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NEW SPECIES OF SIEROLA WITH EXPLANATORY NOTES

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DAVID T. FULLAWAY

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New Species of Sierola With Explanatory Notes

BY DAVID T. FULLAWAY.

INTRODUCTION.

The genus Sierola was established by Cameron in 1881,1 to receive a bethylid sent from the Hawaiian Islands by the Rev. Thomas Blackburn. Only one species was originally included, which was later designated by Ashmead² as the type. Two additional species were described by Cameron³ from Blackburn's collections in 1886, and in 1901 Ashmead4 described five more, from the collections made by Dr. R. C. L. Perkins under the auspices of the Bernice Pauahi Bishop Museum, Royal Society of London and British Association for the Advancement of Science. Perkins⁵ described another, bringing the number of species from Hawaii to nine.

Dr. Perkins,6 in the Introduction to the Fauna Hawaiiensis, stated: "The species of Sierola are apparently somewhat variable and not always easily distinguished and I rather suspect that they were more numerously represented in my collections than is shown by Ashmead's discrimination of them." After several years of study of examples of Sierola, lent me by different collectors in Hawaii, I am convinced that the suspicions entertained by Dr. Perkins were well grounded, for out of five hundred specimens examined I am able to distinguish one hundred and seventy-one distinct forms, which I am herewith describing as new species, or subspecies, providing a table for their separation from each other and from the only other species known to me, Sierola dichroma Perkins.

I regret that I am unable to see the types of the species described by Cameron and Ashmead, for it is more than likely that some of their species are re-described by me. Their descriptions are inadequate, and could be applied to a number of distinct

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¹ Trans. Ent. Soc. Lond. 1881, p. 556.

² Bul. 45, U S. N. M., p. 55.

³ P. Manch. Soc. XXV, p. 176-177; Mem. Manch. Soc. (3) X, 1886, p. 237-238.

⁴ Fauna Hawailensis I (3), p. 290-292.

⁵ Fauna Hawailensis II (6), p. 614.

⁶ Fauna Hawailensis I (6), p. XCIX.

forms in the collections I have examined, while the named material in the Bishop Museum examined by myself and in the U. S. National Museum examined by Mr. Timberlake has in many instances several distinct forms under one name, and is useless for identifying any of the previously-described species. The characters which I have employed to distinguish species are obvious characters but their use necessitates a very careful examination of the specimens in hand and fine discrimination. While I have seen many distinct male forms, I have not cared to describe any that cannot be associated with their females, for the two sexes are often strikingly different and confusion would be the inevitable result. Ultimately, I believe, many more species will be reared from their hosts, the larvæ of Lepidoptera, and the relation of male and female forms established. The multiplicity of forms will astonish some, but this condition is paralleled in many other genera of Hawaiian insects; in fact, a meagre and scattered representation of the families and genera of insects existing on the continents and the presence of many numerically large genera are the outstanding features of the Hawaiian fauna.

In 1900 the genus was found to be represented in Australia as well as in Hawaii. Ashmead⁷ described in that year two species from New South Wales to which Turner,8 in 1915, added a third from Southwest Australia. Representatives of the genus have also been found by Muir in Fiji and Southern China and are described herewith. The range of the genus, which was once thought to be confined to the Australian Region, appears likely to prove very wide.

The types of the species herein described are deposited in the Bernice Pauahi Bishop Museum at Honolulu.

P. Linn, Soc. N. S. Wales, XXV, pp. 328-329.
 Proc. Zool. Soc. 1915, p. 68.

KEY TO THE KNOWN HAWAIIAN SPECIES OF SIEROLA.

FEMALES.

1-284	Head extended in front of the eyes, anterior margin angulate, sometimes with a cly-		
	peal horn		
2-23	Clypeal process large		
3-12	Clypeal process spatulate		
	Clypeal process decurved, dorsally convex,		
4-5	without carina	ı.	distincta
	Clypeal process horizontal, dorsally flat or	1.	aistincia
5-4	elevate and carinate		
6-9	Clypeal process dorsally flat and carinate.		
7-8	Shining black	_	
7-8 8-7	Dull black, particularly on the head	2.	armata
-		_	
9-6	Clypeal process medially longitudinally ele- vate and carinate	3.	nigrescens
10-11	Clypeal process apically obtusely angulate,	4.	volcanica
	head considerably longer than wide		
11-10	Clypeal process apically acutely angulate.	_	
	head only a little longer than wide	5.	acuta
12-3	Clypeal process not spatulate, either a semi-		
	circular or transverse lamina or spicate	_	
13-14	Clypeal process a semicircular lamina	6.	magna
14-13	Clypeal process not semicircular, either trans-		
	verse or spicate		
15-20	Clypeal process transverse		
16-17	Clypeal process simple, not rostrate, head		
	strongly protuberant beneath	7.	kauensis
17-16	Clypeal process rostrate		
18-19	Head and thorax shining black	8.	notabilis
19-18	Head and thorax dull black	9.	sima
20-15	Clypeal process spicate		
21-22	Head smooth and polished, punctuation fine.		
	longer behind, narrower between the eyes		
	than var. hawaiiensis	10.	spicata
22-21	Distinctly sculptured, punctuation coarse,		
	wider between, shorter behind the eyes		
	than Oahu form	11.	spicata
			subspecies
			hawaiiensis
23-2	Clypeal process small		
24-29	Clypeal process spicate		
25-26	Body thick-set	12.	nitida
26-25	Body slender		
27-28	Body particolored	13.	
28-27	Body entirely black	14.	gracilis
	[5]		

00	New Species of Sierola, With Explana	itory	Notes.
29-24	Clypeal process not spicate, either spatulate or simple		
30-41	Clypeal process spatulate, distinctly contracted at the base		
31-32	Head considerably longer than wide	15.	curvignatho
32-31	Head as wide as long or nearly so		
33-36	Vertical margin of the head conspicuously concave		
34-35	Vertical emargination deep, head a little wider than long, expanded behind the eyes, clypeal process short	16.	cmarginata
35-34	Vertical emargination shallow, head a little longer than wide, clypeal process moder- ately long	17.	giffardi
36-33	Vertical margin of the head straight or near- ly so		
37-38	Head a little longer than wide, width between the eyes only slightly exceeding the length from eyes to vertex	18.	suttoniae
38-37	Head as wide as long, width between the eyes considerably more than the length from eye to vertex		
39-40	Head large, shining black	19.	muiri
40-39	Head small, brilliant black, length behind the eyes not great	20.	rocki
41-30	Clypeus simple, without contraction at the base, either carinate or flat dorsally		
42-59	Clypeus without carina		
43-46	Body particolored		
44-45	Head almost smooth and shining	21.	bicolor
45-44	Head coarsely sculptured and dull, opaque or nearly so	22.	aristoteliae
46-43	Body entirely black		
47-50	Body thick-set, not slender or depressed		
48-49	Width between the eyes not much greater than the length from eye to vertex, tem-		
	ples full	23.	anthracina
49-48	Width between the eyes nearly twice the length from eye to vertex, temples rounded	24.	konana
50-47	Body more or less slender or depressed, not	24.	Konuna
	thick-set		
51-54	Head much longer than wide		
52-53	Legs fuscous to black	25.	.,
53-52	Legs luteous	<i>2</i> 6.	levis
54-51	Head as wide as long or nearly so	•	
55-56	Slender, somewhat depressed, head without great depth, antennæ short, propodeum smooth		huania ami
	SINOULI	27.	brevic ornis

56-55	Not noticeably depressed, head tumid beneath, propodeum rugulose		
57-58	Head as wide as long, depth at least two- thirds the length, gula protuberant behind and divided into two lobes with a sulcus between, mandibles long and slender	28.	montana
58-57	Head longer than wide, depth less than two- thirds the length, gula not protuberant, mandibles stout, bent in the middle, dis- tal portion twisted and flattened	20.	peleana
59-42	Clypeus carinate		•
60-89	Large forms, 3 mms. or more in length		
61-70	Head considerably longer than wide		
62-65	Long, slender forms, body a little depressed		
63-64	Width between the eyes considerably more		
03-04	than the length from eye to vertex, head		
	tumid beneath	30.	kaala
6.6.		50.	
64-63	Width between the eyes equalling the length	21	usitata
6-6-	from eye to vertex, head convex beneath	31.	Hanana
65-62 66-69	Thick-set forms, the body not depressed Shining black		
67-68	Legs fuscous to black, mandibles concavo-		
07-06	convex, wings with faint yellowish-brown		
	pigmentation	22	carinata
		32.	(4/1/1014
68-67	Legs yellowish-brown, mandibles bent at the		
	middle, distal portion flattened, wings		h
	hyaline	33.	koa pilosa
69-66	Dull black	34.	puosa
70-61	Head not much, if any, longer than wide		
71-84	Head a little longer than wide		
72-73	Body somewhat depressed, mandibles abnormally large	35.	megalognatha
73-72	Body thick-set, mandibles normal		
74-79	Shining black		
75-76	Antennæ no longer than the head, width be- tween the eyes equalling length from eye to vertex	36.	tantalea
76-75	Antennæ longer than the head, width between		
	the eyes greater than the length from eye		
	to vertex		
77-78	Antennal segments considerably longer than		
	wide, punctuation of the head coarse and		
	irregular, propodeum coarsely rugulose	37.	compacta
78-77	Antennal segments only a little longer than		
	wide, punctuation of the head finer and		
	more regular than in compacta, propo-		
	deum with a fine surface sculpture	38.	osborni
79-74	Dull black	J	
80-81	Wings with a fuscous pigmentation	39.	fuscipennis
	171		-

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81-80	Wings without pigmentation, or if pigment- ed, the pigmentation not fuscous		
82-83	Wings hyaline	40.	longicaudata
83-82	Wings with a yellowish brown pigmentation, gula strongly protuberant	41.	laticeps
84-71	Head as wide as or wider than long		•
85-86	Pin punctures on the head very fine	42.	localis
86-85	Punctuation of the head more or less coarse		
87-88	Head dull black, opaque	43.	obscura
88-87	Head more shining	44.	levigata
89-60	Smaller forms, less than 3 mms. in length		•
90-97	Slender forms		
91-94	Length of the head twice the width		
92-93	Head with a rather coarse surface sculpture	45.	tenuis
93-92	Head smooth, glabrous	46.	depressella
94-91	Length of the head less than twice the width	•	
95-96	Punctuation of the head rather coarse, legs		
<i>yy y</i> -	and antennæ fuscous brown	47.	glabra
96-95	Punctuation of the head fine, legs and anten-	٠,,	8
3° 33	næ flavous	48.	flavicornis
97-90	Forms not remarkably slender	40.	June 11 or mile
98-211	Head longer than wide		
99-100	Yellowish-brown in color, often infuscate	40.	timberlakei
100-99	Not so, particolored or black	49.	· · · · · · · · · · · · · · · · · · ·
101-106	Particolored, yellowish brown and black		
			•
102-103	Thorax and abdomen yellowish brown to fuscous, head black		t l alama
	,	50.	pulchra
103-102	Thorax as well as the head black, or if		
	brown, then not entirely so		
104-105	Thorax and head black, posterior margin of		
	the abdominal segments only yellowish		
	brown	51.	pubescens
105-104	Head and most of the thorax black, pro-		
	thorax and abdomen partially yellowish		
	brown	52.	seminigra
106-101	Body entirely black		
107-108	Wings with a fuscous pigmentation	53.	fuscipes
108-107	Not so		
109-126	Wings with yellowish brown pigmentation		
110-111	Depressed, without great thickness dorso- ventrally	54.	flavipennis
111-110	Not depressed, dorso-ventrally thick	٠.	•
112-115	Shining black, somewhat brilliant		
113-114	Legs and antennæ flavous, width between		
	the eyes one and one-half times the		
	length from eye to vertex, punctuation of		
	the head fine	55.	lepida
114-113	Legs and antennæ fuscous, width between	55.	
,	the eyes and length from eye to vertex		
	equal, punctuation of the head coarse	56.	callida
	[8]	,,,,,	
	1 ~ 1		

115-112 116-123 117-118	Duller species, without brilliancy Faintly shining but not opaque Antennæ considerably longer than the head, length of the segments throughout more than twice the width Antennæ not much longer than the head,	57-	longicornis
·	length of the segments scarcely exceeding the width		
119-120	Mandibles slender, hairy clothing conspicuous	58.	scoriacea
120-119	Mandibles stout, hairy clothing inconspicuous		•
121-122	Head considerably longer than wide, legs		****
	fuscous	59.	gracillima
122-121	Head not much longer than wide, legs dark	,	
122 116	brown Opaque, or nearly so	60.	brunncipes
123-116 124-125	Punctuation of the head extremely fine and		
124-125	inconspicuous, head almost impunctate	61	arida
		01.	u7144
125-124	Punctuation of the head fairly coarse and distinct	۷.	
126-100	Wings hyaline, subinfuscate, or with only a	62.	punctata
120-109	faint yellowish brown pigmentation		
127-152	Shining black, rather brilliant		
128-131	Piceous, not deep black		
129-130	Somewhat depressed and flat, head only a		
,	little longer than wide, mandibles a little		
	slender, wings subinfuscate, with a faint		
	yellowish brown pigmentation	63.	brunnea
130-120	Not depressed, length of the head nearly		
. ,	twice the width, mandibles stout, apical		
	half flattened, wings hyaline	64	picea
131-128	Deep black		
132-133	Mandibles abnormally large, bent near the		
	base, where they are slender, distal por-		
	tion rather stout, twisted and flattened	ა 5.	streblognatha
133-132	Not so		
134-141	Mandibles slender		
135-136	Length of the head nearly twice the width	66.	opaeula
136-135	Length of the head not more than one and		
	one-half times the width		
137-140	Head smooth and glabrous, mandibles black,		
	legs yellowish brown to fuscous, propo- deum smooth		
138-139	Head narrowing behind the eyes, antennæ		
130-139	reaching the mesoscutum	67.	mandibularis
120 120		07.	manatonia is
139-138	Sides of the head parallel or nearly so, antennæ only a little longer than the head	68	minuta
140-137	Head rough and hairy, mandibles, legs and	•	**************************************
	base of antennæ light yellowish brown,		
	propodeum rugose	69.	hirsuta
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64 New Species of Sierola, With Explanatory Notes.

141-134	Mandibles stout		
142-143	Antennæ longer than the head, segments of the flagellum longer than wide	70.	striata
143-142	Antennæ scarcely longer than the head, seg- ments of the flagellum mostly as wide as or wider than long		
144-145	First two segments of the funicle a little longer than wide	71.	agens
145-144	Segments of the flagellum throughout as wide as or wider than long		
146-147	Base of the mandibles not quite reaching the eye	72.	pygmaea
147-146	Base of the mandibles touching the eye	-	
148-149	Abdomen somewhat tumid beneath	73.	tumidoventris
149-148	Not so		
150-151	Punctuation of the head close and somewhat coarse	74.	koolauensis
151-150	Punctuation of the head fine, irregular, rather remote	75.	koebelei
152-127	Dull black, not at all brilliant		
153-200	Dull black, only faintly shining but no opaque	t	
154-187	Mandibles slender		
155-156	Length of the head twice the width or nearly		
- 55 - 5-	\$0	<i>7</i> 6.	longiceps
156-155	Length of the head not nearly twice the width	,	
157-164	Head longer than wide by a half		
158-159	Width between the eyes no more than the		
-	length from eye to vertex, mandibles		
	mostly brown, abdomen elongate ovate.		
	antennæ not much longer than the head	77.	rugulosa
159-158	Width between the eyes a little more than the length from eye to vertex		
1 6 0-161	Antennæ reaching the scutellum, abdomen		
	short ovate, mandibles flattened distally	78.	brevicauda
161-160	Antennæ shorter, not reaching the scutellum		
162-163	Sculpture and punctuation of the head fine	79.	kilauea
163-162	Sculpture and punctuation of the head coarse	80.	olympiana
164-157	Head only a little longer than wide		
165-174	Width between the eyes considerably more		
.66 -6.	than the length from eye to vertex		
166-169	Mandibles mostly yellowish or reddish brown		
167-168	Sculpture and punctuation of the head and thorax extremely fine	8ı.	tenebriosa
168-167	Sculpture and punctuation of the head and thorax fairly coarse	82.	capuana
169-166	Mandibles mostly black		

170-173	Antennal segments throughout longer than wide, base of the mandibles not quite reaching the eye		
171-172	Legs light yellowish brown, wings hyaline, hairy clothing short and inconspicuous	83.	megalops
172-171		84	vestita
173-170		04.	Cestilla
174-165	touching the eye Width between the eyes only a little more than the length from eye to vertex	85.	mauiensis
175-178			
176-177			
	abnormally large, propodeum coarsely rugulose	86.	rufignatha
177-176	Antennæ only a little longer than the head, mandibles normal, propodeum not coarse- ly rugulose	87.	lugens
178-175	Mandibles mostly black	07.	ingens
179-184	Antennal segments longer than wide		
180-181	Wings nearly hyaline, mandibles reddish brown basally	88.	swezeyi
181-180	Wings faintly but evidently pigmented		
182-183	Legs yellowish brown, wings with decided yellowish brown pigmentation	89.	cucrena
183-182	Legs fuscous to black, wings with fuscous pigmentation	QO.	ehrhorni
184-179		90.	emmorm
185-186	Abdomen long and slender, wings with fus- cous pigmentation, punctuation and hairy clothing of the head conspicuous, punc-		
04 0	tuation coarse, mandibles stout	91.	kaduana
186-185	Abdomen short and stout, wings hyaline, punctuation and hairy clothing of the head finer and inconspicuous, mandibles		
	rather slender	92.	gracilariae
187-154	Mandibles stout		
188-193	Head considerably longer than wide		
189-190	Mandibles mostly yellowish brown	93.	incita
190-189 191-192	Mandibles mostly black		
191-192	Legs and antennæ yellowish brown, punctua- tion close, fine and shallow, hairy clothing short and delicate	94.	cryptophlebiae
192-191	Legs and antennæ infuscate, not entirely yel-	74.	Jropini oldi
0-	lowish brown	95.	polita
193-188	Head only a little longer than wide		
194-195	Mandibles mostly reddish brown	96.	lanihuliana

105 104	Mandibles mostly black		
195-194 196-197	Antennæ not reaching the mesoscutum, all		
190-197	the segments beyond the pedicel as wide		
	as or wider than long	97.	nigrita
197-196	Antennæ reaching the mesoscutum, segments	<i>,</i>	
19/ 190	of the flagellum with the exception of the		
	third longer than wide		
198-199	Sculpture and punctuation of the head fine	9 8.	hillebrandi
199-198	Sculpture and punctuation of the head coarse	99.	a ffinis
200-153	Dull black and opaque, not at all shining		-
201-210	Mandibles slender		
202-205	Legs luteous		
203-204	Hairy clothing long and thick, punctuation		
,	very close, propodeum rugulose, flat dor-		
	sally	100.	opogonae
204-203	Hairy clothing inconspicuous, punctuation		,,
204 203	rather remote, propodeum rugose, convex	TOT.	luteipes
205-202	Legs brown		
206-207	Mandibles reddish brown except at the base,		
	where they are black	102.	pilifera
207-206			•
,	they are reddish		
208-200	Head longer than wide by a half, base of		
200 209	the mandibles touching the eye, wings		
	with yellowish brown pigmentation	103.	sericea
200-208	Head only a little longer than wide, narrow-	0-	
,	ing behind, base of mandibles not reach-		
	ing the eye, wings subinfuscate	104.	robusta
210-201	Mandibles stout, hairy clothing of stiff white		
	hairs, wings with a faint fuscous pigmen-		
	tation	105.	setosa
211-98	Head as wide as long		
212-243	Shining, rather brilliant black or brown		
213-230	Mandibles slender		
214-215	Yellowish to fuscous brown throughout	106.	batrachedrae
215-214	Body particolored or black		
216-217	Body particolored, black except the prothor-		
	ax, which is yellowish brown	107.	similaris
217-216	Body entirely black		
218-225	Antennæ reaching the mesoscutum or beyond		
219-220	Median line of the gula with deep sulcus		
	posteriorly	108.	fossulata
220-219	Not so		
221-222	Legs and antennæ fuscous	109.	fusca
222-221	Not so		
223-224	Legs and mandibles, except at base, and an-		
	tennæ basally, croceous, head finely punc-		
	tate, very tumid beneath, the depth under		
	eye equalling length from eye to vertex	110.	croceipes
	[12]		

224-223	Legs and antennæ basally yellowish brown, mandibles black, head coarsely punctate, tumidity beneath less pronounced	111.	puuwaaw aa
225-218	Antennæ not much longer than the head		•
226-227			
•	mandibles reddish brown, wings hyaline	112.	minuscula
227-226	Legs and antennæ brown to fuscous, wings		
,	with a faint pigmentation		
228-220	Wings with a faint fuscous pigmentation	113.	anemophila
229-228	Wings with a faint yellowish brown pigmen-	0	
9	tation	114.	brunneipennis
230-213	Mandibles stout		• • • • • • • • • • • • • • • • • • • •
231-232	Body particolored, prothorax, mesoscutum		
231-232	and abdomen yellowish brown	115	mandibulata
020 021	Body entirely black	113.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
232-231			
233-234		116	tuberculata
	deep median sulcus	110.	Moerenau
234-233	Not so		
	Mandibles reddish or yellowish brown		
236-237			
	between the eyes one and one-half times		
	the length from eye to vertex, a little		
	tumid beneath, antennæ nearly reaching		
	the scutellum	117.	nigra
237-236	Punctuation of the head rather coarse and		
	remote, width between the eyes twice the		
	length from eye to vertex, convex be-		
	neath, antennæ reaching mesoscutum	118.	manoa
238-235	Mandibles black; if red, then only at the		
	apex		
239-240	Antennæ only a little longer than the head,		
	all the segments beyond the pedicel as		
	wide as or wider than long	119.	lata
240-230	Antennæ reaching the mesoscutum, segments		
. 0,	throughout twice as long as wide		
241-242			
	times the length from eye to vertex.		
	propodeum coarsely rugulose, wings sub-		
	infuscate	120.	fuliginosa
242-241	Width between the eyes twice the length		,
	from eye to vertex, propodeum finely ru-		
	gulose, wings with a yellowish brown		
	pigmentation	121	vulcana
243-212			
	Mandibles slender		
	Legs mostly fuscous		
246-247			
	verging behind the eyes	122.	nigrans
217-216	Head narrowing behind the eyes	122.	
248-240		122	olinda
<u>-40-249</u>	[13]	123.	O I I I I I I I I I I I I I I I I I I I
	[13]		

