

CATALOG OF ENTOMOLOGICAL TYPES IN THE BISHOP MUSEUM.

Diptera: Rachiceridae, Scenopinidae, Empididae

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Abstract. Holotypes of 12 Rachiceridae, 6 Scenopinidae and 9 Empididae deposited in the Bishop Museum collection are listed. An account of the holdings of each above-mentioned family in the general collection of the Bishop Museum is also presented.

This catalog treats the type material of 27 taxa in the families Rachiceridae, Scenopinidae, and Empididae deposited in the Bishop Museum and gives the holdings of each family in the general collection. All types listed here are represented by pinned adults, including some with associated slides. The format used is explained in Radovsky et al. (1976).

Though there are 12 holotypes of Rachiceridae deposited in the type collection, this family is poorly represented in the general collection, with only 11 pinned adults identified to species level. Most of these (6) are from China. The remainder are from Borneo, New Guinea, Vietnam and Japan.

The Scenopinidae are also poorly represented. There are 6 types and 180 pinned nontype specimens in the Bishop Museum. Most of the material in the general collection is identified to species level. Localities represented by this family include Australia (2), Fiji (1), Hawaiian Is (155), Japan (1), Micronesia (4), New Guinea (1), Western Samoa (1), Thailand (6), and other (6).

There are 9 types of Empididae housed in the Bishop Museum and approximately 6000 pinned nontype specimens. Most of the general collection material is from the Philippines (2600), Borneo (1400) and New Guinea (1000). Other localities represented include Australia (6), Fiji (7), Hawaiian Is (4), Hong Kong (150), Japan (2), Laos (40), New Caledonia (112), Ryukyus (5), Samoa (300), Solomon Is (230), Taiwan (150), Thailand (8), Tonga (68), Vietnam (250), miscellaneous Pacific islands (19), Europe (350), U.S. and other (150); 45 larvae and adults in alcohol are from Micronesia and other Pacific islands. Most of the material is unsorted.

SPECIES-GROUP ENTRIES

Family RACHICERIDAE

bifidus Nagatomi, <i>Rachicerus</i>	HOLOTYPE ♀	6593
1970 <i>Pac. Insects</i> 12 (2): 432-33 Fig. 2-3		pin
[MALAYSIA]: BORNEO: [Sabah]: [Forest Camp 19 km] N of Kalabakan 30.X.1962		
K.J. Kuncheria		

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- Right antenna beyond 2nd segment missing, left wing missing, right wing torn at tip.
- boarius** Nagatomi, **Rachicerus** HOLOTYPE ♀ 6594
 1970 *Pac. Insects* 12(2): 433–35 Fig. 4–6
 PHILIPPINES: Luzon I: [Laguna Prov.]: Los Baños VI–VII.1917 F.X. Williams
 Original description states the date as 7.VII.1917, right wing missing. pin
- endymion** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6595
 1970 *Pac. Insects* 12(2): 435–36 Fig. 7–9
 [MALAYSIA]: BORNEO: Sabah: [Forest Camp 19 km] N of Kalabakan 27.X.1962 Y.
 Hirashima
 Left wing missing. pin
- flabellum** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6596
 1970 *Pac. Insects* 12(2): 436–37 Fig. 10–12
 [MALAYSIA]: BORNEO: Sabah: [Forest Camp 19 km] N of Kalabakan 15.X.1962 K.J.
 Kuncheria pin
- fluidus** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6597
 1970 *Pac. Insects* 12(2): 437–38 Fig. 13–14
 [PNG]: NEW GUINEA (NE): Morobe Distr: Wau [1250 m] 14.I.1963 J. Sedlacek
 [Malaise trap]
 Left wing missing. pin
- maai** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6598
 1970 *Pac. Insects* 12(2): 441–42 Fig. 20–22
 CHINA: Fukien: Shaowu: Tachulan [1000 m] 1–5.VII.1946 T.C. Maa
 Left wing missing; original description cites the date as 1.VII.1946. pin
- nigellus** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6599
 1970 *Pac. Insects* 12(2): 444–45 Fig. 25
 INDONESIA: JAVA XII.1908 Terry
 Fore leg beyond coxa, mid tarsus, and last 2 segments of hind tarsus missing; ALLOTYPE
 ♀ 6599a on same pin. pin
- nimbosus** Nagatomi, **Rachicerus** HOLOTYPE ♀ 6600
 1970 *Pac. Insects* 12(2): 445–46 Fig. 26–27
 [MALAYSIA]: BORNEO: Sabah [Forest Camp 19 km] N of Kalabakan 8.XI.1962 Y.
 Hirashima
 Left wing and antennae beyond second segment missing. pin
- obatratus** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6601
 1970 *Pac. Insects* 12(2): 446–47 Fig. 28–30
 [MALAYSIA]: BORNEO: Sabah: [Forest Camp 19 km] N of Kalabakan 17.XI.1962 K.J.
 Kuncheria
 Left wing missing. pin
- tenuiculus** Nagatomi, **Rachicerus** HOLOTYPE ♀ 6602
 1970 *Pac. Insects* 12(2): 457–58 Fig. 53–54
 [PNG: BISMARCK ARCH.]: NEW BRITAIN: Gazelle Penin.: Mt Sinewit [900 m] 7–
 16.XI.1962 J. Sedlacek
 Right wing missing. pin
- tenuis** Nagatomi, **Rachicerus** HOLOTYPE ♀ 6603
 1970 *Pac. Insects* 12(2): 458–60 Fig. 55–56
 [IRIAN]: NEW GUINEA [(NW)]: Vogelkop: Manokwari [75 m] 24.VII.1957 D.E.
 Hardy
 Original description cites date as 27.VII.1957. pin
- tigrinus** Nagatomi, **Rachicerus** HOLOTYPE ♂ 6604
 1970 *Pac. Insects* 12(2): 460–461 Fig. 57–59
 [MALAYSIA]: BORNEO: Sabah: [Forest Camp 19 km] N of Kalabakan 28.X.1962 K.J.
 Kuncheria
 Both wings missing. pin