68	New Species of Sierola, With Explana	itory	Notes.
249-248 250-251	Antennæ fuscous Width between the eyes twice the length		
	from eye to vertex	124.	indecora
251-250	Width between the eyes considerably less than twice the length from eye to vertex	125.	nubila
252-245	Legs wholly or partly luteous or yellowish brown		
253-256	Mandibles yellowish brown outwardly		
254-255	Propodeum delicately sculptured, almost smooth	126.	epagogeana
255-254	Propodeum rugulose	127.	a bus a
256-253	Mandibles black		
257-260	Legs luteous or flavous		
258-259	Head smooth, rather remotely punctate, gula		
-557	as long as wide, abdomen short, wings hyaline	128.	similis
259-258	Head rough, rather closely punctate, gula wider than long, abdomen long, wings		Assibas
	with a yellowish brown pigmentation	129.	flavipes
260-257	Legs yellowish brown		amica
261-262	Antennæ reaching the scutellum	130.	amica
262-261	Antennæ not reaching beyond the mesoscutum	131.	quadriceps
263-244	Mandibles stout		
264-269	Mandibles luteous except at the base		
265-266	Punctuation of the head remote	132.	williamsi
266-265	Punctuation of the head close		
267-268	Legs luteous	133.	kaalensis
268-267	Legs yellowish brown to fuscous	134.	imparata
269-264	Mandibles black		
270-275	Legs yellowish brown		
271-272	Antennal segments beyond the pedicel scarce- ly longer than wide	135.	pembertoni
272-271	Antennal segments beyond the pedicel con- siderably longer than wide		
273-274	Punctuation of the head ccarse and a little remote, propodeum delicately sculptured	136.	lacessita
274-273	Punctuation of the head fine and rather close, propodeum finely rugulose	137.	conspicua
275-270	Legs fuscous		
276-279	Width between the eyes twice the length from		
	the eye to the vertex		
277-278	Punctuation of the head a little coarse and		
	somewhat remote, hairy clothing short		
	and inconspicuous	138.	adumbrata
278-277	Punctuation of the head rather fine and close, hairy clothing long and delicate	139.	illingworthi
279-2 7 6	Width between the eyes less than twice the length from eye to vertex		
280-281	Head with the lateral margins parallel, not		
	converging behind the eyes	140.	nemorensis
	f 1		

281-280 282-283	Head narrowing behind the eyes Punctuation of the head extremely fine, hairy		
202 202	clothing long and delicate, segments of the antennæ as wide as long Punctuation of the head rather coarse, hairy	141.	vetusta
283-282	clothing short and inconspicuous, seg- ments of the antennæ considerably lon-		
	ger than wide	142.	kalihiensis
284-I	Head not extended in front of the eyes, an-		
,	terior margin transverse		
285-290	Large species, over 3 mms. in length		
286-287	Thick-set, head longer than wide, clypeus		
•	nearly flat, wings with yellowish brown		
	pigmentation	143.	aucta
287-286	Not so		
288-289	Width between the eyes more than twice the		
	length from eye to vertex, segments of		
	the antennæ throughout considerably		
	longer than wide	144.	breviceps
280-288	Width between the eyes less than twice the	• • •	•
	length from eye to vertex, segments of		
	the antennæ beyond the first funicle seg-		
	ment as wide as or wider than long	145.	bridwelli
290-285	Smaller species, 3 mms. in length or less	- 45.	
291-298	Species more or less flattened, without great		
-,,-	thickness dorso-ventrally		
292-293	Depressed to an extreme degree, mandibles		
, ,	black	146.	depressa
293-292	Less strongly depressed, mandibles brown or	•	•
	flavous		
294-295	Head longer than wide by a half	147.	philodoriae
295-294	Head not much longer than wide		
296-297	Legs, antennæ and mandibles flavous	148.	planiceps
297-296	Legs, antennæ and mandibles fuscous to		
0	black	149.	holomelaena
298-291	Species not dorso-ventrally flattened		
299-304	Slender species		
300-301	Thickly clothed with hair, mandibles black	150.	hirticeps
301-300	Hairy clothing short and inconspicuous,		
	mandibles yellowish or reddish brown		
302-303	Head longer than wide by more than a half,		
	mandibles reddish brown, the base not		
	reaching the eye, gula longer than wide,		_
	propodeum rugulose	151.	tenuiceps
303-302	Head longer than wide by less than a half,		
	mandibles yellowish brown, the base		
	touching the eye, gula no longer than		•.
	wide, propodeum delicately sculptured	152.	nitens
304-299	Species not remarkably slender		
305-320	Brilliant, not at all dull		
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306-309	Body particolored		
307-308	Abdomen yellowish brown to piceous, head and thorax remotely punctate, width be- tween the eyes greater than the length		
	from eye to vertex, antennæ reaching mesoscutum, mandibles slender, upper an- gle of the base touching the eye, wings with deep yellowish brown pigmentation	153.	kaumuohona
308-307	Only the apical margin of abdominal seg- ments brown, punctuation of head and thorax close, width between the eyes equalling the length from eye to vertex, antennæ no longer than the head, man- dibles stout, base not reaching the eye, wings with a faint yellowish brown pig-		
***	mentation	154.	brunneiventris
309-306	Body entirely black Head longer than wide by a half		
311-312	Mandibles as well as the abdomen short,		
311-312	wings with a faint fuscous pigmentation	155.	blackburni
312-311	Mandibles as well as the abdomen rather	- 55.	
	long, wings hyaline	156.	celeris
313-310	Head not much longer than wide		
314-317	Antennal flagellum mostly fuscous Head narrowing behind the eyes, tumid be-		
315-316	neath, segments of the antennæ through- out longer than wide, mandibles slender, gula and sides of the head flat, wings with a faint yellowish brown pigmenta-		
	tion	157.	perkinsi
316-315	Head with the lateral margins parallel, not converging behind, convex beneath, segments of the antennæ beyond first funicle segment as wide as or wider than long, mandibles stout, gula and sides of the head a little convex, wings faintly fus-		
	cous	158.	perottetiae
317-314	Antennal flagellum mostly yellowish brown		
318-319	Legs somewhat infuscate, first funicle seg- ment longer than wide, mandibles touch-		
	ing the eye at the base	159.	humilis
319-318	wide as long, base of the mandibles not		
	reaching the eye	160.	proxima
320-305	Dull shining or opaque, not at all brilliant		
321-338	Dull, only faintly shining but not opaque		dichroma P.
322-323	Body particolored, mostly brown		dichroma P.
323-322	Body entirely black		
324-329	Mandibles stout		

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325-326	Head widest across the eyes, narrowing behind and in front, segments of the anten-		
326-325	converging behind the eyes, segments of the antennæ not longer than wide	161.	langfordi
327-328	throughout Head longer than wide by a half, punctua- tion coarse, hairy	162.	aspera
328-327	Head only a little longer than wide, punctua- tion fine, hairy clothing inconspicuous	163.	atra
329-324	Mandibles slender Head as wide as long	164	newelli
330-331		104.	newelli
331-330 332-335	Head longer than wide Head widest across the eyes, narrowing be-		
334-333	hind and in front		
333-334	Head considerably longer than wide, vertical margin straight, mandible touching the eye at the base, abdomen ovate	165	waianaeana
334-333	Head only a little longer than wide, vertical margin slightly convex, base of the man-	.03.	warana ana
	dible not reaching the eye, abdomen short ovate, apically acuminate	166.	distinguenda
335-332	Head with the lateral margins parallel, not converging behind the eyes		
336-337	Mandibles marked with red, nearly but not quite reaching the eye at the base, me- dian groove of the gula nearly effaced,		
	propodeum rugulose	167.	rufomandibulata
337-336	Mandibles black, touching the eye at the base, gula with a shallow depression along the median line, propodeum delicately sculptured	168	curiosa
338-321	Opaque, not at all shining		
339-340	Head longer than wide by a half, clothed with long silvery hairs	169.	subcrispa
340-339	Head as wide as long or nearly so, hairy clothing short and inconspicuous		
341-342	Head a little longer than wide, only the pedi- cel and first three funicle segments of antennæ longer than wide, mandibles slender, wings with fuscous pigmentation	170.	nuda
342-341	Head as wide as long, narrowing behind the eyes, width between the eyes nearly twice the length from eye to vertex, antennal segments throughout considerably longer than wide, mandibles stout, wings	-,	
	with a yellowish brown pigmentation	171.	willardi

DESCRIPTIONS OF NEW HAWAIIAN SPECIES.

1. Sierola distincta n.sp. Plate XVI, Figure 1.

2 brilliant black, with the exception of the propodeum, which is dull; legs and antennæ yellowish brown, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture and a few scattered setiferous punctures. Head considerably longer than wide, widest across the eyes, width between the eyes scarcely more than the length from the eye to the vertex; flatly convex above, depressed in front, flat beneath, the greatest depth considerably behind the eyes, the gula considerably longer than the occiput; vertical margin slightly concave, temples rounded, eyes convex, antennæ long, reaching the scutellum, all the segments more than twice as long as wide, antennal fossæ deep; clypeal process a spatulate decurved beak, convex above; mandibles large, bent near the middle, the distal portion stout, concavo-convex, obliquely truncate apically and toothed, base not nearly reaching the eye. cheeks moderately long; gula and sides of the head flat, the former as wide as long, with distinct median furrow, anterior margin arcuately concave, posterior margin incised; propodeum rugose, with an acute triangular area at its base smooth; abdomen elongate ovate, smooth; wings subinfuscate, nearly hyaline; length 3 mms.

& with yellowish brown mandibles; smaller than the Q, head shorter,

antennæ more slender, cheeks shorter, abdomen blunt at apex.

Described from twenty females and eleven males (type, allotype and paratypes). Type, allotype, and one 9 paratype Opaeula, Oahu, collected by O. H. Swezey, March 30, 1913. Paratypes: 1 9 Hauula, Swezey, August 15, 1914; 1 9 Tantalus (1300 ft.), Giffard October 15, 1905; 5 9 Tantalus (1500 ft.), Giffard, August 27 and December 22, 1918; 1 9 Tantalus, Fullaway March 20, 1900; I 9 Tantalus (2000 ft.), Kotinsky; I 9 Nuuanu, Fullaway September 4, 1916; 1 9 Kuliouou, Timberlake June 25, 1916; 1 9 Manoa Cliffs on Campylotheca, Timberlake September 1, 1918; 1 9 Palolo Crater, Timberlake September 8, 1918; 1 9 S. E. Koolau Mts., Bridwell June, 1918; OAHU: 2 & Kilauea (4000 ft.), Giffard October 15 and January 19, 1916, 1 9 Kilauea (4000 ft.), Giffard and Muir, January 13, 1917; 1 9 29 miles Olaa, Fullaway, November 19, 1913; HAWAII: 1 & Tantalus (1500 ft.), Giffard December 22, 1915; 2 & Nuuanu, Fullaway, August 20, 1916, and April 1, 1917; 1 & Manoa, Fullaway, July 29, 1917; 2 & Olympus Mt., Timberlake September 8, 1918; 3 & Palolo Crater on Straussia kaduana, Timberlake September 29, 1918; 1 & Palolo Crater on Pelea clusiaefolia, Timberlake September 28, 1918; OAHU.

A variable species. Some of the Hawaii specimens are not quite typical. Type: Cat. No. 1, Bishop Museum.

2. Sicrola armata n.sp.

9 shining black but not brilliant, antennæ and legs yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine, reticu-[18]

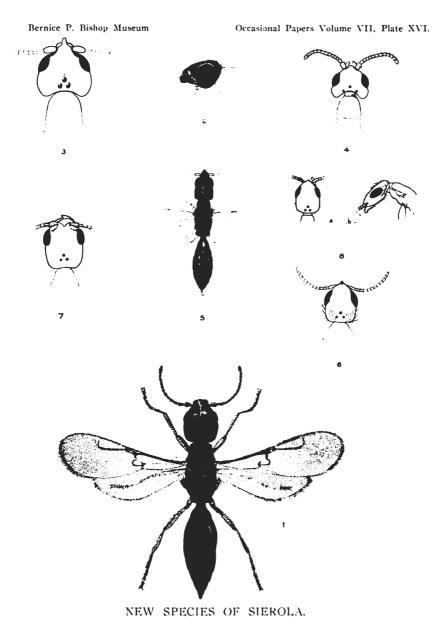


Fig. 1. Siercla distincta Q dorsal aspect with wings spread to display venation. Fig. 2. S. kauensis Q head, lateral aspect. Fig. 3. S. spicata Q outline of the head, dorsal aspect. Fig. 4. S. emarginata Q outline of the head, dorsal aspect. Fig. 5. S. levis Q dorsal aspect of body. Fig. 6. S. pilosa Q outline of the head, dorsal aspect. Fig. 7. S. aucta Q outline of the head, dorsal aspect. Fig. 8. S. depressa Q outline of the head, a, dorsal; b, lateral aspect. (All greatly magnified.)

late surface sculpture, only fairly closely and finely punctate and clothed with short and delicate hairs. Head considerably longer than wide, widest at the vertex, narrowing in front, flatly convex above, a little tumid beneath, greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex, antennæ a little longer than the head, pedicel twice as long as wide, funicle narrower and not quite so long, following segments a little longer than wide, almost moniliform, antennal fossæ deep; clypeal process a spatulate beak horizontally extended, flat above and finely carinate; mandibles slender, bent near the middle, the distal portion flattened, obliquely truncate apically and toothed, base not reaching the eye, cheeks moderately long; gula and sides of the head slightly convex, the former as wide as long, anterior and posterior margins incised, median groove evident but very fine; propodeum rugose; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 3 mms.

& with the mandibles, legs and antennæ basally luteous, considerably smaller than the Q, head shorter and widest across the eyes, antennæ more slender, clypeal process smaller, cheeks shorter, abdomen blunt at the apex.

Described from seven females and four males (type, allotype, and paratypes). Type collected on Kaala Mt., Oahu, by O. H. Swezey, September 7, 1913; one 9 and two 3, allotype and paratypes, at Nuuanu Pali, Oahu, by Fullaway, April 1, 1917. Paratypes: 4 9 and 1 3 Kaumuohona, Oahu, Timberlake September 9, 1917; 1 9 and 1 3 Tantalus, Oahu, Giffard, August 27 and December 22, 1918.

Type: Cat. No. 2, Bishop Museum.

3. Sierola nigrescens n.sp.

Q moderately slender, head and thorax dull black, abdomen brilliant, legs, antennæ and mandibles fuscous.

Head and thorax with a very fine, reticulate surface sculpture, finely and only fairly closely punctate, hairy clothing short but rather thick beneath. Head a little longer than wide, widest at the posterior end of the eyes, narrowing slightly behind and in front, width between the eyes a little more than the length from the eye to the vertex, flatly convex above, a little tumid beneath, the greatest depth behind the eyes; vertical margin straight, temples rounded, eyes flatly convex, antennæ reaching the mesoscutum, segments of the flagellum all longer than wide, pedicel twice as long as wide, antennal fossæ deep, clypeal process a spatulate beak horizontally extended, flat above and finely carinate; mandibles bent near the middle, the distal portion flatened, truncate and blunt toothed on apical margin, the base not reaching the eye; cheeks narrow; gula and sides of the head flat, the former as wide as long, anterior margin semicircularly concave, posterior margin incised; abdomen smooth, elongate and a little depressed; wings subinfuscate; length 2.75 mms.

Described from one female (type) collected at Kilauea, Hawaii, in the dry forest, 4000 ft. elev., by W. M. Giffard, July 6, 1918.

Type: Cat. No. 3, Bishop Museum.

4. Sicrola volcanica n.sp.

Head and thorax to the propodeum with a microscopically fine surface sculpture, finely and only fairly closely punctate and hairy. Head wider than the thorax, considerably longer than wide, width between the eyes a little more than the length from eye to vertex; flatly convex above, a little tumid beneath, the greatest depth behind the eyes; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments of the flagellum longer than wide, the pedicel twice as long as wide, antennal fossæ deep; clypeal process spatulate, horizontally extended, medially longitudinally elevate and carinate but apically not greatly exceeding anterior margin of the head; mandibles abnormally large, bent at the middle, distal portion flattened, obliquely truncate and toothed apically, base not reaching the eye; cheeks moderately wide; gula and sides of the head flat, the former as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 3 mms.

Described from four females (type and paratypes) collected in Kau, Hawaii, on the a-a flows, 3600-4000 ft. elev., by W. M. Giffard, July 13-27, 1918.

Type: Cat. No. 4. Bishop Museum.

5. Sierola acuta n.sp.

9 shining black but not brilliant, antennæ basally, trochanters, tiblæ and tarsi brown.

Head and thorax to the propodeum with a microscopically fine, reticulate surface sculpture, finely, shallowly, closely and distinctly punctate and hairy. Head wider than the thorax, longer than wide, width between the eyes a little more than the length from eye to vertex, convex above, rather flat beneath, depth moderate and greatest directly behind the eye; vertical margin straight, temples rounded; eyes flatly convex; antennæ a little longer than the head, segments of the flagellum scarcely longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeal process spatulate, angulate in front, horizontally extended, exceeding the anterior margin of the head by half its length, medially longitudinally elevate and carinate; mandibles moderately large and stout, curved, concavo-convex, truncate apically and toothed, base not reaching the eye; cheeks rather narrow; gula and sides of the head flatly convex, the former wider than long, anterior margin arcuately, posterior margin semicircularly concave; propodeum rugulose, with a triangular area at its base smooth and shining; abdomen short ovate. smooth and polished; wings hyaline; length 2.25 mms.

Described from three females (type and paratypes). Type, Honolulu, Oahu, collected by P. H. Timberlake on window of H. S. P. A. Exp. Sta. building July 18, 1916. Paratypes collected by O. H. Swezey behind leaf-sheath of cane on the grounds of the H. S. P. A. Exp. Sta. March 27, 1908.

Type: Cat. No. 5, Bishop Museum.

6. Sierola magna n.sp.

9 brilliant black, the legs and antennæ brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, finely but only fairly closely punctate and hairy. Head wider than the thorax, longer than wide, width between the eyes a little more than the length from eye to vertex, convex above, a little tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes convex; antennæ scarcely longer than the head, segments of the flagellum no longer than wide, except the pedicel and first three funicle segments, which are a little longer than wide, antennal fossæ deep; clypeal process a broad, flat, semicircular lamina, horizontally extended from the anterior margin of the head and strongly longitudinally carinate; mandibles stout, curved, concavo-convex, obliquely truncate and toothed apically, the base touching the eye above; gula convex, as wide as long, median groove nearly effaced; anterior margin slightly concave, posterior margin incised; propodeum finely aciculate; abdomen elongate ovate, smooth and polished; wings hyaline; length 3.25 mms.

Described from one female (type), collected in Niu Valley, Oahu, by O. H. Swezey, December 11, 1910.

Type: Cat. No. 6, Bishop Museum.

7. Sierola kauensis n.sp.

Plate XVI, Figure 2.

Q shining black, legs and antennæ brown to fuscous.

Head and thorax to the propodeum with a microscopically fine surface sculpture, rather coarsely, shallowly and closely punctate and hairy. Head wider than the thorax, widest across the eyes, scarcely longer than wide, the length behind the eyes not great and the width decreasing slightly; convex above, tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, segments of the flagellum a little longer than wide, pedicel about twice as long as wide, antennal fossæ deep; clypeus hardly forming a beak; short, decurved, transverse, the anterior margin angulate, apex not greatly exceeding anterior margin of the head, medially longitudinally elevate and carinate; mandibles large, curved, concavoconvex, truncate and toothed apically, the base touching the eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, strongly protuberant behind, and divided into two lobes by a rather deep median sulcus, posterior margin deeply incised, anterior margin almost straight; propodeum rugulose; abdomen moderately long ovate, smooth and polished; wings subinfuscate; length 3 mms.

Described from one female (type) collected at Kahuku, Kau, Hawaii, 2000 ft. elev., by W. M. Giffard, July 27, 1918.

Type: Cat. No. 7, Bishop Museum.

8. Sierola notabilis n.sp.

9 shining black, head and thorax a little dull, legs, basal segments of antennæ and mandibles partly yellowish brown.

Body rather flat, head and thorax to the propodeum with a microscopi-

cally fine, reticulate surface sculpture, coarsely, fairly regularly but not closely punctate. Head longer than wide, width between the eyes a little more than the length from eye to vertex, convex above, tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ longer than the head, segments of the flagellum beyond the first funicle moniliform, pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeal process a flat, transverse lamina, horizontally extended from the anterior margin of the head and longitudinally elevate and carinate; mandibles fairly stout, curved, concavo-convex, obliquely truncate and toothed apically, base touching the eye above; gula convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3.25 mms.

Described from three females (type and paratypes) collected at Kilauea, Hawaii, 4000 ft. elev., by W. M. Giffard. Type marked "No. 7." captured June 7, 1908. Paratypes marked "No. 4," taken in the dry forest, January 11, 1917.

Type: Cat. No. 8, Bishop Museum.

9. Sierola sima n.sp.

9 black, head and thorax dull, abdomen shining, legs and antennæ brown to fuscous.

Head and thorax with a pronounced microscopic surface sculpture, scattered pin punctures and fine hairy clothing. Head wider than the thorax and longer than wide, width between the eyes more than the length from the eye to the vertex, convex above, a little tumid beneath, deepest directly behind the eyes; vertical margin slightly concave, temples rounded, eyes convex; antennæ longer than the head, segments of the flagellum beyond the second funicle moniliform, pedicel and first two funicle segments twice as long as wide, antennal fossæ deep; clypeal process a flat transverse lamina, horizontally extended from the anterior margin of the head and medially elevate and carinate; mandibles fairly stout, curved, concavo-convex, obliquely truncate and toothed apically, the base touching the eye above; gula convex, medially foreshortened, wider than long, anterior and posterior margins incised; propodeum rugulose; abdomen short ovate; wings subinfuscate; length 2.5 mms.

Described from two females (type and paratype) collected at Kilauea, Hawaii, 4000 ft. elev., by W. M. Giffard. Type taken at the lumber camp, July 19, 1918. Paratype marked "Box 4," and captured in May, 1910.

Type: Cat. No. 9, Bishop Museum.

10. Sicrola spicata n.sp. Plate XVI. Figure 3.

Q with the head and thorax depressed and flat; shining black, the legs beyond the femora and the base of the antennæ brown.

Smooth and polished, the pronotum and propodeum with a more evident sculpture, and a little dull; finely, shallowly and fairly closely punctate and hairy. Head wider than the thorax, as wide as long, widest at the vertex and

narrowing in front, width between the eyes scarcely more than the length from eye to vertex; vertical margin strongly concave, temples rounded, eyes flatly convex; antennæ a little longer than the head, segments of the flagellum scarcely longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeal process a spicate beak, horizontally extended from the anterior margin of the head, dorsally subcarinate, the surface smooth and flat, apex depressed; mandibles moderately large, curved, concavo-convex, truncate and toothed apically, base not reaching the eye; cheeks moderately wide; gula flat, medially very much foreshortened, anterior margin semicircularly concave, posterior margin deeply incised, median furrow nearly effaced; propodeum rugulose, a triangular area at the base smooth; abdomen short ovate, smooth and polished; wings subinfuscate with a faint yellowish brown pigmentation; length 3 mms.

& with the legs and antennæ basally yellowish brown, mandibles luteous, except at the base; head a little shorter, the sides parallel; clypeal process not spicate, and extending little beyond the anterior margin of the head; antennæ more slender; wings without pigmentation; abdomen bluntly pointed at the apex.

Described from one female and one male (type and allotype), collected on *Straussia kaduana*, on Lanihuli Ridge, Oahu, 1500 ft. elevation, by P. H. Timberlake, September 3, 1916.

Type: Cat. No. 10, Bishop Museum.

11. Sierola spicata subspecies hawaiiensis new subspecies.

Q variable but generally wider between, shorter behind the eyes, with the surface sculpture more distinct and the punctuation of the head coarser than in the Oahu form.

Described from seven females (type and paratypes). Type collected at Kilauea, Hawaii, 4000 ft. elevation, by W. M. Giffard, July 6, 1918. Paratypes from Puuwaawaa, N. Kona, Hawaii, 3700-3800 ft. elev., Giffard, August. 1917.

Type: Cat. No. 11, Bishop Museum.

12. Sierola nitida n.sp.

9 brilliant black, antennæ, tibiæ, and tarsi brown to fuscous.

Head and thorax with a delicate surface sculpture, uniformly closely and distinctly punctate and hairy. Head almost as wide as long, widest directly behind the eyes, narrowing behind and in front, width between the eyes a little more than the distance from the eye to the vertical margin; flat above, somewhat tumid beneath, deepest behind the eyes but without great depth; vertical margin slightly concave, temples rounded, eyes flat; antennæ scarcely longer than the head, all the segments beyond the pedicel as wide as or wider than long, the pedicel a little longer than wide, antennal fossæ fairly deep; clypeal process short and stout, bluntly spicate, convex above, extending little beyond the anterior margin of the head; mandibles long, slender, curved and toothed apically, base not quite reaching the eye; cheeks very narrow; gula and sides of the head flat, the former foreshortened, as wide as long; propodeum finely rugulose; abdomen clongate ovate, smooth and polished; wings hyaline; length 3 mms.

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Described from one female (type), collected on Tantalus Mt., Oahu, 1500 ft. elevation, by W. M. Giffard, August 27, 1918.

Type: Cat. No. 12, Bishop Museum.

13. Sierola bella n.sp.

Q slender, shining black, antennæ basally, pronotum and prosternum, except at the sides, and the legs yellowish brown, mandibles reddish apically.

Head and thorax with a microscopically fine surface sculpture, fairly closely, finely and shallowly punctate and hairy. Head as wide as long, width between the eyes considerably more than the length from eye to vertex, convex above, tumid beneath; vertical margin deeply concave, temples rounded, eyes convex; antennæ a little longer than the head, segments of the flagellum scarcely longer than wide, pedicel a little longer, antennal fossæ deep; clypeal process short and somewhat spicate; mandibles short, not very stout, curved, truncate and toothed apically, base not reaching the eye; cheeks moderately wide; gula flat, wider than long, divided into two lobes posteriorly by a short sulcus, median furrow nearly effaced, anterior margin arcuately concave, posterior margin deeply incised, sides of the head slightly convex; propodeum finely aciculate; abdomen elongate, smooth and polished; wings hyaline; length 3 mms.

Described from one female (type), collected in Palolo Crater, Oahu, by P. H. Timberlake, September 8, 1918.

Type: Cat. No. 13, Bishop Museum.

14. Sierola gracilis n.sp.

§ slender, shining black, antennæ basally and the legs yellowish brown, antennæ apically and the femora outwardly infuscate, mandibles reddish brown medially and at the tips.

Head and thorax with a fine, reticulate surface sculpture, fairly closely, finely and shallowly punctate and hairy. Head considerably longer than wide, width between the eyes not much greater than the distance from the eye to the vertex; convex above and somewhat tumid beneath, deepest directly behind the eye; vertical margin very slightly concave, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus bluntly pointed, flat on top, apically depressed, extended a little beyond the anterior margin of the head; mandibles abruptly bent at the middle, rather slender basally, flattened and much wider distally, the apical margin obliquely truncate and toothed, base not quite reaching the eye; cheeks narrow; gula and sides of the head flat, the former medially foreshortened, as wide as long, median furrow very fine, anterior margin arcuately concave, posterior margin incised; abdomen elongate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.5 mms.

Described from one female (type) collected on Kaumuohona Ridge. Oahu, by P. H. Timberlake, January 7, 1917.

Type: Cat. No. 14, Bishop Museum.

15. Sierola curvignatha n.sp.

Q dull black, antennæ basally, trochanters, fore-legs distally from the femora, middle and hind tibiæ at base and apex and tarsi entirely brown.

Head and thorax with a microscopically fine surface sculpture, rather closely, finely and shallowly punctate and hairy. Head considerably longer than wide, width between the eyes about equal to the length from the eye to the vertex; flatly convex above, depressed in front, tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes flat; antennæ reaching the mesoscutum, all the segments of the flagellum longer than wide, pedicel twice as long as wide and funicle nearly so; clypeus spatulate, very little extended beyond the anterior margin of the head, convex apically, contracted basally by the inward extension of the antennal fossæ; mandibles large, bent in the middle, distal portion flattened, apical margin oblique and toothed, base not quite reaching the eye; cheeks narrow; gula and sides of the head flatly convex, the former medially foreshortened but longer than wide, median furrow very fine, anterior margin arcuately, posterior margin semicircularly concave; propodeum finely rugulose; abdomen short ovate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected at Kilauea, Hawaii, at the lumber camp, 4000 ft. elevation, by W. M. Giffard, July 4, 1918.

Type: Cat. No. 15, Bishop Museum.

Sierola emarginata n.sp. Plate XVI, Figure 4.

2 shining black, legs and antennæ brown to fuscous.

Head and thorax to the propodeum with a microscopically fine surface sculpture, some scattered small shallow punctures on the mesonotum, the head a little more closely punctate and clothed with short, fine, whitish hairs. Head as wide as long, widest at the vertex, narrowing in front, width between the eyes greater than the length from eye to vertex; flatly convex above, depressed in front, tumid beneath, the greatest depth behind the eye; vertical margin deeply concave, temples rounded, eyes convex; antennæ longer than the head, segments of the flagellum scarcely longer than wide, pedicel longer by a half; clypeal process a small, decurved, spatulate beak, convex above, very little extended beyond the anterior margin of the head; mandibles not very stout, bent at the middle, truncate and toothed apically, base not reaching the eye; cheeks fairly wide; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate, smooth and polished; wings subinfuscate; length 2 mms.

Described from one female (type), collected on Hawaii by Albert Koebele. Date of capture not given.

Type: Cat. No. 16, Bishop Museum.

17. Sierola giffardi n.sp.

\$\text{\$\text{\$\text{\$\text{\$}}\$ shining black, the legs yellowish brown, infuscate to the apex of the femora, antennæ yellowish brown, fuscous outwardly, mandibles brown, fuscous basally.}

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, extremely finely, shallowly and fairly closely punctate, hairy clothing short and inconspicuous. Head nearly as wide as long, widest at the vertex, narrowing slightly in front, width between the eyes a little more than the length from the eye to the vertex; convex above, depressed in front, tumid beneath, the greatest depth behind the eyes; vertical margin concave, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments of the flagellum a little longer than wide, the pedicel hardly twice as long as wide, antennal fossæ deep; clypeal process a small, decurved, spatulate beak, flat above and extending more than half its length in front of the anterior margin of the head; mandibles not very stout; bent at the middle, the distal portion flattened, truncate and toothed apically, base not reaching the eye; cheeks fairly wide; gula and sides of the head flat, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate, smooth and polished; wings subinfuscate, with a more or less faint yellowish brown pigmentation; length 2.5 to 3 mms.

Described from two females (type and paratype) collected on Kona-

huanui, Oahu, by O. H. Swezey, February 22, 1914.

Type: Cat. No. 17, Bishop Museum.

18. Sierola suttoniae n.sp.

Q black, hardly shining in front of the abdomen, head opaque, antennæ and legs brown.

Head and thorax to the propodeum with a microscopically fine surface sculpture, much coarser on the head, fairly coarsely, shallowly and remotely punctate, hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; flatly convex above, tumid beneath, the greatest depth beneath the posterior end of the eyes; vertical margin straight, temples rounded; eyes convex; antennæ reaching the mesoscutum, all the segments of the flagellum longer than wide, pedicel and funicle twice as long as wide, antennal fossæ deep; clypeus small, decurved, hardly exceeding the anterior margin of the head, contracted at the base by the inward extension of the antennal fossæ; mandibles stout, curved, concavo-convex, truncate and toothed apically, base nearly but not quite touching the eye above; cheeks narrow; gula and sides of the head convex, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen elongate ovate, smooth and polished; wings with a deep brown pigmentation; length 3 mms.

Described from one female (type), collected on Suttonia lassertiana on Mt. Kaala, Oahu, 2500 ft. elev., by P. H. Timberlake, March 4, 1917.

Type: Cat. No. 18, Bishop Museum.

19. Sierola muiri n.sp.

2 shining black, antennæ and legs brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head and pronotum; finely and [26]

closely punctate and hairy. Head wider than the thorax, as wide as long, width between the eyes considerably more than the length from the eye to the vertex; convex above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eyes; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments of the flagellum longer than wide, the pedicel and funicle twice as long as wide, antennal fossæ deep; clypeus spatulate, rather short, hardly exceeding the anterior margin of the head, convex above, apically depressed, contracted at the base by the inward extension of the antennal fossæ; mandibles fairly stout, bent at the middle, distal portion flattened, truncate apically and toothed, the base not reaching the eye; cheeks fairly wide; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum short, finely aciculate; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a shallow yellowish brown pigmentation; length 3 mms.

Described from two females (type and paratype). Type collected at Kilauea, Hawaii, 4000 ft. elev., by Giffard and Muir, January 19, 1917. Paratype collected in the same locality by W. M. Giffard, June 8, 1908.

Type: Cat. No. 19, Bishop Museum.

20. Sierola rocki n.sp.

9 shining black, the legs, mandibles and basal segments of antennæ yellowish brown, antennæ outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, finely, shallowly and remotely punctate, hairy clothing inconspicuous. Head a little wider than long, widest across the eyes, narrowing slightly behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments of the flagellum longer than wide, pedicel and funicle twice as long as wide, antennal fossæ deep: clypeus spatulate, rather small, horizontally extended, and exceeding the anterior margin of the head by half its length, convex above, contracted at base by the inward extension of the antennal fossæ; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen elongate ovate, smooth and polished; wings with a shallow yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected near Kilauea, at 29 miles, from Hilo, on the Hilo-Kau road, Hawaii by D. T. Fullaway, May 12, 1913.

Type: Cat. No. 20, Bishop Museum.

21. Sierola bicolor n.sp.

Q slender, shining black, almost brilliant, antennæ basally, prothorax and the legs luteous, mandibles testaceous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, finely, shallowly and remotely punctate, hairy clothing short and inconspicuous. Head longer than wide, length from eye to vertex equalling the width between the eyes; convex above, depressed in front, tumid beneath, greatest depth behind the eyes, vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, segments of the flagellum scarcely longer than wide, pedicel about twice as long as wide, antennal fossæ somewhat shallow; clypeus short, flat on top, apically depressed and blunt, hardly exceeding the anterior margin of the head, basally marked by converging lines from the sides; mandibles fairly stout, bent at the middle, distal portion flattened, truncate apically and toothed, base not reaching the eye; cheeks narrow; gula and sides of the head flat, the former medially foreshortened, longer than wide, narrowing behind, both anterior and posterior margin rather deeply incised; propodeum rugulose; abdomen somewhat particolored, elongate ovate, smooth and polished; wings subinfuscate; length 2.75 mms.

Described from two females (type and paratype). Type collected at Opaeula, Oahu, by D. T. Fullaway, March 30, 1913. Paratype collected on Mt. Kaala, Oahu, by P. H. Timberlake, July 22, 1917.

Type: Cat. No. 21, Bishop Museum.

22. Sierola aristoteliae n.sp.

Q black, with the exception of the prothorax, which is yellowish brown, thorax only faintly shining, the head dull, opaque or nearly so; legs, apex of the clypeus, antennæ basally and the mandibles, except at the base, luteous, antennæ fuscous outwardly.

Thorax with a microscopically fine reticulate surface sculpture, head coarsely sculptured, apparently minutely granulate; very finely and closely punctate; clothed with a rather dense covering of short procumbent hairs. Head a little longer than wide, width between the eyes greater than the length from eye to vertex; length in front of the eyes not great; convex above, depressed in front, tumid beneath, the greatest depth in front of the posterior end of the eye; vertical margin straight, temples rounded; eyes convex, antennæ longer than the head, segments of the flagellum scarcely longer than wide, pedicel nearly twice as long as wide, antennal fossæ deep; clypeus short, projecting a little from the anterior margin of the head, longitudinally elevate in the middle and sloping at the sides, apex depressed, the carina distinct behind the antennæ but effaced in front of it; mandibles stout, curved, concavo-convex, truncate and toothed apically, base touching the eye above; gula and sides of the head convex, the former not much foreshortened medially, longer than wide, anterior margin arcuately concave, posterior margin incised; abdomen short ovate, smooth and polished; wings hyaline; length 2.5 mms.

Described from seven females (type and paratypes), four, including the type reared from the larvæ of a species of Aristotelia infesting a Gouldia fruit collected in Palolo by O. H. Swezey, January 11, 1914. Of the remaining paratypes, one was collected on Manoa Cliffs by P. H. Timberlake, March 29, 1918; one in the S. E. Koolau Mountains by J. C. Bridwell, Sep-

tember 9, 1917; and one along Cooke's trail, Nuuanu Valley, by D. T. Fullaway, January 14, 1917.

Type: Cat. No. 22, Bishop Museum.

23. Sierola anthracina n.sp.

Q shining black, the antennæ basally and the legs yellowish brown, antennæ distally and the femora infuscate.

Head and thorax with a fine reticulate surface sculpture, finely, shallowly and fairly closely punctate and hairy. Head longer than wide, width between the eyes a little more than the length from the eye to the vertex; flatly convex above, depressed in front, tumid beneath, greatest depth behind the eye; vertical margin slightly concave, temples rounded but quite full, eyes flatly convex; antennæ reaching the mesoscutum, all the segments a little longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus simple, flat on top, declivous at the sides, depressed apically, extended shortly in front of the anterior margin of the head as an acutely angulate projection, the base marked by converging lines from the sides, which meet in the middle and extend backward a short distance; mandibles fairly stout, bent near the middle, the distal portion twisted and flattened, obliquely truncate apically and toothed, base not touching the eye; cheeks narrow; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin semicircularly concave, posterior margin deeply incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate: length 3 mms.

Described from one female (type) collected on Tantalus Mountain, Oahu, 1500 ft. elevation, by W. M. Giffard, December 22, 1918.

Type: Cat. No. 23, Bishop Museum.

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24. Sierola konana n.sp.

9 shining black, legs and antennæ brown to fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, finely, shallowly and rather remotely punctate and hairy, the sculpture a little coarser on the propodeum. Head wider than the thorax, longer than wide, widest across the eyes, narrowing behind and in front, length in front almost as great as the length behind the eyes, width between considerably more than the length from eye to vertex but less than twice as much; flatly convex above, depressed in front, tumid beneath, deepest beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ almost reaching the mesoscutum, the segments of the flagellum all longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus short, nearly horizontal, medially longitudinally elevate and sloping at the sides, extended a little in front of the anterior margin of the head; mandibles large, bent in the middle and twisted, the distal portion flattened, truncate apically and toothed, base not reaching the eye; cheeks narrow; gula and sides of the head rather flat, the former medially foreshortened, wider than long, narrowing a little and slightly protuberant behind, a shallow sulcus separating the two lobes; abdomen elon-

gate ovate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected at Puuwaawaa, N. Kona, Hawaii, 3800 ft. elevation, by W. M. Giffard in August, 1917.

Type: Cat. No. 24, Bishop Museum.

25. Sierola angustata n.sp.

9 moderately flat, slender, and shining black, antennæ basally, mandibles except at the base, trochanters, tibiæ and tarsi brown.

Head and thorax with a microscopically fine reticulate surface sculpture, a little coarser on the head and propodeum, almost impunctate, the minute pin punctures extremely fine, shallow and remote, hairy clothing inconspicuous. Head considerably longer than wide, the length from the eye to the vertex equalling the width between the eyes; flatly convex above, depressed in front, tunid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, segments of the flagellum a little longer than wide, pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus short, flat on top, projected a little in front of the anterior margin of the head, apically depressed and bluntly pointed; mandibles slender, curved, toothed apically, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, longer than wide, widening behind where it is divided into two lobes by a fairly deep median sulcus, anterior margin arcuately concave, posterior margin incised; abdomen elongate, smooth and polished; wings subinfuscate; length 2.25 mms.

Described from one female (type) collected at Kilauea, Hawaii, by W. M. Giffard in January, 1915.

Type: Cat. No. 25, Bishop Museum.

26. Sierola levis n.sp. Plate XVI, Figure 5.

9 moderately flat, slender, and shining, almost brilliant, black; legs, antennæ basally and mandibles, except at the base, luteo-testaceous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; impunctate or nearly so, the minute pin punctures and hairs of extreme fineness. Head nearly twice as long as wide, widest at the vertex, narrowing in front, length from the eye to the vertex more than the width between the eyes; convex above, depressed in front, tumid beneath, greatest depth behind the eyes more than half the length; vertical margin very slightly concave, temples rounded, eyes rather flat: antennæ reaching the mesoscutum, all the segments of the flagellum considerably longer than wide, pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus short, projected a little in front of the anterior margin of the head, medially longitudinally elevate but without carina, apically depressed and bluntly pointed; mandibles long, slender, nearly straight, toothed apically, base touching the eye above, projecting slightly below; gula and sides of the head flat, the former medially foreshortened, twice as long as wide, somewhat protuberant behind and divided into two lobes by a deep median sulcus, anterior and posterior margins incised; propodeum rugulose,

with a triangular area at the base smooth and shining; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

8 with the head and abdomen shorter, the latter bluntly pointed api-

cally, wings deeply pigmented.

Described from four females and five males (type, allotype and paratypes). Type and allotype collected on Tantalus mountain, Oahu, 1500 ft. elev., by W. M. Giffard, December 22, 1918; 2 & & and 1 & collected on Manoa Ridge, Oahu, by D. T. Fullaway, February 13, 1917; 1 & collected on Waialae Ridge, Oahu, by O. H. Swezey, April 22, 1917; 1 & collected on Manoa Cliffs, Oahu, by P. H. Timberlake, September 1, 1918; 1 & collected on Tantalus mountain, Oahu, 1500 ft. elev., by W. M. Giffard, August 27, 1918; 1 & collected on Manoa Cliffs, Oahu, by P. H. Timberlake, March 29, 1918, paratypes.

Type: Cat. No. 26, Bishop Museum.

27. Sierola brevicornis n.sp.

9 moderately flat, slender, and shining, almost brilliant, black; legs and antennæ basally luteo-testaceous, the latter fuscous outwardly, mandibles reddish brown except at the base.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarsely, shallowly and remotely punctate and hairy. Head a little longer than wide, width between the eyes more than the length from eye to vertex; flat above, depressed a little in front, and a little tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes convex, antennæ a little longer than the head, all the segments of the flagellum as wide as long with the exception of the pedicel, which is a little longer, antennal fossæ deep; clypeus short, medially longitudinally elevate, sloping at the sides, depressed apically and slightly projected in front of the anterior margin of the head; mandibles slender, curved, concavo-convex, truncate apically and toothed, base not reaching the eye; cheeks very narrow; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin arcuately curved, posterior margin incised; propodeum hardly rugulose, a little more coarsely sculptured than the head and thorax in front; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 2.75 mms.

Described from one female (type) collected at Kaumuohona, Oahu, by P. H. Timberlake, June 4, 1916.

Type: Cat. No. 27, Bishop Museum.

28. Sierola montana n.sp.

Q brilliant black, legs and antennæ basally luteo-testaceous, the latter fuscous outwardly; mandibles testaceous.

Head and thorax with a microscopically fine and delicate reticulate surface sculpture; finely, shallowly and somewhat remotely punctate, hairy clothing short and inconspicuous. Head as wide as long, widest across the eyes, which are slightly bulging, short behind the eyes, width between the eyes twice the length from eye to vertex; convex above, depressed in front,

tumid beneath, the greatest depth, beneath the posterior end of the eye, at least two-thirds the length; vertical margin straight, temples rounded, eyes convex; antennæ reaching the necoscutum, all the segments of the flagellum longer than wide, the pedicel more than twice as long as wide, antennal fossæ deep; clypeus short, medially longitudinally elevate and sloping at the sides, depressed apically and slightly projected in front of the anterior margin of the head; mandibles slender, curved, concavo-convex, toothed apically, base nearly reaching the eye above; gula and sides of the head flat, the former medially foreshortened, considerably wider than long and somewhat protuberant behind where it is divided into two lobes by a wide and shallow sulcus; propodeum rugulose, flat on top, declivous behind and at the sides, the margins distinct; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.5 mms.

Described from one female (type) collected on Kaala mountain, Oahu, 2500-3000 feet elevation, by P. H. Timberlake, July 22, 1917.

Type: Cat. No. 28, Bishop Museum.

29. Sierola peleana n.sp.

9 shining black, almost brilliant, legs and antennal scape flavous, the flagellum fuscous; mandibles reddish brown.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly, and remotely punctate; sparingly clothed with short stiff white hairs. Head a little longer than wide, width between the eyes more than the length from the eye to the vertex; flatly convex above, depressed in front, tumid beneath, greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex, antennæ reaching the mesoscutum, all the segments considerably longer than wide, the pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus short, medially elevate and sloping at the sides, depressed apically and slightly projected in front of the anterior margin of the head; mandibles stout, bent in the middle, the distal portion twisted and flattened, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen ovate, smooth and polished; wings subinfuscate; length 3 mms.

Described from three females (type and paratypes). Type collected on Kaala mountain, Oahu, 2000 ft. elev., on *Pelea clusiaefolia*, by P. H. Timberlake, March 4, 1917. Two specimens collected on Niu Ridge, Oahu, by P. H. Timberlake, February 10, 1918, paratypes.

Type: Cat. No. 29, Bishop Museum.

30. Sierola kaala n.sp.

9 moderately flat and elongate; dull black on the head, thorax a little more shining, abdomen brilliant; antennæ and legs brown to fuscous, antennæ fuscous outwardly, legs basally from the apex of the femora.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head than on the thorax; fairly closely, shallowly and a little coarsely punctate and hairy. Head longer than wide by the length in front of the eyes, width between the eyes considerably more than the length from eye to vertex; flatly convex above, depressed in front, tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel nearly twice as long as wide, antennal fossæ deep; clypeus reduced by erosion to a carinate ridge, declivous at the sides, apically depressed and slightly projected in front of the anterior margin of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base reaching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, a little longer than wide, slightly protuberant behind where it is divided into two lobes by a wide, shallow sulcus, anterior margin almost straight, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate; wings with a yellowish brown pigmentation; length 3.5 mms.

Described from one female (type) collected on Kaala mountain, Oahu,

2500-3000 ft. elevation, by P. H. Timberlake, July 22, 1917.

Type: Cat. No. 30, Bishop Museum.

31. Sierola usitata n.sp.

Q moderately flat, slender and elongate; head and thorax dull black, abdomen brilliant, antennæ and legs brown to fuscous, the former fuscous outwardly, the latter basally.

Head and thorax to the propodeum with a microscopically close, rather coarse, reticulate surface sculpture, a little coarsely, shallowly and closely punctate, clothed with silvery white hairs. Head considerably longer than wide, width between the eyes not much greater than the distance from the eye to the vertex; convex above, depressed in front and a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, slightly projected in front of the anterior margin of the head, depressed in front and sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, concavo-convex, truncate and toothed apically, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, longer than wide, narrowing posteriorly, anterior margin straight, posterior margin incised; the latter with a highly polished surface; propodeum finely rugulose; abdomen elliptical, apically acuminate, smooth and polished; wings with a deep yellowish brown pigmentation; length 3.1 mms.

& smaller, head shorter, antennæ more slender, mandibles luteo-testaceous; abdomen bluntly pointed at the apex.

Described from five females and one male (type, allotype and paratypes) collected at Kaumuohona, Oahu, by P. H. Timberlake, September 9, 1917.

Type: Cat. No. 31, Bishop Museum.

32. Sierola carinata n.sp.

Q unusually large; shining black, not brilliant, tibiæ and tarsi fuscous. Head and thorax with a microscopically close and fairly coarse reticulate surface sculpture, fairly closely but somewhat irregularly punctate and hairy. Head wider than the thorax and considerably longer than wide, widest at the vertex and narrowing slightly in front, width between the eyes greater than the distance from the eye to the vertex, which is considerable; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ longer than the head, segments of the flagellum as wide as or wider than long, pedicel a little longer than wide, antennal fossæ deep; clypeus reduced by erosion at the sides to a carinate ridge, depressed apically and projecting a little in front of the anterior margin of the head, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles very stout, curved, concavo-convex, truncate apically and toothed, base nearly reaching the eye above; gula rather flat and hairy, somewhat foreshortened medially, a little wider than long, anterior margin almost straight, posterior margin incised; abdomen elongate ovate, smooth and polished, somewhat depressed; wings subinfuscate, with a rather faint yellowish-brown pigmentation basally and along costal border; length 3.5 mms.

Described from one female (type) collected at Kilauea, Hawaii, lumber camp, 4000 ft. elevation, by W. M. Giffard, July 4, 1918.

Type: Cat. No. 32, Bishop Museum.

33. Sierola koa n.sp.

Q unusually large; shining black, legs and antennæ yellowish brown, the latter fuscous outwardly.

Head and thorax with a microscopically fine reticulate surface sculpture, finely and closely punctate and hairy. Head considerably longer than wide, widest across the eyes, slightly narrower behind and in front, length from the eye to the vertex equalling the width between the eyes; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ scarcely longer than the head, the segments of the flagellum not much longer than wide, pedicel a little longer, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting a little in front of the anterior margin of the head, sloping at the sides; mandibles very stout, bent at the middle, distal portion somewhat flattened, obliquely truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, wider than long, finely punctate and hairy, anterior margin nearly straight, posterior margin incised; abdomen ovate, apically acuminate, smooth and polished; wings hyaline; length 3.25 mms.

Described from three females (type and paratypes) collected on Tantalus mountain, Oahu, on Acacia koa, by J. C. Bridwell, June, 1918.

Type: Cat. No. 33, Bishop Museum.

34. Sicrola pilosa n.sp. Plate XVI, Figure 6.

Q unusually large and thick-set; dull shining black, antennæ and legs brown, the fore-femora outwardly and the antennæ distally fuscous.

Head and thorax to the propodeum with a microscopically close and rather coarse reticulate surface sculpture, uniformly closely and shallowly punctate and clothed with long light brown to silvery hairs. Head considerably longer than wide, widest across the eyes, much narrower behind and in front, width between the eves a little more than the length from the eye to the vertex, which is considerable; flatly convex above, depressed in front, very tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ longer than the head, all the segments considerably longer than wide, antennal fossæ deep; clypeus reduced to an extremely thin, carinate ridge, vertically depressed apically and projecting a little in front of the anterior margin of the head, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, apically toothed, base not reaching the eye; cheeks narrow; gula and sides of the head flat, the former medially foreshortened, as wide as long in front, narrowing behind where it is strongly protuberant and divided into two lobes by a deep sulcus; anterior margin almost straight; propodeum rugulose; abdomen elongate ovate, mostly smooth and polished, but an extremely fine reticulate surface sculpture evident; wings subinfuscate, with a faint yellowish-brown pigmentation: length 3.5 mms.

Described from five females (type and paratypes), collected at Kualapuu, Molokai, by D. T. Fullaway, July 15, 1910.

Type: Cat. No. 34, Bishop Museum.

35. Sierola megalognatha n.sp.

9 moderately flat and unusually large; shining black, legs and antennæ brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, closely and shallowly punctate and hairy. Head nearly as wide as long, widest at the vertex, narrowing a little in front, width between the eyes nearly twice the length from eye to vertex; flat on top, depressed in front, a little tumid beneath; deepest behind the eyes, the greatest depth less than half the length; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, segments of the flagellum a little longer than wide, the pedicel nearly twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting a little in front of the anterior margin of the head, sloping at the sides; mandibles abnormally large, bent at the middle, the distal portion flattened and punctate, apically truncate and toothed, base reaching the eye above; gula and sides of the head flat, the former scarcely as long as wide but not much foreshortened medially, posterior margin incised, anterior margin arcuately concave; abdomen ovate, apically acuminate, smooth and polished; wings hyaline; length 3.5 mms.

& smaller; mandibles yellowish brown, abdomen bluntly pointed at the apex.

Described from two females and one male (type, allotype and paratype), [35]

collected at Puuwaawaa, N. Kona, Hawaii, 3700 ft. elevation, by W. M. Giffard, August, 1917.

Type: Cat. No. 35, Bishop Museum.

36. Sicrola tantalea n.sp.

Q unusually large; shining black, antennæ, legs and posterior margin of the abdominal segments brown, the antennæ fuscous outwardly.

Head and thorax with a microscopically fine reticulate surface sculpture, rather closely and finely punctate and hairy. Head wider than the thorax, a little longer than wide, the length from eye to vertex about equalling the width between the eyes, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ no longer than the head, pedicel a little longer than wide, following segments as wide as or even wider than long, antennal fossæ deep; clypeus reduced by erosion from the sides to a longitudinal, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised, median groove nearly effaced; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3.5 mms.

Described from three females (type and paratypes) collected on Tantalus mountain, Oahu, 1300-1800 ft. elevation. Type, numbered 284, collected by W. M. Giffard, September 9, 1908. One specimen, collected by W. M. Giffard, September 14, 1907, and one labelled Oahu (Koebele), paratypes.

Type: Cat. No. 36, Bishop Museum.

37. Sierola compacta n.sp.

Q moderately large and thick-set; shining black, the head a little dull, antennæ brown to fuscous at the base; trochanters, femora apically, tibiæ and tarsi testaceous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head than on the thorax, rather closely, coarsely and shallowly punctate, and hairy. Head nearly as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, tumid beneath, deepest under the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, the segments of the flagellum all longer than wide, the pedicel twice, the funicle three times as long as wide; antennal fossæ deep; clypeus carinate, apically depressed and projecting a little in front of the anterior margin of the head sloping at the sides; mandibles slender, curved, toothed apically, base not reaching the eye; cheeks narrow; gula and sides of the head convex, the former medially foreshortened, transverse, anterior margin arcuately concave, posterior margin incised, median groove nearly effaced; propodeum

rugulose, opaque; abdomen short ovate, smooth and polished; wings sub-infuscate, with a yellowish brown pigmentation; length 3 mms.

Described from two females (type and paratype). Type collected on a-a flow, Kau, Hawaii, 3600 ft. elevation, by W. M. Giffard, July 18, 1918. One specimen from Kilauea, Hawaii, collected by W. M. Giffard, June 12, 1908, and numbered 13, paratype.

Type: Cat. No. 37, Bishop Museum.

38. Sierola osborni n.sp.

Q unusually large; shining black, almost brilliant, antennæ and legs fuscous to black, the middle and hind femora entirely black.

Head and thorax with a microscopically fine reticulate surface sculpture, fairly closely, shallowly and rather coarsely punctate and hairy. Head wider than the thorax, a little longer than wide, width between the eyes greater than the length from eye to vertex; convex above and beneath, without great depth; vertical margin straight, temples rounded, eyes convex; antennæ longer than the head, all the segments a little longer than wide, the pedicel more than twice as long as wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base reaching the eye above; gula and sides of the head convex, the former very much foreshortened medially, transverse, anterior margin arcuately, posterior margin semicircularly concave, median groove faintly impressed; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation basally; length 3.5 mms.

Described from one female (type) collected at Kilauea, Hawaii, by D. T. Fullaway, May 12, 1913.

Type: Cat. No. 38, Bishop Museum.

39. Sierola fuscipennis n.sp.

9 unusually large; dull black, the head opaque, antennæ and legs brown, the former fuscous outwardly, the latter with the coxæ and femora mostly black.

Head and thorax with a microscopically fine and close reticulate surface sculpture, closely and finely punctate and hairy. Head a little longer than wide, widest across the eyes, narrowing slightly behind and in front, width between the eyes considerably more than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ a little longer than the head, all the segments longer than wide, antennæ lossæ deep; clypeus reduced by erosion from the sides to a carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base nearly reaching the eye above; cheeks very narrow; gula and sides of the head flatly convex, the former medially

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foreshortened, transverse, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings with a slightly fuscous pigmentation; length 4 mms.

Described from one female (type) collected on the Shipman Ranch, at

Kilauea, Hawaii, by F. Muir, January 14, 1917.

Type: Cat. No. 39, Bishop Museum.

40. Sierola longica udata n.sp.

Q unusually large and thick-set; black, the head and thorax dull, the former nearly opaque, legs and antennæ brown to fuscous.

Head and thorax with a microscopically fine and close reticulate surface sculpture, finely, shallowly and rather closely punctate and hairy. Head a little longer than wide, widest across the posterior part of the eyes, narrowing behind and in front, smallest width, between the eyes, twice the length from eye to vertex; convex above and beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate and vertically depressed, projecting a little in front of the anterior margin of the head, declivous at the sides; mandibles fairly stout, curved, concavoconvex, truncate and toothed apically, base not quite reaching the eye; cheeks narrow; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior and posterior margins arcuately concave, median groove nearly effaced; abdomen elongate ovate, apically acuminate; wings hyaline or nearly so; length 3.75 mms.

Described from three females (type and paratypes) collected on Maui by Koebele.

Type: Cat. No. 40, Bishop Museum.

41. Sierola laticeps n.sp.

Q unusually large; dull shining black, antennæ and legs brown, the fore-coxæ and femora outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, closely and shallowly punctate and thinly clothed with silvery gray hairs. Head wider than the thorax, a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; convex above, depressed in front, abnormally swollen beneath, the greatest depth, beneath the posterior end of the eye, at least two-thirds the length; vertical margin straight, temples rounded, eyes convex; autennæ longer than the head, all the segments considerably longer than wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles short, stout, concavo-convex, truncate and toothed apically, base not reaching the eye; cheeks narrow; gula and sides of the head flatly concave, the former medially foreshortened, about as long as wide, narrowing behind where it is strongly protuberant and divided into two lobes by a rather deep median sulcus; propodeum finely rugulose;

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abdomen elongate ovate, smooth and polished; wings with a faint yellowish brown pigmentation; length 3.75 mms.

Described from seventeen females (type and paratypes). Type collected at Hilo, Hawaii, 1500 ft. elevation, by W. M. Giffard, August 3, 1906. Five § § from the Kilauea koa forest, collected by F. W. Terry, May 24, June 3, 1905: 6 § § labelled Hawaii (Koebele); I § from the Kilauea koa forest collected by W. M. Giffard, July 19th, 1911; I § from Kau road, collected by Giffard and Muir, January 16, 1917; I § from the Kilauea dry forest, 4000 ft. elevation, collected by W. M. Giffard, January 9, 1919; I § from Puuwaawaa, N. Kona, 3700 ft. elevation, collected by W. M. Giffard, August, 1917; I § from Kahuku, Kau, collected by Giffard and Muir, January 15, 1917, paratypes.

Type: Cat. No. 41, Bishop Museum.

42. Sierola localis n.sp.

Q unusually large; dull shining black, trochanters, tibiæ and tarsi and a large part of the antennæ brown.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, fairly closely and finely punctate and hairy, the pin punctures on the head extremely fine. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides; mandibles fairly stout, curved, concavo-convex, truncate and toothed apically, base reaching the eye above; gula flatly convex, medially foreshortened, wider than long, anterior margin nearly straight; propodeum rugulose; abdomen elongate ovate, smooth and shining; wings subinfuscate; length 3.5 mms.

Described from one female (type) collected on Tantalus mountain, Oahu, 1300 ft. elevation, by W. M. Giffard, January 15, 1905.

Type: Cat. No. 42, Bishop Museum.

43. Sierola obscura n.sp.

Q unusually large and thick-set; dull shining black, the head nearly opaque; trochanters, tibiæ and tarsi brown, antennæ brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, coarsely, shallowly and fairly closely punctate and hairy, both sculpture and punctuation coarser on the head than on the thorax. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, tunid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base

of the antennæ; mandibles stout, curved, concavo-convex, truncate and toothed apically, base reaching the eye above; gula convex, medially fore-shortened, twice as wide as long, slightly depressed behind on either side of the median groove, anterior margin nearly straight, posterior margin incised; abdomen elliptic-ovate, apically acuminate, smooth and polished; wings hyaline; length 3.5 mms.

Described from one female (type) collected at Palolo, Oahu, by O. H.

Swezey, January 3, 1915.

Type: Cat. No. 43, Bishop Museum.

44. Sierola levigata n.sp.

9 unusually large; shining black, the head and thorax very dull, trochanters, tibiæ, tarsi and apex of the mandibles brown, antennæ fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarsely, shallowly and closely punctate and hairy. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex, length in front of the eyes not great; convex above and beneath, vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles short, stout, curved, concavo-convex, truncate and toothed apically, base nearly reaching the eye above; cheeks extremely narrow; gula and sides of the head convex, the former medially foreshortened, twice as wide as long, slightly depressed behind on either side of the median line, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 3.75 mms.

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft. elevation, by W. M. Giffard, October, 1915.

Type: Cat. No. 44, Bishop Museum.

45. Sierola tenuis n.sp.

Q slender; shining black, the legs and antennæ basally yellowish brown, the latter fuscous outwardly, mandibles brown except at the base.

Head and thorax with a microscopically fine reticulate surface sculpture, fairly coarse except on the propodeum; closely, shallowly and somewhat coarsely punctate, rather thickly clothed with long silvery-gray hairs. Head twice as long as wide, width between the eyes a little less than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel longer than wide, following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides; mandibles fairly stout, curved, truncate and toothed apically, base touching the eye above; gula and sides of the head flat, the former convex behind, medially foreshortened but considerably longer than

wide, narrowing posteriorly, anterior margin nearly straight, posterior margin incised; abdomen short ovate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected at Palolo, Oahu, by O. H. Swezey, January 3, 1915.

Type: Cat. No. 45, Bishop Museum.

46. Sierola depressella n.sp.

Q slender; shining black, antennæ and legs fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture and extremely finely and remotely punctate, hairy clothing inconspicuous. Head twice as long as wide, width between the eyes a little less than the length from eye to vertex; nearly flat above and beneath; vertical margin straight, temples rounded, eyes flat; antennæ a little longer than the head, pedicel longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and slightly projecting in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate and toothed apically, base touching the eye above; gula flatly convex, not much foreshortened medially, considerably longer than wide, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished, a faint reticulate surface sculpture on the tergites; wings subinfuscate; length 2 mms.

Described from one female (type) collected on Kaala mountain, Oahu, 2500-3000 ft. elevation, by P. H. Timberlake, July 22, 1917.

Type: Cat. No. 46, Bishop Museum.

47. Sierola glabra n.sp.

Q slender, somewhat depressed; shining black, almost brilliant, trochanters, tibiæ, tarsi and antennæ brown, the latter fuscous outwardly.

Head and thorax with a microscopically fine reticulate surface sculpture, finely, shallowly and somewhat remotely punctate, hairy clothing inconspicuous. Head somewhat longer than wide, width between the eyes equalling the distance from eye to vertex, length in front of the eyes not great; convex above and beneath, depressed in front; vertical margin straight, temples rounded, eyes flatly convex; antennæ hardly longer than the head, pedicel longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides; mandibles slender, curved, truncate and toothed apically, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, as wide as long, a little convex behind, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 2.25 mms.

Described from one female (type) collected on Tantalus mountain, Oahu, 1300 ft. elevation, by W. M. Giffard, May 7, 1911.

Type: Cat. No. 47, Bishop Museum.

48. Sierola flavicornis n.sp.

9 shining black, almost brilliant, antennæ and legs flavous.

Head and thorax with a microscopically fine reticulate, surface sculpture, finely, shallowly and somewhat remotely punctate, hairy clothing inconspicuous. Head considerably longer than wide, width between the eyes equalling the distance from eye to vertex, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ hardly longer than the head, pedicel a little longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and slightly projecting in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate and toothed apically, base touching the eye above; gula flatly convex, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and shining; wings hyaline; length 2.25 mms.

Described from one female (type) collected on Tantalus mountain. Oahu, elevation 1300 ft., by W. M. Giffard, January 1, 1905.

Type: Cat. No. 48, Bishop Museum.

49. Sierola timberlakei n.sp.

9 shining yellowish brown, often infuscate, legs, antennæ and mandibles concolorous.

Head and thorax with a microscopically fine reticulate surface sculpture, finely, shallowly and fairly closely punctate and hairy. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, segments of the flagellum longer than wide, the pedicel nearly twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides; mandibles slender, curved, apically truncate and toothed, base reaching the eye above; gula and sides of the head flat, the former medially foreshortened, as wide as long, narrowing behind where it is rather convex, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and shining; wings subinfuscate with a faint yellowish brown pigmentation; length 2 mms.

& a little smaller, the head as wide as long, abdomen bluntly pointed at the apex.

Described from eight females and one male (type, allotype and paratypes). Type from Tantalus mountain, Oahu, mounted on pin with one other lacking head, both of which were specimens reared from larvæ of Batrachedra sophroniclla, by O. H. Swezey, August 13. 1911. One & collected at Waiawa, Oahu, by O. H. Swezey, May 4, 1913, allotype. Two & & collected at Kalihi, Oahu, by O. H. Swezey, May 7, 1914, one & collected on

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Tantalus mountain, Oahu, by O. H. Swezey, August 4, 1912, one 2 collected on Cooke's Trail, Nuuanu Valley, Oahu, by P. H. Timberlake, on *Cyrtandra grandiflora*, March 19, 1916, one 2 collected on Kaala mountain, Oahu, 2000 ft. elevation, by P. H. Timberlake, March 4, 1917, one 2 collected in Nuuanu, Oahu, by D. T. Fullaway, August 20, 1916, paratypes.

Type: Cat. No. 49, Bishop Museum.

50. Sicrola pulchra n.sp.

9 shining, almost brilliant, black on the head, shining yellowish brown on the thorax and abdomen, often infuscate, legs and antennæ luteous, the latter fuscous outwardly, mandibles brown except at the base.

Head and thorax with a microscopically fine reticulate surface sculpture, finely, shallowly and remotely punctate, hairy clothing inconspicuous. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes equalling the length from eye to vertex; flat above, convex beneath, deepest behind the eye but without great depth; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, the segments of the flagellum longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, depressed apically and projecting slightly in front of the anterior margin of the head, sloping at the sides; mandibles slender, curved, flattened distally, apically truncate and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, as long as wide, anterior margin arcuately concave, posterior margin incised, median groove very fine; abdomen ovate, smooth and polished; wings subinfuscate, sometimes with a faint vellowish brown pigmentation; length 2.5 mms.

& a little smaller, mandibles luteous, abdomen bluntly pointed at the apex.

Described from 21 females and 5 males (type, allotype and paratypes). Type and allotype from Tantalus mountain, Oahu, and part of a series including 10 9 9 and 4 8 8 specimens, reared by O. H. Swezey from leaf-miner in Urera, March 15, 1914. In addition to the paratypes in the above series, there are four females and one male from Manoa Cliffs, Oahu, reared by P. H. Timberlake, from Urera leaf miner, April 15, 1918; 4 9 9 from Manoa Cliffs, Oahu, collected by P. H. Timberlake on Urera sandwicensis, March 29, 1918; 1 9 from Tantalus, reared by O. H. Swezey, from blotch miner in Urera, August 29, 1915; 1 9 collected on Tantalus by O. H. Swezey, March 16, 1915; 1 9 collected in Nuuanu, by D. T. Fullaway, March 4, 1912, paratypes.

Type: Cat. No. 50, Bishop Museum.

51. Sierola pubescens n.sp.

§ shining black, abdominal segments posteriorly margined with brown, legs yellowish brown, antennæ yellowish brown, fuscous outwardly.

Head and thorax with a microscopically fine reticulate surface sculpture, coarsely and fairly closely punctate and hairy. Head wider than the thorax and a little longer than wide, length from the eye to the vertex equalling the width between the eyes, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ scarcely longer than the head, pedicel a little longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base nearly or quite reaching the eye; gula convex, closely punctate and pubescent, medially foreshortened, wider than long, the median groove distinct, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 3 mms.

Described from 9 females (type and paratypes), collected on Tantalus mountain, Oahu, 1300 ft. elevation, by W. M. Giffard. Two specimens, one of which is the type, collected October 15, 1905. In addition to the paratype just mentioned, there are three specimens, collected November 14, 1907, 2 specimens collected April 16, 1905, 1 specimen collected March 11, 1905, 1 specimen collected December 2, 1905, paratypes,

Type: Cat. No. 51, Bishop Museum.

52. Sierola seminigra n.sp.

Q black, with the exception of the prothorax, which is brown; and shining, with the exception of the head, which is dull, opaque or nearly so; legs, antennæ and mandibles brown.

Head and thorax with a microscopically fine reticulate surface sculpture, coarser and closer on the head; very finely, closely and shallowly punctate; hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; convex above, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel a little longer than wide, following segments as wide as long or nearly so, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward a little on the top of the head; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula convex, medially foreshortened, wider than long, anterior margin almost straight, posterior margin deeply incised; abdomen ovate, apically acuminate, smooth and polished; wings with a yellowish brown pigmentation; length 2.75 mms.

& smaller, head shorter, legs, antennæ and mandibles paler, abdomen bluntly pointed at the apex, wings nearly hyaline.

Described from four females and one male (type, allotype and paratypes). Type collected on Cooke's Trail, Nuuanu Valley, Oahu, by D. T. Fullaway, January 14, 1917. One & and one & collected in Pauoa Valley, Oahu, by O. H. Swezey, January 23, 1909, respectively allotype and paratype. One & collected in Palolo Valley, Oahu, by D. T. Fullaway, August 12, 1912,

and one collected on Olympus mountain, Oahu, January 14, 1912, paratypes. Type: Cat. No. 52, Bishop Museum.

53. Sierola fuscipes n.sp.

9 dull shining black, the legs and antennæ fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly closely and finely punctate; hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head a little beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised, abdomen elongate ovate, smooth and polished; wings with a fuscous pigmentation; length 2.5 mms.

Described from five females (type and paratypes) from Kilauea, Hawaii, dry forest, 4000 ft. elevation, three 9 9 collected by Giffard and Muir, November 1, 1917, and numbered 4, one of which is the type; in addition to the paratypes in this series, 1 9 collected by W. M. Giffard, July 6, 1918, and another 9 collected June 12, 1900, and numbered 12, paratypes.

Type: Cat. No. 53, Bishop Museum.

54. Sierola flavipennis n.sp.

Q depressed, flat; shining black, legs and antennæ yellowish brown, mandibles apically reddish brown.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and somewhat sparsely punctate; hairy clothing short and inconspicuous. Head wider than the thorax, longer than wide, width between the eyes equalling the length from eye to vertex, length in front of the eyes not great; rather flat above and beneath; vertical margin straight, temples rounded, eyes convex; antennæ longer than the head, the pedicel and first funicle segment somewhat longer than wide, the following segments hardly so, antennal fossæ deep; clypeus short, almost vertical, carinate, slightly projecting in front of the anterior margin of the head, sloping at the sides; mandibles slender, curved, truncate apically and toothed, sloping at the sides; mandibles slender, curved, truncate apically and toothed base touching the eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind where it is rather convex, anterior margin arcuately concave, posterior margin incised, median groove effaced; abdomen elongate ovate, smooth and polished; wings sub-infuscate, with a yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected, Kaumuohona, Oahu, by P. H. Timberlake, April 23, 1916.

Type: Cat. No. 54, Bishop Museum.

55. Sierola lepida n.sp.

9 shining black, the legs, antennæ basally and the mandibles except at

the base, flavous, antennæ distally fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and closely punctate; hairy clothing short and delicate. Sides of the pronotum aciculate. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than (11/2 X) the length from eye to vertex; convex above, tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, widening outwardly, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, as long as wide, narrowing behind where it is inconspicuously divided into two lobes by a shallow depression on the median line, anterior margin arcuately concave, posterior margin incised; abdomen depressed, ovate, smooth and polished; wings infuscate, with a yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected at Glenwood, Hawaii, 2800

ft. elevation, by Giffard and Muir, October 1, 1917.

Type: Cat. No. 55, Bishop Museum.

56. Sierola callida n.sp.

9 shining black, the legs and antennæ fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly closely, coarsely and shallowly punctate and hairy. Head wider than the thorax, longer than wide, width between the eyes equalling the length from eye to vertex; convex above and beneath; depressed in front; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel and first funicle segment a little longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula convex, not much foreshortened, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate, with a yellowish-brown pigmentation; length 2.75 mms.

& smaller, head shorter, vertical margin arcuately convex, mandibles

luteous except at the base, abdomen bluntly pointed at the apex.

Described from one female and three males (type, allotype and paratypes) collected on Kaala mountain, Oahu. Type collected by P. H. Timberlake, July 4, 1916. Three & collected by P. H. Timberlake, at 1500-2500 ft. elevation, March 4, 1917, one on Bobca clation, allotype and paratypes.

Type: Cat. No. 56, Bishop Museum.

57. Sierola longicornis n.sp.

Q dull black but not opaque, legs and antennæ yellowish brown to fuscous, the former with the femora fuscous outwardly, the latter fuscous distally from the first funicle segment.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head; rather coarsely, shallowly and closely punctate and hairy. Head a little longer than wide, widest across the eyes, narrowing in front and behind, width between the eyes more than the length from eye to vertex; convex above, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ considerably longer than the head, all the segments more than twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate and toothed apically, base almost touching the eye above; gula and sides of the head flat, the former not much foreshortened medially, longer than wide, anterior margin arcuately concave, posterior margin incised, the median groove nearly effaced; propodeum rugulose, a small triangular area medially at the base smooth; abdomen ovate, brilliantly polished; wings subinfuscate, with a yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected at Kilauea, Hawaii, 29 miles, by W. M. Giffard, January, 1915.

Type: Cat. No. 57, Bishop Museum.

58. Sierola scoriacea n.sp.

9 shining black, the head a little dull; antennæ, trochanters, tibiæ and tarsi testaceous, femora fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and closely punctate; rather thickly clothed with fine silvery gray hairs. Head longer than wide, width between the eyes a little more than the length from eye to vertex; convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, the segments hardly longer than wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, where it is rather convex, anterior margin nearly straight, posterior margin incised, the median groove effaced; abdomen ovate, smooth and polished; wings subinfuscate, with a yellowish brown pigmentation; length 2 mms.

Described from one female (type) collected on Kau, Hawaii, a-a flows, 3600 ft. elevation, by W. M. Giffard, July 18th, 1918.

Type: Cat. No. 58, Bishop Museum.

59. Sierola gracillima n.sp.

§ shining black, the head a little dull; legs fuscous, antennæ yellowish brown, outwardly infuscate.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely and somewhat remotely punctate; hairy clothing inconspicuous. Head considerably longer than wide, width between the eyes equalling the length from eye to vertex, length in front of the eyes not great; flatly convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel longer than wide, following segments as wide as long, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and shining; wings subinfuscate, with a yellowish brown pigmentation; length 2 mms.

Described from one female (type) collected at Punaluu, Oahu, by O. H. Swezey, June 11, 1911.

Type: Cat. No. 59, Bishop Museum.

60. Sierola brunneipes n.sp.

9 dull shining black, legs and antennæ brown, the latter fuscous apically.

Head and thorax with a microscopically fine reticulate surface sculpture; finely and fairly closely punctate; hairy clothing short and inconspicuous. Head wider than the thorax, a little longer than wide, width between the eyes equalling the length from eye to vertex; convex above and beneath; vertical margin straight, temples rounded, eyes flat; antenna not much longer than the head, pedicel a little longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, truncate apically and toothed, base touching the eye above; gula flatly convex, medially foreshortened, as wide as long, anterior margin nearly straight, posterior margin incised; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a yellowish brown pigmentation; length 2.25 mms.

Described from five females (type and paratypes) from Tantalus mountain, Oahu. Type collected by W. M. Giffard, February 16, 1916. One specimen swept from *Acacia koa* by J. C. Bridwell, July 5, 1915, and three others collected on *Acacia koa* by J. C. Bridwell, June, 1918, paratypes.

Type: Cat. No. 60, Bishop Museum.

61. Sierola arida n.sp.

Q dull black, almost opaque; legs and antennæ brown to fuscous. Head and thorax with a microscopically fine and close reticulate sur-

face sculpture; finely and somewhat remotely punctate and hairy. longer than wide, widest across the eyes, narrowing slightly behind and in front, width between the eyes equalling the length from eye to vertex; convex above, depressed in front, a little tumid beneath, the greatest depth directly behind the middle; vertical margin slightly concave, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel and funicle twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head rather flat, the former medially foreshortened, a little longer than wide, narrowing behind, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings fuscous, with a yellowish brown pigmentation; length 2.75 mms.

Described from two females (type and paratype) collected on Kaala mountain, Oahu, by O. H. Swezey, September 7, 1913.

Type: Cat. No. 61, Bishop Museum.

62. Sierola punctata n.sp.

9 dull black, head nearly opaque, the legs flavous, antennæ yellowish brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; closely, finely and shallowly punctate and hairy; punctuation on the thorax very fine, that on the head coarser. Head longer than wide, width between the eyes a little more than the length from eye to vertex; convex above and beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, all the segments longer than wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, as long as wide, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings with a yellowish brown pigmention; length 2.75 mms.

Described from one female (type) collected on Kaala mountain, Oahu, at 2000 ft. elevation, by P. H. Timberlake in sweeping a species of Kadua, March 4, 1917.

Type: Cat. No. 62, Bishop Museum.

63. Sierola brunnea n.sp.

Q moderately flat; shining black, the head, pronotum and abdomen piceous; legs, mandibles and antennæ basally yellowish brown, antennæ fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine and

close reticulate surface sculpture; finely and fairly closely punctate; rather thinly clothed with long delicate hairs. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; flat above, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, pedicel a little longer than wide, following segments as wide as long, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward a little on the top of the head; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, as long as wide, narrowing behind, where it is indistinctly divided into two lobes by a shallow depression posteriorly on the median line, anterior margin straight, posterior margin incised; propodeum finely rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from two females (type and paratype) from Tantalus mountain, Oahu, 1300 ft. elevation. Type collected by W. M. Giffard January 29, 1905. Second specimen collected by O. H. Swezey, August 4, 1912, paratype.

Type: Cat. No. 63, Bishop Museum.

64. Sierola picea n.sp.

§ shining black, the head somewhat piceous; legs and antennæ luteous, the latter infuscate outwardly, mandibles brown.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and fairly closely punctate; thinly clothed with short, delicate, silvery white hairs. Head nearly twice as long as wide, width between the eyes equalling the length from eye to vertex; convex above and beneath; temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel twice as long as wide, following segments as wide as long or hardly longer, antennal fossæ deep; clypeus carinate, apically depressed, projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, flattened outwardly, truncate apically and toothed, base touching the eye above; gula flatly convex, medially foreshortened, a little longer than wide, slightly depressed along the median line, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings hyaline; length 2 mms.

Described from one female (type) collected on Tantalus mountain, Oahu, 1300 ft. elevation, by W. M. Giffard, January 15, 1905.

Type: Cat. No. 64, Bishop Museum.

65. Sierola streblognatha n.sp.

9 shining black, antennæ basally and the legs brown, with the exception of the femora, which are blackish in the middle.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, fairly coarsely, shallowly and remotely punctate and

Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; convex above, depressed in front, tumid beneath. the greatest depth beneath the posterior end of the eye; vertical margin slightly concave, temples rounded, eyes flatly convex; antennæ reaching 'the mesoscutum, the segments of the flagellum all longer than wide, pedicel twice as long as wide, and the first funicle segment nearly so, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, bent near the base, the distal portion twisted and flattened, apical margin obliquely truncate and toothed, base touching the eye above; gula and sides of the head flat, the former medially very much foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen short ovate, smooth and polished; wings subinfuscate, with a rather faint yellowish brown pigmentation; length about 3 mms.

Described from one female (type) collected at Puuwaawaa, N. Kona, Hawaii, 3700 ft. elevation, by W. M. Giffard, August, 1917.

Type: Cat. No. 65, Bishop Museum.

66. Sierola opaeula n.sp.

9 shining black, antennæ brown, outwardly fuscous, tibiæ and tarsi yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely and fairly closely punctate; hairy clothing short and inconspicuous. Head nearly twice as long as wide, width between the eyes equalling the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin nearly straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, the pedicel a little longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head to the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head rather flat, the former medially foreshortened, as wide as long, narrowing behind where it is inconspicuously divided into two lobes by a shallow median depression, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected at Opaeula, Oahu, by D. T.

Fullaway, March 30, 1913.

Type: Cat. No. 66, Bishop Museum.

67. Sierola mandibularis n.sp.

9 shining black, antennæ basally brown, fuscous outwardly, apex of the femora, tibiæ and tarsi yellowish brown.

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Head and thorax with a microscopically fine reticulate surface sculpture; fairly coarsely and closely punctate; hairy clothing short and delicate. Head longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the mesoscutum. all the segments longer than wide, antennal fossæ deep; clypeus carinate. apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward a little on the top of the head; mandibles slender, curved, flattened outwardly, the apical margins truncate and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, no longer than wide, closely and finely punctate, the groove nearly effaced, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected on the Pauoa side of Tan-

talus mountain, Oahu, by J. C. Bridwell, July 15, 1916.

Type: Cat. No. 67, Bishop Museum.

1. 27

68. Sicrola minuta n.sp.

Q small, shining black, legs and antennæ yellowish brown to fuscous. Head and thorax with a microscopically fine reticulate surface sculpture; finely and somewhat remotely punctate; hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes more than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, the pedicel longer than wide, following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of head beyond the base of the antennæ; mandibles slender, curved, truncate and toothed apically, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; abdomen short ovate, smooth and polished; wings subinfuscate; length 2 mms.

Described from one female (type) collected in Middle Puna, Hawaii, at 750 ft. elevation, by W. M. Giffard, August 6, 1918.

Type: Cat. No. 68, Bishop Museum.

69. Sierola hirsuta n.sp.

२ shining black, legs, antennæ basally and mandibles light yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head; coarsely, shallowly and closely punctate; thickly clothed with long silvery hairs. Head longer than wide by a half, width between the eyes more than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical

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margin slightly convex, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments a little longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye above; gula and sides of the head flat, the former medially foreshortened, a little longer than wide, narrowing behind, where it is somewhat convex, anterior margin arcuately concave, posterior margin incised; propodeum rugulose, dull; abdomen ovate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 2.25 mms.

§ smaller, head shorter, abdomen bluntly pointed at the apex.

Described from eight females and two males (type, allotype and paratypes). Type from Niu, Oahu, collected by P. H. Timberlake, February 10, 1918, allotype from Kaala mountain, collected March 4, 1917. Four Q Q collected same date, one collected July 9, 1916, and one & collected July 22, 1917, on Kaala mountain, together with two Q Q collected on Tantalus mountain, at 1500 ft. elevation, by W. M. Giffard, August 27 and December 22, 1918, respectively, paratypes.

Type: Cat. No. 69, Bishop Museum.

70. Sierola striata n.sp.

2 shining black, antennæ basally yellowish brown, fuscous outwardly, legs brown, the femora somewhat infuscate.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; finely, closely, somewhat sparsely punctate: hairy clothing short and inconspicuous. Head wider than the thorax, longer than wide by a half, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath, the greatest depth behind the eyes; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, the segments of the flagellum all longer than wide, the pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; pronotum aciculate at the sides; scutellum smooth and impunctate; propodeum rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected in Palolo valley, Oahu, by D. T. Fullaway, August 12, 1912.

Type: Cat. No. 70. Bishop Museum.

71. Sierola agens n.sp.

§ shining black, the legs and antennæ luteous, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, which is very delicate on the head; finely, fairly closely and rather sparsely punctate; hairy clothing short and delicate. Head longer than wide by a half, width between the eyes a little more than the length from eye to vertex; convex above and beneath, depressed in front; vertical margin nearly straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel more than twice as long as wide, first two funicle segments a little longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavoconvex, truncate apically and toothed, base touching the eye above; gula flatly convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen ovate, smooth and polished; wings subinfuscate; length 2.75 mms.

Described from one female (type), collected in Nuuanu valley, Oahu, by D. T. Fullaway, August 20, 1916.

Type: Cat. No. 71, Bishop Museum.

72. Sierola pygmaea n.sp.

9 small, the thorax and abdomen unusually short; shining black, not brilliant, legs and two basal joints of antennæ yellowish brown, antennæ apically fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, a little coarser on the head; fairly coarsely, shallowly and closely punctate; hairy clothing short and delicate. Head wider than the thorax, longer than wide by a half, width between the eyes equalling the length from eye to vertex, length in front of the eyes not great; flatly convex above, depressed in front and a little tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes convex; antennæ scarcely longer than the head, pedicel twice as long as wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye above; gula and sides of the head convex, the former a little foreshortened medially, as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen depressed, short ovate, smooth and polished; wings subinfuscate; length 2 mms.

Described from one female (type) collected on Cooke's Trail, Nuuanu Valley. Oahu, by D. T. Fullaway, August 20, 1916.

Type: Cat. No. 72, Bishop Museum.

73. Sierola tumidoventris n.sp.

9 shining black, antennæ and legs brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly closely, shallowly and finely punctate; hairy clothing rather short and delicate. Head wider than the thorax, longer than wide by a half, width between the eyes equalling the length from eye to vertex, length in front of the eyes not great; somewhat flat above, convex beneath; vertical margin straight, temples rounded, eyes convex; antennæ scarcely longer than the head, pedicel about twice as long as wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward a little on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula convex, a little foreshortened medially, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and brilliantly polished, somewhat tumid beneath; wings hyaline; length 2.5 mms.

Described from one female (type) collected on Cooke's Trail, Nuuanu Valley, Oahu, by D. T. Fullaway, August 20, 1916.

Type: Cat. No. 73, Bishop Museum.

74. Sierola koolauensis n.sp.

9 shining black, antennæ brown, fuscous outwardly, legs fuscous, tibiæ and tarsi yellowish brown.

Head and thorax with a microscopically fine reticulate surface sculpture; closely, shallowly, fairly coarsely punctate, and hairy. Head longer than wide by one-half, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, convex beneath, the greatest depth directly behind the eyes; vertical margin straight, temples rounded, eyes flat; antennæ no longer than the head, pedicel a little longer than wide, following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula flatly convex, medially foreshortened, as wide as long, anterior margin nearly straight, posterior margin incised; abdomen short ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from two females (type and paratype). Type from S. E. Koolau mountains, Oahu, collected by J. C. Bridwell, 1916. Second specimen, from Kuliouou, collected by P. H. Timberlake, June 25, 1916, and marked "no. 20", paratype.

Type: Cat. No. 74, Bishop Museum.

75. Sierola koebelei n.sp.

Shining black, almost brilliant, antennæ brown, fuscous outwardly, legs fuscous, tibiæ and tarsi brown.

[55]

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly, somewhat sparsely punctate, and hairy. Head longer than wide by one-half, width between the eyes equalling the length from eye to vertex; rather flat above, convex beneath, the greatest depth at the middle; vertical margin straight, temples rounded, eyes flatly convex; antennæ scarcely longer than the head, pedicel a little longer than wide, following segments as wide as long or nearly so, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected by Koebele on Oahu. Type: Cat. No. 75, Bishop Museum.

76. Sierola longiceps n.sp.

9 shining black, head and thorax a little dull; antennæ brown basally, fuscous outwardly, trochanters, tibiæ, tarsi and apex of femora yellowish brown, mandibles reddish at apex.

Head and thorax with a microscopically fine and close reticulate surface sculpture; finely, shallowly and closely punctate; rather thickly clothed with long silvery hairs. Head nearly twice as long as wide, widest across the eyes, narrowing behind and in front, width between the eyes a little more than the length from eye to vertex; flat on top, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not reaching the eye; gula and sides of the head flat, the former medially foreshortened, a little longer than wide, narrowing behind, the median groove entirely effaced, anterior margin straight, posterior margin incised; propodeum rugulose; abdomen short ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft. elevation, by W. M. Giffard, October, 1915.

Type: Cat. No. 76, Bishop Museum.

77. Sierola rugulosa n.sp.

9 dull shining black, antennæ yellowish brown, fuscous outwardly, legs fuscous, mandibles brown except at the base.

Head and thorax to the propodeum with a microscopically fine, fairly coarse reticulate surface sculpture, coarser on the head; coarsely, shallowly and rather closely punctate; thinly clothed with silvery hairs. Head longer [56]

than wide by a half, width between the eyes equalling the length from eye to vertex; length in front of the eyes not great; convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel twice as long as wide, first six funicle segments as wide as long, the following segments longer than wide, antennal fossæ deep; clypeus short, carinate, almost vertically depressed and projecting slightly in front of the anterior margin of the head, the carina extending backward a little on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula convex, a little foreshortened medially, anterior margin arcuately concave, posterior margin incised, sides of the head flat; propodeum finely sculptured, brilliant; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 2.25

Described from one female (type) collected on Palolo Hill trail, Oahu, by P. H. Timberlake, April 7, 1916, and numbered 16.

Type: Cat. No. 77, Bishop Museum.

78. Sierola brevicauda n.sp.

Q shining black, a little dull; antennæ yellowish brown at the base, outwardly fuscous, legs fuscous basally, outwardly yellowish brown, mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head, very delicate on the scutellum; closely, shallowly and fairly coarsely punctate and hairy. Head longer than wide by a half, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the scutellum, all the segments longer than wide, pedicel more than twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head to the anterior margin of the eyes; mandibles slender, curved, twisted and flattened outwardly, truncate apically and toothed, base not reaching the eye; gula and sides of the head rather flat, the former narrowing behind, where it is indistinctly divided into two lobes by a shallow median depression, anterior margin almost straight; propodeum finely rugulose; abdomen short ovate, smooth and polished; wings hyaline; length 2 mms.

Described from one female (type) collected in Nuuanu Valley, Oahu, by D. T. Fullaway, March 4, 1912.

Type: Cat. No. 78, Bishop Museum.

79. Sierola kilauea n.sp.

Q dull shining black, legs and antennæ yellowish brown, the latter fuscous outwardly, the former fuscous basally, mandibles reddish at apex.

Head and thorax with a microscopically fine and close reticulate surface sculpture; finely, shallowly and closely punctate; clothed with fairly long silvery hairs. Head somewhat longer than wide, widest across the eyes. narrowing behind and in front, width between the eyes more than the

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length from eye to vertex; flatly convex above, a little tumid beneath, deepest under the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel and funicle more than twice as long as wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin carinate ridge, almost vertically depressed and projecting slightly in front of the anterior margin of the head, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former nearly as wide as long, narrowing posteriorly, anterior margin arcuately concave, posterior margin incised, median groove shallow; propodeum finely rugulose; abdomen ovate, apically acuminate, as long as the head and thorax together, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft.

elevation, by W. M. Giffard, June 7, 1908, and numbered 7. Type: Cat. No. 79, Bishop Museum.

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80. Sierola olympiana n.sp.

Q dull shining black, antennæ yellowish brown, fuscous outwardly, legs fuscous, tibiæ and tarsi yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head; closely and coarsely punctate; clothed with fairly stiff silvery hairs. Head longer than wide by a half, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments a little longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, the carina extending backward on the top of the head beyond the anterior margin of the eyes; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the latter smooth and polished, the former longer than wide, narrowing behind, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate; length 2.25 mms.

Described from two females (type and paratype). Type from Mt. Olympus, Oahu, collected by P. H. Timberlake, June 18, 1916. Second specimen, collected by Mr. Timberlake on the Cooke Trail, Nuuanu Valley, January 7, 1917, paratype.

Type: Cat. No. 80, Bishop Museum.

81. Sierola tenebriosa n.sp.

Q dull shining black, legs and antennæ yellowish brown, the latter fuscous outwardly, mandibles except at the base, and apex of the clypeus reddish brown.

Head and thorax to the propodeum with a microscopically fine and | 58 |

delicate reticulate surface sculpture; very finely, shallowly and somewhat remotely punctate; hairy clothing sparse and delicate. Head not much longer than wide, width between the eyes twice the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennæl fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, anterior margin nearly straight, posterior margin incised; propodeum finely rugulose; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from two females (type and paratype). Type from Mt. Olympus, Oahu, collected by P. H. Timberlake, July 31, 1917. Second specimen collected by D. T. Fullaway on the Cooke Trail, Nuuanu Valley, August 20, 1916, paratype.

Type: Cat. No. 81, Bishop Museum.

82. Sierola capuana n.sp.

Q dull shining black, legs and antennæ luteous, the latter fuscous outwardly, mandibles yellowish brown.

Head and thorax with a microscopically fine and close reticulate surface sculpture; fairly coarsely and closely punctate and hairy. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; flatly convex above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex, antennæ a little longer than the head, all the segments a little longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles rather slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, anterior margin nearly straight, posterior margin incised, median groove nearly effaced; abdomen short ovate, apically acuminate, smooth and polished; wings hyaline, length 2.25 mms.

& smaller, head a little shorter, abdomen bluntly pointed.

Described from three females and one male (type, allotype and paratypes) from Niu, Oahu. Type reared from the larva of Capua cassia by O. H. Swezey, May 16, 1909; allotype and paratypes from the larva of Archips longiplicatus, June 27, 1909.

Type: Cat. No. 82, Bishop Museum.

83. Sierola megalops n.sp.

Q shining black, the head dull; legs and antennæ basally light yellowish brown, the latter outwardly fuscous, mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head; finely, shallowly and fairly closely punctate, hairy clothing short and inconspicuous. Head a little longer than wide, widest across the eyes, narrowing in front and behind, width between the eyes nearly twice the length from eye to vertex; flatly convex above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, anterior margin straight, posterior margin incised; propodeum finely rugulose; abdomen ovate, smooth and shining; wings hyaline; length 2.75 mms.

Described from one female (type) collected in Manoa Valley, Oahu, by D. T. Fullaway, July 29, 1917.

Type: Cat. No. 83, Bishop Museum.

84. Sierola vestita n.sp.

Q dull shining black, legs testaceous, front and hind femora fuscous outwardly, antennæ brown, fuscous apically.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture; finely and very closely punctate; hairy clothing long and thick. Head longer than wide by the length in front of the eyes, widest across the posterior end of the eyes, narrowing behind and in front, width between the eyes greater than the length from eye to vertex; convex above, a little tumid beneath; vertical margin straight, temples rounded, eyes flat, antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, anterior margin nearly straight, posterior margin incised; propodeum finely rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected in the Waianae mountains, Oahu, by D. T. Fullaway, March 5, 1911.

Type: Cat. No. 84. Bishop Museum.

85. Sierola mauiensis n.sp.

Q dull shining black, legs yellowish brown, the femora infuscate, antennæ brown to fuscous.

Head and thorax with a microscopically fine and close reticulate surface sculpture; finely, shallowly and closely punctate, and hairy. Head a little longer than wide, widest across the posterior end of the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel about twice as long as wide, following segments scarcely longer than wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, anterior margin straight, a shallow depression along the median line posteriorly, the margin incised; abdomen ovate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected on Maui, by Koebele.

Type: Cat. No. 85, Bishop Museum.

86. Sierola rufignatha n.sp.

Q dull shining black, legs, clypeus apically and antennæ basally luteous, the last outwardly fuscous, mandibles reddish brown except at the base.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and remotely punctate, hairy clothing sparse, punctuation coarser on the head. Head a little longer than wide, width between the eyes exceeding the length from eye to vertex; convex above, a little tumid beneath, the greatest depth beneath the eye; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching almost to the scutellum, all the segments longer than wide, the pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed a little and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles large, fairly stout, bent at basal third, the distal portion flattened, obliquely truncate apically and toothed, base touching the eye above; sides of the head and gula in front flatly convex, the latter tumid behind, medially foreshortened, the anterior margin arguate, posterior margin incised; propodeum coarsely rugulose, with a smooth area at the base medially; abdomen short ovate, smooth and polished; wings hyaline; length 2 mms.

Described from one female (type) collected in Nuuanu Valley, Oahu, by D. T. Fullaway, August 20, 1916.

Type: Cat. No. 86, Bishop Museum.

87. Sierola lugens n.sp.

9 shining black, a little dull on the head, legs and antennæ luteous, mandibles yellowish brown.

Head and thorax with a microscopically fine reticulate surface sculpture, a little coarser on the head; finely, closely and shallowly punctate, and hairy. Head wider than the thorax, a little longer than wide, widest across the eyes, narrowing a little behind and in front, width between the eyes greater than the length from eye to vertex; flat on top, depressed in front, a little tumid beneath, deepest under the posterior end of the eye but without great depth; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel nearly twice as long as wide, the following segments scarcely longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, as wide in front as long but narrowing behind where the margin is incised and the median line a little depressed, anterior margin straight; abdomen a little depressed, elongate ovate, smooth and polished; wings with a faint yellowish brown pigmentation; length 2.75 mms.

& a little smaller, the head shorter and hardly as flat, the abdomen

bluntly pointed apically.

Described from one female and two males (type, allotype and paratype) collected at Opaeula, Oahu, by D. T. Fullaway, March 30, 1913.

Type: Cat. No. 87, Bishop Museum.

88. Sierola swezeyi n.sp.

Q shining black, the head a little dull; trochanters, tibiæ, tarsi and antennæ basally yellowish brown, the last fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head; fairly closely and coarsely punctate; hairy clothing long, thin, and delicate. Head a little longer than wide, width between the eyes greater than the length from eye to vertex; convex above, tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the scutellum, all the segments considerably longer than wide, antennæ fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, longer than wide, narrowing behind, anterior margin nearly straight, posterior margin incised; propodeum finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate, nearly hyaline; length 2 mms.

Described from one female (type) collected on Konahuanui Peak, Oahu, by O. H. Swezey, February 23, 1914.

Type: Cat. No. 88, Bishop Museum. [62]

89. Sierola eucrena n.sp.

Q dull shining black, legs and antennæ brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head, very delicate on the scutellum; coarsely, shallowly and fairly closely punctate, and hairy. Head a little longer than wide, widest across the eyes, narrowing in front and behind, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; sides of the head flat, gula flatly convex, medially foreshortened, wider than long, narrowing behind, anterior margin arcuately concave, posterior margin incised; propodeum rugulose, with a median longitudinal line dorsally; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected on Hawaii by Koebele.

Type: Cat. No. 89, Bishop Museum.

90. Sierola ehrhorni n.sp.

§ shining black, a little dull on the head; antennæ fuscous, trochanters, tibiæ and tarsi yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head; fairly closely, shallowly and finely punctate; hairy clothing rather short and erect. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes a little more than the length from eye to vertex; flatly convex above, a little tumid beneath; vertical margin nearly straight, temples rounded, eyes flatly convex; antennæ broken a little beyond the middle, the segments of the stumps all longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not reaching the eye; gula and sides of the head flat, the former medially foreshortened, scarcely as long as wide, narrowing behind, median groove nearly effaced, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen short ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.25 mms.

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft. elevation, by W. M. Giffard, in January, 1916.

Type: Cat. No. 90, Bishop Museum.

91. Sierola kaduana n.sp.

Q dull shining black, antennæ fuscous, legs luteous.

Head and thorax with a microscopically fine reticulate surface sculpture; uniformly, closely and shallowly punctate, and hairy; the sculpture and punctuation coarser on the head, the hairy clothing short, stiff and silvery white. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; flat above, convex beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel longer than wide, the following segments hardly so, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles long, curved, slender at the base, the distal portion flattened, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.5 mms.

Described from two females (type and paratype) collected at Malamalama, Oahu, by P. H. Timberlake, July 28th, 1918, on Kadua acuminata.

Type: Cat. No. 91, Bishop Museum.

92. Sierola gracilariae n.sp.

§ shining black, the head dull; legs luteous, antennæ brown to fuscous, mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely and closely punctate, and hairy. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel longer than wide, the following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles long, curved, slender at the base, the distal portion flattened, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised, depressed along the median line; propodeum very finely rugulose; abdomen shortly ovate, smooth and polished; wings hyaline; length 2 mms.

& a little smaller, head shorter, mandibles and first four antennal segments luteous, abdomen bluntly pointed at the apex.

Described from one female and two males (type, allotype and paratype) from Niu, Oahu, reared by O. H. Swezey from the larva of *Gracilaria mabaella*, December 11, 1910.

[64]

Type: Cat. No. 92, Bishop Museum.

93. Sierola incita n.sp.

9 dull shining black; legs, antennæ, clypeus and mandibles yellowish brown, the mandibles black at the base and reddish apically.

Head and thorax with a microscopically fine reticulate surface sculpture, very delicate on the thorax; shallowly, closely and somewhat coarsely punctate, the punctuation on the thorax very fine; hairy clothing short and delicate. Head a little wider than the thorax, longer than wide by a half, width between the eyes equalling the length from eye to vertex, length in front of the eyes not great; convex above and beneath, depressed in front; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, all the segments a little longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula convex, not much foreshortened, anterior and posterior margins arcuately concave; abdomen ovate, depressed, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected on the Palolo Hill trail, Oahu, by P. H. Timberlake, April 4, 1916.

Type: Cat. No. 93, Bishop Museum.

94. Sierola cryptophlebiae n.sp.

Q dull shining black; legs and antennæ yellowish brown, mandibles reddish apically.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly closely, finely and shallowly punctate; hairy clothing short and delicate. Head longer than wide by more than a half, width between the eyes a little more than the length from eye to vertex; flat above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ scarcely longer than the head, pedicel a little longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula convex, medially foreshortened, as wide as long, closely punctate, median groove effaced, anterior margin arcuately concave, posterior margin incised; abdomen ovate, apically acuminate, smooth and polished; wings hyaline; length 2.5 mms.

Described from six females (type and paratypes). Five § §, including type, from Tantalus, Oahu, reared from the larva of Cryptophlebia illepida, by D. T. Fullaway, June 10, 1910. Four of these specimens and one § from S. E. Koolau mountains, collected by J. C. Bridwell in 1913, paratypes.

Type: Cat. No. 94, Bishop Museum.

95. Sierola polita n.sp.

Q dull shining black; legs and antennæ brown, the latter fuscous outwardly, the former basally.

Head and thorax with a microscopically fine reticulate surface sculpture; shallowly, closely and fairly coarsely punctate, and hairy. Head longer than wide by a half, width between the eyes a little more than the length from eye to vertex; flat above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula convex, somewhat foreshortened medially, as wide as long, anterior margin arcuately concave, posterior margin incised, median groove nearly effaced; abdomen ovate, smooth and polished; wings subinfuscate; length 2.25 mms.

Described from two females (type and paratype) collected at Kuliouou, Oahu, by P. H. Timberlake, June 25, 1916.

Type: Cat. No. 95, Bishop Museum.

96. Sierola lanihuliana n.sp.

Q dull shining black; legs and antennæ fuscous, the former yellowish brown outwardly, the latter basally; mandibles reddish brown except at the

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, much coarser on the head; shallowly, closely and rather coarsely punctate on the head, the punctuation finer on the thorax; hairy clothing inconspicuous. Head wider than the thorax, a little longer than wide, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; flat above, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye, lower angle protuberant; gula convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected at Lanihuli, Oahu, by P. H. Timberlake, September 3, 1918.

Type: Cat. No. 96, Bishop Museum.

97. Sierola nigrita n.sp.

Q dull shining black; legs and antennæ fuscous, the latter more or less

brown at the base, the former brown outwardly; mandibles reddish apically. Head and thorax with a microscopically fine reticulate surface sculpture; fairly closely, finely and shallowly punctate; hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ no longer than the head, the pedicel longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula convex, somewhat foreshortened medially, as wide as long. with a shallow depression along the median line, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.5 mms.

Described from one female (type) collected at Opaeula, Oahu, by D. T. Fullaway, March 30, 1913.

Type: Cat. No. 97, Bishop Museum.

98. Sierola hillebrandi n.sp.

Q dull shining black; legs luteous, antennæ yellowish brown, fuscous outwardly.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and closely punctate; hairy clothing inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; convex above and beneath, depressed in front; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, segments of the flagellum with the exception of the third, longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula convex, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised, median groove effaced; propodeum finely rugulose; abdomen ovate, apically acuminate, smooth and polished; wings infuscate; length 3 mms.

Described from one female (type) collected at Hillebrand's Glen, Oahu. by O. H. Swezey, November 17, 1912.

Type: Cat. No. 98, Bishop Museum.

99. Sierola affinis n.sp.

9 dull shining black; legs and antennæ basally luteous, the latter fuscous apically and the middle and hind femora infuscate.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head; coarsely, shallowly and closely [67]

punctate, and hairy. Head wider than the thorax, a little longer than wide, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel twice as long as wide, first, second and third funicle segments longer than wide, following segments as wide as or wider than long, antennal fossæ deep; clypeus short and flat, longitudinally carinate down the middle, apically depressed and projecting very slightly in front of the anterior margin of the head, sloping a little at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base almost touching the eye above; gula convex, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected at Kuliouou, Oahu, by P. H. Timberlake, December 12, 1018.

Type: Cat. No. 99, Bishop Museum.

100. Sierola opogonae n.sp.

Q dull black, opaque; legs and antennæ luteous, the latter fuscous apically, the former basally.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, a little coarser on the head; finely, closely and shallowly punctate; hairy clothing long, delicate and ample. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes somewhat more than the length from eye to vertex; convex above, depressed in front, a little tunid beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel less than twice as long as wide, the following segments as long as or a little longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula convex, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin deeply incised, median groove nearly effaced; propodeum finely rugulose, flat dorsally; abdomen short ovate, smooth and polished; wings hyaline; length 2.25 mms.

& smaller, head a little shorter, mandibles luteous, abdomen bluntly pointed at the apex.

Described from two females and one male (type, allotype and paratype) from Tantalus mountain, Oahu, reared by J. C. Bridwell from *Opogona* larva on *Clermontia*. The parasitized larva was collected May 26, 1918, cocoons were formed by May 27, adults appeared June 5.

Type: Cat. No. 100, Bishop Museum.

101. Sierola luteipes n.sp.

Q dull black, opaque; legs and antennæ basally luteous, the latter fuscous apically; mandibles fuscous except at the base; abdomen somewhat piceous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head; finely, shallowly and somewhat remotely and sparsely punctate; hairy clothing inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel and first funicle segment a little longer than wide, the following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles fairly slender, curved, truncate apically and toothed, base not quite reaching the eye, lower angle protuberant; gula convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum rugose, convex above; abdomen ovate, apically acuminate, smooth and polished; wings hyaline; length 2.25 mms.

Described from one female (type) collected in Palolo Valley, Oahu, by O. H. Swezey, September 3, 1906.

Type: Cat. No. 101, Bishop Museum.

102. Sicrola pilifera n.sp.

9 dull black, opaque; legs brown, scape and pedicel of antennæ luteous, the following segments fuscous; mandibles reddish brown except at base.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, a little coarser on the head; very finely, shallowly and closely punctate; hairy clothing long, delicate and ample. Head somewhat longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes somewhat more than the length from eye to vertex; flatly convex above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base almost touching the eye above, lower angle protuberant; gula flatly convex, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised, sides of the head flat and polished in the middle; propodeum finely rugulose; abdomen elongate ovate, apically acuminate, smooth and polished; wings subinfuscate, nearly hyaline; length 2.75 mms.

Described from one female (type) collected at Makaha, Oahu, by W. M. Giffard, November 5, 1905.

Type: Cat. No. 102, Bishop Museum.

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103. Sierola sericea n.sp.

Q dull black, opaque; legs and antennæ basally brown, the front coxæ and the antennæ outwardly fuscous; mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, a little coarser on the head; very finely, shallowly and closely punctate; hairy clothing long, delicate and rather thick, that on the antennæ sericeous. Head longer than wide by a half, width between the eyes a little more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above, lower angle protuberant; gula and sides of the head flat, the former longer than wide, narrowing behind, anterior margin arcuately concave, posterior margin deeply incised; propodeum finely rugulose; abdomen elliptical, smooth and polished; wings subinfuscate, with a yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected at Olinda, Maui, 4200 ft. elevation, by Giffard and Fullaway, May 13, 1918.

Type: Cat. No. 103, Bishop Museum.

104. Sierola robusta n.sp.

9 dull black, opaque; legs and antennæ yellowish brown, the femora infuscate; mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, a little coarser on the head; finely, shallowly and closely punctate; hairy clothing long, delicate and ample. Head longer than wide by the length in front of the eyes, widest across the eyes, narrowing behind and in front, width between the eyes somewhat more than the length from eye to vertex; convex above, depressed in front, tumid beneath, the greatest depth beneath the eye; vertical margin slightly concave, temples rounded, eyes flatly convex; antennæ broken, basal segments all longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, concavoconvex, truncate apically and toothed, base not reaching the eye; gula anteriorly and sides of the head flat, the former medially foreshortened. longer than wide, narrowing posteriorly, where it is more convex, anterior margin almost straight, posterior margin incised, median groove effaced; propodeum finely rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate; length 3 mms.

Described from one female (type) collected at Opaeula, Oahu, by O. H. Swezey, March 30, 1913.

Type: Cat. No. 104, Bishop Museum. [70]

105. Sierola sctosa n.sp.

Q dull black, the head opaque; legs and antennæ brown, the femora a little infuscate; mandibles reddish brown except at the base.

Head and thorax with a microscopically fine and close reticulate surface sculpture, coarser on the head; coarsely, shallowly and fairly closely punctate, the punctuation on the thorax finer; clothed with stiff silvery white hairs. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes a little more than the length from eye to vertex, length in front of the eye not great; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, all the segments longer than wide, pedicel nearly twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 3 mms.

Described from one female (type) collected on the Palolo Hill trail, Oahu, by P. H. Timberlake, April 9, 1916.

Type: Cat. No. 105, Bishop Museum.

106. Sierola batrachedrae n.sp.

Q shining brown to fuscous, prothorax and abdomen basally yellowish brown; legs, antennæ and mandibles luteous.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and somewhat remotely punctate; hairy clothing short and inconspicuous. Head nearly as broad as long, width between the eyes a little more than the length from eye to vertex, length in front of the eyes not great; flatly convex above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin slightly convex, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel a little longer than wide, the following segments all as wide as or wider than long, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above, lower lobe protuberant; gula and sides of the head flat, the former medially foreshortened, a little longer than wide, narrowing behind, anterior margin arcuately concave, posterior margin incised; abdomen elliptical, apically acuminate, smooth and polished; wings hyaline; length 1.5 mms.

& smaller; antennæ more slender, the six last segments longer than wide; abdomen bluntly pointed at apex.

Described from a series of males and females (type, allotype and paratypes) from Palolo Ridge, Oahu, reared by O. H. Swezey, September 4, 1911.

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from the larva of a species of Batrachedra infesting a fern (Acrostichum sp.).

Type: Cat. No. 106, Bishop Museum.

107. Sierola similaris n.sp.

Q shining black, a little dull on the head; prothorax, legs, antennæ and mandibles yellowish brown.

Head and thorax with a microscopically fine reticulate surface sculpture, a little coarser on the head; finely, shallowly, fairly closely punctate, and hairy. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex, length in front of the eyes not great; flat above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel more than twice as long as wide, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula convex, not much foreshortened, anterior and posterior margins arcuately concave; abdomen ovate, smooth and polished; wings subinfuscate; length 2.25 mms.

Described from one female (type) collected at Waimano, Oahu, by O. II. Swezey, January 5, 1913.

Type: Cat. No. 107, Bishop Museum.

108. Sierola fossulata n.sp.

§ shining black; mandibles, coxæ, femora, and flagellum of the antennæ fuscous, trochanters, tibiæ, tarsi and scape of the antennæ yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; coarsely, shallowly and fairly closely punctate; clothed with short, fairly stiff white hairs. Head wider than the thorax, as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes nearly twice the length from eye to vertex; convex above, tumid beneath, the depth beneath the eye equal to the length behind the eye; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, the pedicel twice as long as wide, antennal fossæ deep; clypeus more or less convex, indistinctly carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, bent and twisted at the middle, the distal portion flattened, truncate apically and toothed, base not reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, median line with a deep sulcus posteriorly, anterior margin arcuately concave, posterior margin incised, the lower lobe of the base of the mandibles deeply notching the anterior margin at the side; propodeum rugose and dull; abdomen ovate,

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apically acuminate, smooth and polished; wings hyaline; length 2.75 mms.

Described from one female (type) collected on the Kaumuohona Trail,
Oahu, by P. H. Timberlake, September 9, 1917.

Type: Cat. No. 108, Bishop Museum.

109. Sierola fusca n.sp.

9 shining black, legs and antennæ fuscous, coxæ and femora nearly black, trochanters, tibiæ and tarsi sordid yellowish brown.

Head and thorax to the propodeum with a microscopically fine and shallow reticulate surface sculpture; coarsely and rather remotely punctate and hairy. Head nearly as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater than the length from eye to vertex; flat above, convex beneath, the greatest depth beneath the posterior end of the eye; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the scutellum, all the segments twice as long as wide, antennal fossæ deep; clypeus reduced by erosion from the sides to a thin, carinate ridge, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not reaching the eye above; gula flatly convex, a little foreshortened medially, anterior and posterior margins arcuately concave; propodeum rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.75 mms.

Described from one female (type) collected on Kaala Mountain, Oahu, 1500-2500 ft. elevation, by P. H. Timberlake, July 9, 1916.

Type: Cat. No. 109, Bishop Museum.

110. Sierola croceipes n.sp.

9 shining black; legs, mandibles except at the base, and antennæ basally croceous, the antennæ outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and somewhat remotely punctate; clothed with short, stiff silver gray hairs. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater by a half than the length from eye to vertex; flat above, tumid beneath, depth beneath the posterior end of the eye equalling the length from eye to vertex; vertical margin straight, temples rounded, eyes convex; antennæ almost reaching the scutellum, all the segments considerably longer than wide, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former not much foreshortened, nearly as long as wide, narrowing behind, anterior and posterior margins arcuately concave; propodeum rugulose; abdomen elongate ovate, apically acuminate, smooth and polished;

wings subinfuscate, with a faint yellowish brown pigmentation, radial cell incomplete; length 2.75 mms.

Described from one female (type) collected at Kilauea, Hawaii, 29 miles, by W. M. Giffard, January, 1915.

Type: Cat. No. 110, Bishop Museum.

111. Sierola puuwaawaa n.sp.

Q shining black, legs and antennæ basally yellowish brown, the latter fuscous outwardly from the scape.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, very delicate on the thorax; coarsely and somewhat remotely punctate; hairy clothing short and inconspicuous. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater by a half than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles fairly slender, curved, truncate apically and toothed, base not quite reaching the eye above, lower lobe protuberant; gula and sides of the head convex, the former medially foreshortened, as wide as long, anterior margin nearly straight, posterior margin incised; propodeum rugulose, a triangular area at the base smooth; abdomen elongate ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.75 mms.

Described from two females (type and paratype) collected at Puuwaawaa, N. Kona, Hawaii, 3700-3800 ft. elevation, by W. M. Giffard, August 24, 1917. Type numbered 14.

Type: Cat. No. 111, Bishop Museum.

112. Sicrola minuscula n.sp.

Q shining black, legs and antennæ luteous to yellowish brown, mandibles reddish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; fairly coarsely and remotely punctate and hairy. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes a little more than the length from eye to vertex; convex above and beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel nearly twice as long as wide, following segments all a little longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula convex, nearly flat, a little wider than long, anterior margin straight, posterior margin incised, median groove nearly effaced; propodeum finely rugulose; abdomen short ovate, smooth and polished; wings hyaline; length 1.75 mms.

Described from one female (type) collected on Kaala, Waianae Mountains, Oahu, by D. T. Fullaway, August 11, 1912.

Type: Cat. No. 112, Bishop Museum.

113. Sierola anemophila n.sp.

9 shining black, antennæ and femora fuscous, trochanters, tibiæ and tarsi yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and remotely punctate; hairy clothing delicate and grayish white. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; flat on top, depressed in front, tumid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ longer than the head, all the segments longer than wide the pedicel nearly twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is augulate, not transverse, declivous at the sides; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye above, lower lobe protuberant; gula and sides of the head flatly convex, the latter polished, the former somewhat foreshortened medially, as wide as long, anterior margin nearly straight, posterior margin incised; propodeum finely rugulose; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.75 mms.

Described from one female (type) collected at the Nuuanu Pali, Oahu, by D. T. Fullaway, April 1, 1917.

Type: Cat. No. 113, Bishop Museum.

114. Sierola brunneipennis n.sp.

Q shining black, antennæ and legs from the femora outwardly brown to fuscous.

Head and thorax with a microscopically fine and shallow reticulate surface sculpture; finely and somewhat remotely punctate, hairy clothing short and inconspicuous. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes nearly twice the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, all the segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above, lower lobe slightly protuberant; sides of the head and the gula in front flat, the latter wider than long, narrowing behind, where it is convex, with a slight depression along the median line, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and shining; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected on Kaala Mountain, Oahu, by O. H. Swezey September 7, 1913.

Type: Cat. No. 114, Bishop Museum.

115. Sierola mandibulata n.sp.

Q particolored, the head and posterior half of the thorax shining black, prothorax, mesoscutum and abdomen yellowish brown; legs luteous, mandibles and antennæ yellowish brown, the former black at the base, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarse, but shallow, on the head; coarsely, shallowly and fairly closely punctate; clothed with short, stiff white hairs. Head nearly as wide as long, width between the eyes greater than the length from eye to vertex, length in front of the eyes not great; convex above, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments with the exception of the second and third of the funicle longer than wide, pedicel and first funicular segment nearly twice as long as wide, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles stout, bent and twisted at the middle, the distal portion flattened, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former a little foreshortened medially, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.75 mms.

Described from one female (type) collected on Niu Ridge, Oahu, by P. H. Timberlake, February 10, 1918.

Type: Cat. No. 115, Bishop Museum.

116. Sierola tuberculata n.sp.

9 shining black, the legs and antennæ yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine and shallow reticulate surface sculpture; fairly coarsely, shallowly and remotely punctate; clothed with fairly long silvery gray hairs. Head as wide as long, width between the eyes twice the length from eye to vertex; convex above, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head: mandibles fairly stout, bent at outer third, truncate apically and toothed, base touching the eye above, lower lobe protuberant; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, where it is divided into two lobes by a deep median sulcus, anterior margin arcuately concave, posterior margin incised; propodeum rugulose;

abdomen short ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected in the Waianae Mountains, Oahu, by D. T. Fullaway, March 5, 1911.

Type: Cat. No. 116, Bishop Museum.

117. Sicrola nigra n.sp.

Q shining black, the legs fuscous basally, tibiæ, tarsi and antennæ yellowish brown, mandibles reddish brown.

Head and thorax to the propodeum with a microscopically fine and shallow reticulate surface sculpture; extremely finely and fairly closely punctate; clothed with short, delicate grayish hairs. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater by a half than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ nearly reaching the scutellum, pedicel and first funicle segment twice as long as wide, following segments all a little longer than wide, antennal fossæ deep; clypeus short, carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye above, lower lobe slightly protuberant; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, where there is a slight depression along the median line, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2 mms.

Described from one female (type) collected on Kaala Mountain, Oahu, by O. H. Swezey, August 11, 1912.

Type: Cat. No. 117, Bishop Museum.

118. Sicrola manoa n.sp.

9 shining black, the head somewhat dull; legs reddish brown, mandibles and antennæ yellowish brown, the former black at the base, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; fairly coarsely and remotely punctate, and hairy. Head nearly as wide as long, width between the eyes about twice the length from eye to vertex; flat above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, truncate apically and toothed, base not quite reaching the eye above, lower lobe protuberant; gula and sides of the head flat, the former medially foreshortened, wider

than long, narrowing behind where there is a slight depression along the median line, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected on Manoa Ridge, Oahu,

by D. T. Fullaway, February 13, 1917.

Type: Cat. No. 118, Bishop Museum.

119. Sierola lata n.sp.

Q shining black, the legs and antennæ brown to fuscous, femora fuscous. Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; fairly closely and finely punctate, and hairy. Head wider than the thorax, as wide as long, width between the eyes greater by a half than the length from eye to vertex, length in front of the eyes not great; flatly convex above, convex beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula flatly convex, a little foreshortened medially, wider than long, with a depression along the median line, anterior margin arcuately concave, posterior margin incised; propodeum rugulose, with a smooth triangular area at the base; abdomen elongate ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected on Olympus Mountain,

Oahu, by O. H. Swezey, January 21, 1912.

Type: Cat. No. 119, Bishop Museum.

120. Sierola fuliginosa n.sp.

Q shining black, the legs fuscous basally, yellowish brown from the apex of the femora outwardly, antennæ yellowish brown basally, fuscous

apically, mandibles apically reddish.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; fairly coarsely, shallowly and closely punctate, and hairy. Head nearly as wide as long, width between the eyes greater by a half than the length from eye to vertex; flatly convex above, depressed in front, convex beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles fairly stout, curved, concavoconvex, truncate apically and toothed, base not reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised, median groove

nearly effaced; propodeum coarsely rugulose; abdomen ovate, smooth and polished; wings subinfuscate; length 3 mms.

Described from one female (type) collected on Mt. Kaala, Oahu, by P. H. Timberlake, July 4, 1916.

Type: Cat. No. 120, Bishop Museum.

121. Sierola vulcana n.sp.

Q shining black, the legs and antennæ fuscous, trochanters, apex of femora, tibiæ and tarsi brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; coarsely, shallowly and fairly closely punctate, and hairy. Head nearly as wide as long, width between the eyes twice the length from eye to vertex, length in front of the eyes not great; flat above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the scutellum, all the segments twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, truncate apically and toothed, base not reaching the eye above, lower lobe protuberant; gula flatly convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen ovate, apically acuminate, smooth and polished; wings with a yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected at Kilauea, Hawaii, lumber camp, 4000 ft. elevation, by W. M. Giffard, July 19, 1918.

Type: Cat. No. 121, Bishop Museum.

122. Sierola nigrans n.sp.

Q dull shining black, the legs outwardly fuscous.

Head and thorax with a microscopically fine and close reticulate surface sculpture; finely, shallowly and fairly closely punctate, and hairy. Head as wide as long, width between the eyes nearly twice the length from eye to vertex, length in front of the eyes not great; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the scutellum, all the segments longer than wide, antennal fossæ deep; clypcus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, anterior margin arcuately concave, posterior margin incised, median groove nearly effaced; abdomen ovate, reticulately sculptured and shining; wings infuscate, with a faint fuscous pigmentation; length 2.75 mms.

Described from one female (type) collected at Kahuku, Kau, Hawaii, 1800 ft. elevation, by W. M. Giffard, January 14, 1919.

Type: Cat. No. 122, Bishop Museum.

123. Sierola olinda n.sp.

9 dull shining black, the head nearly opaque; legs fuscous, tibiæ and tarsi fuscous brown; antennæ yellowish brown basally, fuscous apically.

Head and thorax with a microscopically fine reticulate surface sculpture, very delicate on the thorax, coarser on the head; finely and fairly closely punctate, and hairy. Head nearly as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, first to fifth funicular segments hardly longer than wide, the following segments a little longer, pedicel nearly twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected at Olinda, Maui, 4200 ft. elevation, by Giffard and Fullaway, May 12 and 13, 1918.

Type: Cat. No. 123, Bishop Museum.

124. Sierola indecora n.sp.

Q dull shining black, trochanters, tibiæ and tarsi brown, antennæ fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, very delicate on the scutellum and propodeum, coarser on the head: coarsely, shallowly and fairly closely punctate, and hairy except on the propodeum. Head nearly as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, a little tunid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, anterior margin arcuately concave, posterior margin incised; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft. elevation, by W. M. Giffard, October, 1915.

Type: Cat. No. 124, Bishop Museum.

125. Sierola nubila n.sp.

9 dull shining black, trochanters, tibiæ, tarsi and antennæ fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly closely and finely punctate, and hairy. Head nearly as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater by one-half than the length from eye to vertex; convex above, depressed in front, a little tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, pedicel and first funicular segment longer than wide, the following segments hardly so, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles curved, slender, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, anterior margin straight, posterior margin incised, median groove nearly effaced; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a very faint fuscous pigmentation; length 2.1 mms.

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft. elevation, by W. M. Giffard, January 11, 1919.

Type: Cat. No. 125, Bishop Museum.

126. Sierola epagogeana n.sp.

Q dull shining black, the legs luteous, antennæ yellowish brown, mandibles brown outwardly.

Thorax with a microscopically fine reticulate surface sculpture, very delicate on the scutellum and propodeum, close and shallow on the mesoscutum and pronotum, coarser on the head; coarsely, shallowly and fairly closely punctate on the head, the punctuation on the thorax much finer; clothed with silvery white hairs. Head nearly as wide as long, widest across the posterior end of the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ a little longer than the head, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles rather slender, curved, outwardly somewhat flattened, truncate apically and toothed, base not reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum short, posterior face flat; abdomen short ovate, apically acuminate, smooth and polished; wings hyaline; length 2 mms.

Described from one female (type) from Kaumuohona Trail, Oahu, reared by O. H. Swezey from the larva of *Epagoge infaustana*, December 18, 1910.

Type: Cat. No. 126, Bishop Museum.

127. Sierola abusa n.sp.

Q dull shining black, legs, antennæ and outer half of mandibles yellowish brown, somewhat infuscate.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and rather closely punctate, and hairy. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes nearly twice the length from eye to vertex, length in front of the eyes not great; convex above, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, the pedicel and first and second funicular segments longer than wide, the following segments as wide as long or nearly so, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above: gula and sides of the head convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate; length 2.25 mms.

Described from one female (type) collected on Palolo Hill Trail, Oahu, by P. H. Timberlake, April 9, 1916.

Type: Cat. No. 127, Bishop Museum.

128. Sierola similis n.sp.

§ shining black, the head dull; legs and first three segments of antennæ luteous, the antennæ fuscous outwardly, mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, somewhat remotely and shallowly punctate, the sculpture and punctuation of the head coarser than that of the thorax; clothed with silvery white hairs. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes nearly twice the length from eye to vertex, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, the pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base not reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, as long as wide, anterior margin slightly concave, posterior margin incised; propodeum finely rugulose; abdomen short ovate, apically acuminate, smooth and polished; wings hyaline; length 2 mms.

Described from one female (type) collected on Mt. Kaala, Oahu, by O. H. Swezey, August 11, 1912.

Type: Cat. No. 128, Bishop Museum.

129. Sierola flavipes n.sp.

§ shining black, the head, pronotum, mesoscutum posteriorly and the scutellum dull; legs and basal segments of the antennæ flavous.

Head and thorax with a microscopically fine and close reticulate surface sculpture, the mesoscutum anteriorly and the propodeum more delicately sculptured, the former nearly smooth; finely, closely and shallowly punctate; clothed with long silvery white hairs. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes more than twice the length from eye to vertex; convex above, depressed in front, a little tumid beneath, the greatest depth beneath the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, the pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly slender, curved, truncate apically and toothed, base reaching the eye above; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, anterior margin nearly straight, posterior margin incised, a shallow sulcus posteriorly on the median line, the furrow nearly effaced in front; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected on Tantalus Mountain, Oahu, elevation 1300 ft., by W. M. Giffard, April 4, 1905.

Type: Cat. No. 129, Bishop Museum.

130. Sierola amica n.sp.

Q shining black, the head dull; legs and antennæ basally yellowish brown, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, very delicate on the thorax, a little coarser on the head; coarsely, shallowly and remotely punctate, the punctuation on the thorax finer; hairy clothing sparse and delicate. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the scutellum, all the segments longer than wide, pedicel and first to third funicular segments twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head convex, the former not very much foreshortened medially, longer than wide, a slight depression along the median line posteriorly, the groove nearly effaced in front, anterior margin slightly concave, posterior margin incised; propodeum rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 2.75 mms.

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Described from two females (type and paratype) collected on Kaala Mountain, Oahu, by O. H. Swezey, September 7, 1913, and August 11, 1912, respectively.

Type: Cat. No. 130, Bishop Museum.

131. Sicrola quadrice s n.sp.

9 dull shining black, legs and antennæ basally yellowish brown, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head; coarsely, shallowly and remotely punctate, the punctuation on the thorax rather fine; hairy clothing short and Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater by a half than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin slightly convex, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, anterior margin nearly straight, posterior margin incised; propodeum finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate; length 2.1 mms.

Described from one female (type) collected at Puuwaawaa, N. Kona, Hawaii, 3700 ft. elevation, by W. M. Giffard, August, 1917.

Type: Cat. No. 131, Bishop Museum.

132. Sierola williamsi n.sp.

9 dull shining black, trochanters, front femora, apex of middle and hind femora, tibiæ, tarsi, antennæ basally and mandibles except at the base yellowish brown, antennæ outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head than on the thorax; finely, shallowly and remotely punctate; hairy clothing short and inconspicuous. Head as wide as long, width between the eyes greater than the length from eye to vertex, length in front of the eyes not great; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus short, carinate, apically depressed, almost perpendicular, and projecting slightly in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, a slight depression in the median line posteriorly, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen depressed, ovate, smooth and polished; wings fuscous; length 2 mms.

Described from one female (type) collected on Alewa Heights Trail, Oahu, by P. H. Timberlake, March 26, 1916.

Type: Cat. No. 132, Bishop Museum.

133. Sierola kaalensis n.sp.

Q dull shining black, the legs, antennæ basally and the mandibles except at the base luteous, the antennæ fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head; coarsely and closely punctate, the punctuation on the thorax finer; hairy clothing delicate but fairly long. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, a depression along the median groove posteriorly, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen ovate, smooth and polished; wings hyaline; length 2.75 mms.

Described from one female (type) collected on Kaala Mountain, Oahu, by P. H. Timberlake, July 22, 1917.

Type: Cat. No. 133, Bishop Museum.

134. Sierola imparata n.sp.

Q dull shining black, legs, antennæ basally and the mandibles yellowish brown, antennæ outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and closely punctate, and hairy. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ nearly reaching the scutellum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, wider than long, anterior margin nearly straight, posterior margin incised; propodeum rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

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Described from one female (type) collected at Kilauea, Hawaii, dry forest, 4000 ft. elevation by W. M. Giffard, August 1, 1911.

Type: Cat. No. 134. Bishop Museum.

135. Sicrola pembertoni n.sp.

Q dull shining black, legs and antennal scape brown, antennæ outwardly infuscate.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; closely, shallowly and finely punctate, and hairy. Head almost as wide as long, width between the eyes greater than the length from eye to vertex; flatly convex above, convex beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, the pedicel twice as long as wide, the following segments hardly longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula flat, medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised, sides of the head convex; propodeum very finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected on Tantalus Mountain, Oahu, 1300 ft. elevation, by W. M. Giffard, February 12, 1905.

Type: Cat. No. 135, Bishop Museum.

136. Sierola lacessita n.sp.

Q dull shining black, legs yellowish brown, antennæ yellowish brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, coarser on the head; coarsely, shallowly and fairly closely punctate, the punctuation finer on the thorax; clothed with silvery white hairs. Head nearly as wide as long, width between the eyes greater than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, concayo-convex, truncate apically and toothed, base not reaching the eye above, lower lobe protuberant; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised, median groove nearly effaced; abdomen clongate ovate, smooth and polished; wings subinfuscate; length 2.5 mms.

Described from one female (type) collected at Lanihuli, Oahu, by P. H. Timberlake, September 3, 1916.

Type: Cat. No. 136, Bishop Museum. [86]

137. Sierola conspicua n.sp.

9 dull shining black, the legs and scape of antennæ brown, antennæ outwardly infuscate.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; finely, shallowly and fairly closely punctate, and hairy. Head wider than the thorax, nearly as wide as long, width between the eyes greater by a half than the length from eye to vertex; flatly convex above, depressed in front, a little tunid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head convex, the former medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised; propodeum very finely rugulose; abdomen a little depressed, ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected in the Koloa Mountains, Kauai, by O. H. Swezey, August 2, 1908.

Type: Cat. No. 137, Bishop Museum.

138. Sierola adumbrata n.sp.

Q dull shining black, the femora and antennæ outwardly fuscous; trochanters, tibiæ, tarsi and basal joints of antennæ yellowish brown; mandibles red at the apex.

Head and thorax with a microscopically fine reticulate surface sculpture; coarsely, shallowly and somewhat remotely punctate, and hairy. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the middle of the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, slightly depressed along the median line, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings hyaline; length 2.25 mms.

Described from two females (type and paratype) collected on Kaala Mountain, Oahu, by O. H. Swezey August 11, 1912.

Type: Cat. No. 138, Bishop Museum.

139. Sicrola illingworthi n.sp.

Q dull shining black, trochanters, tibiæ, tarsi and antennæ yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, a little coarser on the head; finely and fairly closely punctate, and hairy. Head wider than the thorax, nearly as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes twice the length from eye to vertex; flat above, tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not reaching the eye; gula flat, medially foreshortened, wider than long, narrowing posteriorly where there is a slight depression along the median line, anterior margin nearly straight, posterior margin incised, sides of the head convex; propodeum rugulose; abdomen elliptical and somewhat depressed, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected on Kau, Hawaii, a-a flows, elevation 3600 ft., by W. M. Giffard, July 18, 1918.

Type: Cat. No. 139, Bishop Museum.

140. Sicrola nemorensis n.sp.

2 dull shining black, legs and antennæ yellowish brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculp-

ture, very delicate on the thorax, especially on the scutellum and propodeum, coarser on the head; fairly closely and coarsely punctate, and hairy. Head nearly as wide as long, width between the eyes considerably more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head convex, the former medially foreshortened, wider than long, median groove nearly effaced, anterior and posterior margins arcuately concave; abdomen ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.75 mms.

Described from two females (type and paratype) collected on Hawaii by Koebele.

Type: Cat. No. 140, Bishop Museum.

141. Sierola vetusta n.sp.

Q dull shining black, trochanters, tibiæ, tarsi and antennæ basally yellowish brown, coxæ, femora and antennæ outwardly fuscous.

Head and thorax with a microscopically fine and close reticulate surface sculpture; finely, shallowly and closely punctate; hairy clothing long and delicate. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, pedicel longer than wide, the following segments hardly so, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles fairly stout, curved, truncate apically and toothed, base touching the eye above; gula convex, medially foreshortened, wider than long, anterior margin arcuately concave, posterior margin incised, sides of the head flat; abdomen ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2 mms.

Described from one female (type) collected on Maui by Koebele.

Type: Cat. No. 141, Bishop Museum.

142. Sierola kalihiensis n.sp.

Q dull shining black, trochanters, tibiæ, tarsi and base of antennæ brown, antennæ distally fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture, shallow throughout, very delicate on the propodeum, coarser on the head; coarsely and somewhat remotely punctate, the punctuation of the thorax finer; hairy clothing rather short and delicate. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes greater by a half than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ nearly reaching the scutellum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides. the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, bent in the middle, outer half concavo-convex, a little flattened dorso-ventrally, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, twice as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.25 mms.

Described from one female (type) collected in Kalihi Valley, Oahu, by P. H. Timberlake, March 11, 1917, on Suttonia lassertiana.

Type: Cat. No. 142, Bishop Museum.

143. Sicrola aucta n.sp. Plate XVI, Figure 7.

9 unusually large and thickset; dull shining black, antennæ fuscous, trochanters, tibiæ and tarsi yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and fairly closely punctate; hairy clothing short and inconspicuous. Head wider than the thorax, longer than wide by more than a half, width between the eyes not much greater than the length from eye to vertex, which is considerably more than the length in front of the eyes; flatly convex above, a little tumid beneath; vertical margin slightly concave, temples rounded, eyes flatly convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus nearly flat, indistinctly carinate, hardly projecting in front of the anterior margin of the head, sloping at the sides; mandibles stout, curved, concavo-convex, somewhat flattened outwardly, truncate apically and toothed, base not reaching the eye; gula and sides of the head convex, the former not much foreshortened, as long as wide, anterior margin nearly straight, deeply notched at the sides by the base of the mandibles, posterior margin incised; propodeum finely rugulose; abdomen short ovate, apically acuminate, smooth and polished; wings with a yellowish brown pigmentation; length 4 nims.

Described from two females (type and paratype). Type (numbered 11) from Puuwaawaa, N. Kona, 3800 ft. elevation, collected by W. M. Giffard, August 24, 1917. Second specimen from Kilauea, Hawaii, collected by D. T. Fullaway, November 19, 1913, paratype.

Type: Cat. No. 143, Bishop Museum.

144. Sicrola breviceps n.sp.

Q unusually long; dull shining black, trochanters, tibiæ, tarsi and antennæ basally brown, antennæ fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarsely, shallowly and fairly closely punctate, the sculpture and punctuation coarser on the head and pronotum than on the mesonotum and scutellum; hairy clothing short and delicate. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes more than twice the length from eye to vertex; convex above, depressed in front, tunid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula flatly convex, medially foreshortened, width twice the length, median furrow nearly effaced, anterior margin arcuately concave, deeply notched at the sides by the base of the mandibles, posterior margin incised; propodeum finely rugulose; abdomen elliptical, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 3.5 mms.

Described from one female (type) collected in Palolo Valley, Oahu, by D. T. Fullaway, September 8, 1912.

Type: Cat. No. 144, Bishop Museum.

145. Sierola bridwelli n.sp.

Q unusually long; shining black, legs and antennæ yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; fairly closely and coarsely punctate, the punctuation finer on the thorax; hairy clothing short and inconspicuous. Head longer than wide, width between the eyes more than the length from eye to vertex, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel and first funicle segment a little longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, narrowing behind, median furrow nearly effaced, anterior margin almost straight, deeply notched at the sides by the base of the mandibles, posterior margin incised; propodeum finely rugulose; abdomen oyate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3.5 mms.

Described from two females (type and paratype) collected in the

S. E. Koolau Mountains, Oahu, by J. C. Bridwell, 1916.

Type: Cat. No. 145, Bishop Museum.

146. Sierola depressa n.sp. Plate XVI, Figure 8.

Depressed to an extreme degree; shining black, the legs basally and the antennæ fuscous, tibiæ and tarsi yellowish brown.

Head and thorax with a microscopically fine and delicate reticulate surface sculpture; finely, shallowly and fairly closely punctate; clothed with short, fine, silvery white hairs. Head wider than the thorax, longer than wide by a half, length from eye to vertex equalling the width between the eyes; flat above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ longer than the head, all the segments longer than wide, antennal fossæ deep; clypeus short, carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula flat, hardly foreshortened, longer than wide, median groove nearly effaced, anterior margin straight, posterior margin arcuately concave; pronotum elongate: abdomen broken; wings hyaline; length 2 mms.

146 New Species of Sierola, With Explanatory Notes.

Described from one example (type) collected on Kaala Mountain, Oahu, by O. H. Swezey, September 1, 1913.

Type: Cat. No. 146, Bishop Museum.

147. Sierola philodoriae n.sp.

§ somewhat depressed; dull shining black, legs luteous, antennæ and mandibles brown.

Head and thorax with a microscopically fine reticulate surface sculpture; coarsely, shallowly, somewhat remotely punctate, and hairy. Head longer than wide by more than a half, length from eye to vertex equalling the width between the eyes, length in front of the eyes not great; convex above, depressed in front, flat beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus short, carinate, apically depressed, almost perpendicular, hardly projecting in front of the anterior margin of the head; mandibles fairly stout, curved, somewhat flattened outwardly, truncate apically and toothed, base touching the eye above; gula flat, not much foreshortened, longer than wide, anterior margin arcuately concave, posterior margin incised; abdomen ovate, apically acuminate, smooth and polished; wings hyaline; length 1.5 mms.

Described from four females (type and paratypes). Three specimens, including type, from Olympus Mountain, Oahu, reared from larva of *Philodoria splendida*, by O. H. Swezey, January 30, 1913. Two specimens in this series and one collected in the S. E. Koolau Mountains, Oahu, by J. C. Bridwell, 1916, paratypes.

Type: Cat. No. 147, Bishop Museum.

148. Sierola planiceps n.sp.

Q depressed; shining black, the legs, antennæ and mandibles, except at the base, flavous.

Head and thorax with a microscopically fine and delicate reticulate surface sculpture; finely, shallowly and somewhat remotely punctate; hairy clothing short and inconspicuous. Head longer than wide, length from eye to vertex equalling the width between the eyes, length in front of the eyes not great; flat above, flatly convex beneath; vertical margin slightly concave, temples rounded, eyes convex; antennæ a little longer than the head, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at the sides; mandibles slender, curved, concavo-convex, flattened outwardly, truncate apically and toothed, base touching the eye above; gula flat, very little foreshortened medially, longer than wide, median groove nearly effaced, anterior margin arcuately concave, posterior margin incised; abdomen short ovate, smooth and polished or nearly so; wings with a yellowish brown pigmentation; length 2 mms.

Described from four females (type and paratypes). Type from Nuuanu Valley, Oahu, collected by D. T. Fullaway, March 4, 1912. Two specimens collected in the S. E. Koolau Mountains, Oahu, by J. C. Bridwell, 1913, and one collected on Kaumuohona, by P. H. Timberlake, June 4, 1916, paratypes.

Type: Cat. No. 148, Bishop Museum.

149. Sierola holomelaena n.sp.

Q depressed; shining black, the head a little dull, legs and antennæ fuscous.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; finely, shallowly and somewhat remotely punctate; hairy clothing short and delicate. Head longer than wide, width between the eyes greater than the length from eye to vertex, length in front of the eyes not great; flat above, flatly convex beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ longer than the head, all the segments a little longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, not projecting in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula flat, not much foreshortened medially, anterior and posterior margins arcuately concave; propodeum very finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.75 mms.

Described from one female (type) collected at Kilauea, Hawaii, 4000 ft. elevation, by Giffard and Muir, January 14, 1917.

Type: Cat. No. 149, Bishop Museum.

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150. Sierola hirticeps n.sp.

9 a little slender; dull shining black, coxæ and femora fuscous to black, trochanters, tibiæ, tarsi and antennæ basally yellowish brown, antennæ apically fuscous.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture; coarsely, shallowly and closely punctate; thickly clothed with long silver-gray hairs. Head nearly twice as long as wide, length from eye to vertex equalling the width between the eyes; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel nearly twice as long as wide, the following segments as wide as long or nearly so, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former foreshortened medially, longer than wide, narrowing posteriorly, where it is a little convex, anterior margin arcuately concave, posterior margin incised; propodeum very finely rugulose; abdomen elongate elliptical, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 2.75 mms.

Described from five females (type and paratypes). Type from Tan-

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talus Mountain, Oahu, collected by D. T. Fullaway, January 3, 1910. One specimen from Kunia, Oahu, one from Manoa Ridge, Oahu, collected by D. T. Fullaway, March 24, 1910, and February 13, 1917, respectively; one specimen from Kaumuohona, Oahu, collected by P. H. Timberlake, September 9, 1917, and one specimen from S. E. Koolau Mountains, Oahu, collected by J. C. Bridwell on the same day, paratypes.

Type: Cat. No. 150, Bishop Museum.

151. Sierola tenuiceps n.sp.

9 slender; shining black, legs and antennæ luteous, mandibles reddish brown.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, a little coarser on the head; impunctate or nearly so, the punctuation extremely fine and hardly discernible; hairy clothing short and inconspicuous. Head nearly twice as long as wide, length from eye to vertex equalling the width between the eyes; flatly convex above, depressed in front, a little tunid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ a little longer than the head, pedicel and first funicle segment longer than wide, the following segments as wide as long, antennal fossæ deep; clypeus short, carinate, apically depressed, almost perpendicular, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides; mandibles slender, curved, concavo-convex, truncate apically and toothed, base not reaching the eye; gula and sides of the head flat, the former medially foreshortened, longer than wide, narrowing behind, where there is a shallow sulcus in the median line, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen elongate ovate, apically acuminate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 2 mms.

Described from two females (type and paratype). Type from Honolulu, Oahu, collected by J. C. Bridwell, April, 1916. Second specimen collected at Kunia, Oahu, by D. T. Fullaway, March 9, 1910, paratype.

Type: Cat. No. 151, Bishop Museum.

152. Sierola nitens n.sp.

a little slender; shining black, the legs, mandibles and antennæ basally yellowish brown, antennæ fuscous outwardly.

Head and thorax with a microscopically fine and delicate reticulate surface sculpture; impunctate and glabrous, or nearly so, the very fine pin punctures and short hairy clothing inconspicuous. Head longer than wide by a third, width between the eyes greater than the length from eye to vertex; flat above, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedical and first funicle segments nearly twice as long as wide, antennal fossæ deep; clypeus short, flat, vertical, indistinctly carinate, not projecting in front of the anterior margin of the head, which is angulate, not transverse; mandibles slender, curved, concavo-convex, truncate apically and toothed, base

touching the eye above; gula and sides of the head flat, the former medially foreshortened, as wide as long, narrowing somewhat posteriorly, where there is a small but deep sulcus in the median line, anterior margin almost straight, posterior margin incised; abdomen somewhat depressed, elongate ovate, smooth and polished; wings subinfuscate, with a yellowish brown pigmentation; length 2.25 mms.

Described from two females (type and paratype). Type from Kaala Mountain, Oahu, 2500 ft. elevation, collected by P. H. Timberlake on *Pelea clusiacfolia*, March 4, 1917, Second specimen, collected on Kaala Mountain, Oahu, by O. H. Swezey, September 1, 1913, paratype.

Type: Cat. No. 152, Bishop Museum.

153. Sierola kaumuohona n.sp.

9 shining black, legs and antennæ basally yellowish brown, hind femora and antennæ apically fuscous, abdomen yellowish brown to piceous.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; coarsely, shallowly and remotely punctate; clothed with sparse, short, fairly stiff silver white hairs. Head longer than wide, width between the eves more than the length from eye to vertex; flat above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flat; antennæ nearly reaching the mesoscutum, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed, not projecting in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles rather slender, curved, truncate apically and toothed, base touching the eye above; gula flatly convex, medially foreshortened, a little wider than long, narrowing behind, where there is a slight depression in the groove, anterior margin arcuately concave, posterior margin incised; propodeum very finely rugulose; abdomen elongate ovate, smooth and polished; wings with a deep yellowish brown to fuscous pigmentation; length 2 mms.

Described from one female (type) collected on Kaumuohona, Oahu, by P. H. Timberlake, September 9, 1917.

Type: Cat. No. 153, Bishop Museum.

154. Sicrola brunnciventris n.sp.

Q shining black, legs, antennæ basally and apical margin of abdominal segments, particularly at the sides, brown, antennæ outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine and shallow reticulate surface sculpture; coarsely, shallowly and fairly closely punctate, but not uniformly so; clothed, rather thickly on the gula, with delicate silver gray hairs. Head wider than the thorax, longer than wide by a half, length from eye to vertex equalling the width between the eyes; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ about as long as the head, pedicel a little longer than wide, the following segments wider than long, antennal fossæ deep; clypeus carinate, apically depressed, hardly pro-

jecting in front of the anterior margin of the head, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles stout, curved, concavo-convex, truncate apically and toothed, base not reaching the eye; gula flatly convex, finely and closely punctate, medially foreshortened, as wide as long narrowing posteriorly, anterior margin arcuately concave, posterior margin incised; propodeum very finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 3 mms.

Described from two females (type and paratype) collected on Tantalus Mountain, Oahu, elevation 1300 ft., by W. M. Giffard, October 15, 1905, and

numbered 10.

Type: Cat. No. 154, Bishop Museum.

155. Sicrola blackburni n.sp.

Q shining black, the legs and antennæ brown to fuscous.

Head and thorax with a microscopically fine reticulate surface sculpture; coarsely and fairly closely punctate; clothed with short silver gray hairs. Head longer than wide by a half, width between the eyes a little more than the length from eye to vertex; flatly convex above, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ a little longer than the head, pedicel longer than wide, the following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles short, stout, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, as wide as long, narrowing behind, anterior margin arcuately concave, posterior margin incised; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a very faint fuscous pigmentation; length 2.5 mms.

Described from one female (type) collected on Kau, Hawaii, a-a flows, 3600 ft. elevation, by W. M. Giffard, July 18, 1918.

Type: Cat. No. 155, Bishop Museum.

156. Sierola celeris n.sp.

9 shining black, the legs and antennæ basally yellowish brown, hind femora and antennæ outwardly fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; coarsely, shallowly, fairly closely punctate, and hairy. Head wider than the thorax, longer than wide by a half, length from eye to vertex equalling the width between the eyes; convex above, a little tumid beneath, the greatest depth behind the eye; vertical margin straight, temples rounded, eyes flat; antennæ a little longer than the head, pedicel and first funicle segment twice as long as wide, second a little shorter, the following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed but rather flat, not projecting in front of the anterior margin of the head, sloping at the sides; mandibles stout, curved, a little flattened outwardly, truncate apically and toothed, base touching the eye above; gula

and sides of the head flat, the former medially foreshortened, as wide as long, narrowing behind, anterior margin arcuately concave, posterior margin incised; propodeum rugulose, with a narrow triangular area medially at the base smooth; abdomen ovate, apically acuminate, smooth and polished; wings hyaline; length 2.25 mms.

Described from one female (type) collected on Tantalus Mountain, Oahu, by O. H. Swezey, March 16, 1915.

Type: Cat. No. 156, Bishop Museum.

157. Sierola perkinsi n.sp.

9 shining black, legs and antennæ basally yellowish brown, front and hind femora and antennæ outwardly fuscous, mandibles outwardly reddish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; fairly coarsely and closely punctate; clothed with delicate silver gray hairs. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes greater by a half than the length from eye to vertex; flatly convex above, depressed in front, tumid beneath, the greatest depth directly behind the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel twice as long as wide, antennal fossæ deep; clypeus reduced by crosion from the sides to a thin carinate ridge, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former a little foreshortened medially, longer than wide, narrowing behind, anterior margin arcuately concave, posterior margin incised; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected at Kilauea, Hawaii, dry forest, 4000 ft. elevation, by W. M. Giffard and F. Muir, November 1, 1917.

Type: Cat. No. 157, Bishop Museum.

158. Sicrola perottetiae n.sp.

Q shining black, the legs and antennæ fuscous except the scape, pedicel, trochanters, tibiæ and tarsi, which are yellowish brown.

Head and thorax to the propodeum with a microscopically fine and delicate reticulate surface sculpture; coarsely, shallowly and remotely punctate; hairy clothing short and inconspicuous. Head longer than wide by a third, width between the eyes greater than the length from eye to vertex, length in front of the eyes not great; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ not much longer than the head, pedicel and first funicle segment longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at

the sides, the carina extending backward shortly on the top of the head; mandibles stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former a little foreshortened, as wide as long, flat and depressed in front as well as in the groove behind, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate, with a faint fuscous pigmentation; length 2.5 mms.

Described from three females (type and paratypes) from Manoa Cliff Trail-Tantalus, Oahu, reared from decaying wood of *Perottetia sandwiccensis* by J. C. Bridwell, July, 1918.

Type: Cat. No. 158, Bishop Museum.

159. Sicrola humilis n.sp.

Q shining black, antennæ, trochanters, fore-tibiæ and tarsi, middle and hind tarsi yellowish brown.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; coarsely and fairly closely punctate; hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes greater than the length from eye to vertex; convex above, depressed in front, a little tunid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ hardly longer than the head, pedicel and first funicle segment a little longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward shortly on the top of the head; mandibles fairly stout, curved, concavoconvex, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, wider than long and finely punctate, anterior margin arcuately concave, posterior margin incised; propodeum finely rugulose; abdomen elongate ovate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.5 mms.

Described from one female (type) collected on ridge south of Iao Valley, W. Maui, 1800-2000 ft. elevation, by J. C. Bridwell, September 1, 1918. Type: Cat. No. 159, Bishop Museum.

160. Sierola proxima n.sp.

Q shining black, the legs and antennæ brown.

Head and thorax with a microscopically fine and delicate reticulate surface sculpture; finely, shallowly and fairly closely punctate, hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; convex above and beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel a little longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles stout

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curved, concavo-convex, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long and finely punctate, anterior margin arcuately concave, posterior margin incised; abdomen ovate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 2.5 mms.

Described from one female (type) collected on Tantalus Mountain, Oahu, 1300 ft. elevation, by W. M. Giffard.

Type: Cat. No. 160, Bishop Museum.

161. Sierola langfordi n.sp.

Q dull shining black, legs and antennæ yellowish brown to fuscous.

Head and thorax with a microscopically fine and delicate reticulate surface sculpture; finely and somewhat remotely punctate, and hairy. Head considerably longer than wide, widest across the eyes, narrowing behind and in front, width between the eves greater than the length from eye to vertex; flatly convex above, depressed in front, tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel nearly twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed, the point blunt, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides; mandibles stout, bent at the middle, outer half flattened, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flat, the former medially foreshortened, wider than long, narrowing behind, with a depression along the median line, anterior and posterior margins arcuately concave; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a very faint fuscous pigmentation; length 3 mms.

Described from one female (type) collected on Tantalus Mountain, Oahu, elevation 1300 ft., by W. M. Giffard, November 1-2, 1905.

Type: Cat. No. 161, Bishop Museum.

162. Sicrola aspera n.sp.

Q dull shining black, legs and antennæ yellowish brown except the hind femora, the coxæ and the apical segments of the flagellum, which are fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture, coarser on the head and prothorax than on the mesothorax and scutellum; coarsely, shallowly and closely punctate; hairy clothing fairly long and thick. Head longer than wide by a half, width between the eyes hardly exceeding the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel and first funicle segment twice as long as wide, the following segments hardly longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, almost perpendicular, not projecting in front of the anterior margin of the head, declivous at the sides, the carina extend-

ing backward shortly on the top of the head; mandibles stout, curved, truncate apically and toothed, base touching the eye above, lower lobe protuber ant; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen somewhat piceous, ovate, smooth and polished; wings subinfuscate, with a very faint fuscous pigmentation; length 2.25 mms.

Described from one female (type) collected on Kaumuohona, Oahu, by O. H. Swezey, December 5, 1907.

Type: Cat. No. 162, Bishop Museum.

163. Sierola atra n.sp.

9 dull shining black, antennæ, tibiæ and tarsi brown black.

Head and thorax with a microscopically fine reticulate surface sculpture; finely, shallowly and closely punctate but not uniformly so; hairy clothing short and inconspicuous. Head wider than the thorax, a little longer than wide, width between the eyes considerably more than the length from eye to vertex, length in front of the eyes not great; convex above, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ hardly longer than the head, pedicel and first funicle segment longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles short and stout, bent at the middle, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, a little wider than long, median groove effaced, anterior margin arcuately concave, posterior margin incised; propodeum very finely rugulose; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a very faint fuscous pigmentation; length 2 mms.

Described from one female (type) collected at 29 miles, Olaa, Hawaii, 3800 ft. elevation, by W. M. Giffard, August 10, 1918.

Type: Cat. No. 163, Bishop Museum.

164. Sierola newelli n.sp.

9 dull shining black, antennæ and legs yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely and fairly closely punctate; hairy clothing rather sparse, the hairs long and delicate. Head as wide as long, width between the eyes nearly twice the length from eye to vertex, length in front of the eyes not great; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles fairly slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and

sides of the head flat, the former a little foreshortened medially, as wide as long, narrowing posteriorly, anterior and posterior margins arcuately concave; propodeum rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected on Kau, Hawaii, a-a flows, 3600 ft. elevation, by W. M. Giffard, July 18, 1918.

Type: Cat. No. 164, Bishop Museum.

165. Sierola waianacana n.sp.

Q dull shining black, legs and antennæ brown to fuscous, mandibles reddish apically.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; finely, shallowly and fairly closely punctate but not uniformly so; hairy clothing short and inconspicuous. Head considerably longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes greater than the length from eye to vertex; flatly convex above, depressed in front, a little tunid beneath; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and bluntly pointed, not projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides: mandibles fairly slender, bent at the middle, the distal portion flattened, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, a little depressed along the median line, anterior and posterior margins arcuately concave; propodeum finely rugulose; abdomen ovate, smooth and polished; wings subinfuscate, with a very faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected in the Waianae Mountains, Oahu, by D. T. Fullaway, March 5, 1911.

Type: Cat. No. 165, Bishop Museum.

166. Sierola distinguenda n.sp.

Q dull shining black, legs and antennæ basally yellowish brown, the antennæ fuscous outwardly, mandibles marked with red.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly coarsely, shallowly and closely punctate; hairy clothing short and delicate. Head a little longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes greater than the length from eye to vertex by a half; convex above, depressed in front, a little tumid beneath; vertical margin slightly convex, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments longer than wide, pedicel and first funicle segment twice as long as wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, a little flattened outwardly, truncate apically and toothed, base not reaching the eye; gula and sides of the head flatly convex, the former

medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; abdomen short ovate, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected on Kaala Mountain, Oahu, by D. T. Fullaway, August 11, 1912.

Type: No. 166, Bishop Museum.

167. Sierola rufomandibulata n.sp.

Q dull shining black, legs and antennæ yellowish brown, the latter fuscous outwardly, mandibles marked with red.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture; finely and rather closely punctate, and hairy. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes convex; antennæ nearly reaching the mesoscutum, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, not projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, longer than wide, narrowing behind, very finely punctate, median groove nearly effaced, anterior margin straight, posterior margin incised; propodeum rugulose; abdomen ovate, smooth and polished; wings with a yellowish brown pigmentation; length 2.25 mms.

Described from one female (type) collected in Manoa Valley, Oahu, by O. H. Swezey, July 27, 1913.

Type: Cat. No. 167, Bishop Museum.

168. Sierola curiosa n.sp.

Q dull shining black, legs and antennæ apically fuscous, the latter basally yellowish brown.

Head and thorax with a microscopically fine reticulate surface sculpture; fairly coarsely, shallowly and closely punctate; hairy clothing short and inconspicuous. Head a little longer than wide, width between the eyes a little more than the length from eye to vertex; convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, all the segments longer than wide, antennal fossæ deep; clypeus carinate, apically depressed and bluntly pointed, not projecting in front of the anterior margin of the head, which is angulate, not transverse, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, with a shallow depression along the median line, anterior margin arcuately concave, posterior margin incised; abdomen elongate ovate, smooth and polished; wings with a shallow yellowish brown pigmentation; length 2 mms.

Described from one female (type) collected at Kuliouou, Oahu, by P. H. Timberlake, June 25, 1916.

Type: Cat. No. 168, Bishop Museum.

169. Sierola subcrispa n.sp.

9 dull shining black, almost opaque; legs and antennæ basally luteous, the femora and antennæ apically fuscous.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture; finely and closely punctate; clothed with long silver gray hairs. Head longer than wide by a half, widest across the eyes, narrowing behind and in front, width between the eyes considerably more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath; vertical margin straight, temples rounded, eyes flatly convex; antennæ a little longer than the head, pedicel and first three funicular segments a little longer than wide, the following segments hardly longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, sloping at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, truncate apically and toothed, base not quite reaching the eye; gula and sides of the head flatly convex, the former medially foreshortened, wider than long, depressed slightly along the median line and in front, anterior margin nearly straight, posterior margin incised; propodeum finely rugulose; abdomen elliptical, apically acuminate, smooth and polished; wings subinfuscate, with a faint yellowish brown pigmentation; length 2.5 mms.

Described from one female (type) collected on Manoa Ridge, Oahu, by D. T. Fullaway, February 13, 1917.

Type: Cat. No. 169, Bishop Museum.

170. Sierola nuda n.sp.

9 dull black, head almost opaque; legs yellowish brown, the femora infuscate, antennæ yellowish brown basally, fuscous apically, mandibles reddish brown except at the base.

Head and thorax with a microscopically fine reticulate surface sculpture, coarser on the head; coarsely, shallowly and remotely punctate; hairy clothing short, sparse and inconspicuous. Head a little longer than wide, width between the eyes greater than the length from eye to vertex, length in front of the eyes not great; convex above, depressed in front, tumid beneath, the greatest depth directly behind the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ nearly reaching the mesoscutum, pedicel and first three funicular segments longer than wide, the following segments as wide as long, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles slender, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, as wide as long, slightly depressed along the median line, anterior and posterior margins arcuately concave; abdomen a little depressed, ovate. smooth and polished; wings with a fuscous pigmentation; length 2.5 mms.

Described from one female (type) collected at Kuliouou, Oahu, by D. T. Fullaway, July 12, 1918.

Type: Cat. No. 170, Bishop Museum.

171. Sierola willardi n.sp.

Q dull black, the head almost opaque; legs and antennæ brown, the latter fuscous outwardly.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture; finely and closely punctate; hairy clothing short and inconspicuous. Head as wide as long, widest across the eyes, narrowing behind and in front, width between the eyes nearly twice the length from eye to vertex; convex above, depressed in front, tumid beneath, the greatest depth beneath the eye; vertical margin straight, temples rounded, eyes convex; antennæ reaching the mesoscutum, all the segments considerably longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward shortly on the top of the head; mandibles fairly stout, curved, truncate apically and toothed, base touching the eye above; gula and sides of the head convex, the former medially foreshortened, as wide as long, median groove nearly effaced. anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen ovate, smooth and polished; wings with a yellowish brown pigmentation; length 3 mms.

Described from one female (type) collected on Kaala Mountain, Oahu, by J. C. Bridwell, July 4, 1916.

Type: Cat. No. 171, Bishop Museum.

DESCRIPTIONS OF NEW EXOTIC SPECIES.

I. Sierola vitiensis n.sp.

9 shining black, legs, antennæ and mandibles yellowish brown to fuscous.

Head and thorax to the propodeum with a microscopically fine reticulate surface sculpture; fairly coarsely and closely punctate; hairy clothing short. Head longer than wide, widest across the eyes, narrowing behind and in front, width between the eyes more than the length from eye to vertex; flatly convex above, depressed in front, a little tumid beneath, the greatest depth beneath the posterior end of the eye; vertical margin straight, temples rounded, eyes flatly convex; antennæ slender, longer than the head, pedicel twice as long as wide, the following segments only a little longer than wide, antennal fossæ deep; clypeus carinate, apically depressed, hardly projecting in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles slender, curved. truncate apically and toothed, base touching the eye above; gula and sides of the head flat, the former medially foreshortened, as wide as long, narrowing behind, anterior margin nearly straight, posterior margin incised; propodeum rugulose; abdomen ovate, apically acuminate, smooth and polished; wings subinfuscate; length 2 mms.

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& smaller; antennal segments beyond the pedicel shorter, hardly longer than wide, abdomen bluntly pointed at the apex.

Described from one female and one male (type and allotype) collected at Rewa, Fiji, by F. Muir, March, 1906.

A male specimen from Ba, Fiji, collected in January, 1906, appears somewhat different.

Type: Cat. No. 172, Bishop Museum.

2. Sierola sinensis n.sp.

Q dull shining black to the abdomen, which is smooth and polished, the head opaque or nearly so; antennæ yellowish brown, fuscous apically, legs fuscous basally, tibiæ and tarsi yellowish brown.

Head and thorax to the propodeum with a microscopically fine and close reticulate surface sculpture, coarser on the head; finely and closely punctate; hairy clothing short and inconspicuous. Head longer than wide by a half, width between the eyes more than the length from eye to vertex; flat above, depressed in front, convex beneath; vertical margin straight, temples rounded, eyes flat; antennæ hardly longer than the head, the pedicel a little longer than wide, the following segments as wide as or wider than long, antennal fossæ deep; clypeus carinate, apically depressed and projecting slightly in front of the anterior margin of the head, which is angulate, not transverse, declivous at the sides, the carina extending backward on the top of the head beyond the base of the antennæ; mandibles fairly stout, curved, concavo-convex, truncate apically and toothed, base touching the eye above; gula and sides of the head flatly convex, the former medially foreshortened, as wide as long, anterior margin arcuately concave, posterior margin incised; propodeum rugulose; abdomen ovate, apically acuminate; wings subinfuscate; length 2 mms.

Described from one female (type) collected at Chin San, Macao, China, by F. Muir, December, 1906.

Type: Cat. No. 173, Bishop Museum.