Family SCENOPINIDAE

- adverticius** Hardy, **Scenopinus** HOLOTYPE ♂ 2989
 1960 *Insects of Hawaii* Vol. 10: 329-31 Fig. 116a-f
 HAWAIIAN IS: Oahu: Honolulu I.1953 D.E. Hardy
 Reared from *Tribolium castanum*
 ALLOTYPE 2989a, on pin. pin
- maai** Kelsey, **Scenopinus** HOLOTYPE ♀ 7486
 1970 *Pac. Insects* 12(1): 41 Fig. 2
 THAILAND (NW): Chiang Mai: Doi Suthep 1278 m 29.III-4.V.1958 T.C. Maa
 #164
 Genitalia in vial on pin; original description cites locality as "Chang Mai."
- maai** Kelsey, **Seguyella** HOLOTYPE ♀ 7490
 1970 *Pac. Insects* 12(1): 46-48 Fig. 6
 THAILAND (NW): Chiang Mai: Doi Pui 1360 m 2.V.1958 T.C. Maa
 #214
 Genitalia in vial on pin; right wing missing, head glued to rest of body; original description incorrectly cites locality as "Chang Mai."
- papuana** Kelsey, **Metatrachia** HOLOTYPE ♀ 7488
 1970 *Pac. Insects* 12(1): 44-46 Fig. 4
 [PNG]: NEW GUINEA (NE): Wau 1200 m 14.XI.1964 P.S. Shanahan
 Malaise trap
 Genitalia in vial on pin; left wing torn at costa near vein R_{2+3} .
- thailandica** Kelsey, **Metatrachia** HOLOTYPE ♀ 7489
 1970 *Pac. Insects* 12(1): 46 Fig. 5
 THAILAND (NW): [Chiang Mai]: Doi Suthep 1278 m 29.III-4.V.1958 T.C. Maa
 #253
 Genitalia in vial on pin; original description cites locality as "Chang Mai."
- thailandicus** Kelsey, **Scenopinus** HOLOTYPE ♀ 7487
 1970 *Pac. Insects* 12(1): 41-44 Fig. 3
 THAILAND (NW): Chiang Mai: Doi Suthep 1278 m 29.III-4.V.1958 T.C. Maa
 #243
 Genitalia in vial on pin; original description cites locality as "Chang Mai."

Family EMPIDIDAE

- basetosa** Saigusa, **Rhamphomyia (Orientomyia)** HOLOTYPE ♂ 6939
 1966 *Pac. Insects* 8(4): 906-08 Fig. 1
 CHINA (S): Fukien Prov: Shaowu: Tachulan 1000 m 25-30.IV.1943 T.C. Maa
 Left wing on slide, macerated genitalia glued on card below insect.
- brevispinus** Collin, **Syneches** HOLOTYPE ♀ 520
 1929 *Insects of Samoa* 6(4): 181-82
 WESTERN SAMOA: Savaii I: Safune: rain forest 610-1220 m 3.V.1924 E.H. Bryan,
 Jr.
- coxalis** Smith, **Austrodrapetis** HOLOTYPE ♂ 3609
 1964 *Pac. Insects* 6(2): 248 Fig. 1
 COOK IS: Akaiami I: Aitutaki III.1955 N.L.H. Krauss
- dissita** Collin, **Chersodromia** HOLOTYPE ♂ 2990
 1960 *Insects of Hawaii* Vol. 10: 335, 336-38 Fig. 118a-c
 HAWAIIAN IS: HAWAII: Upper Olaa Forest VII.1953 D.E. Hardy
 ALLOTYPE 2990a, on pin. pin
- kraussi** Smith, **Crossopalpus** HOLOTYPE ♂ 3610
 1964 *Pac. Insects* 6(2): 250-51 Fig. 2
 COOK IS: Akaiami I: Aitutaki III.1955 N.L.H. Krauss
 Right wing, left mid and hind legs behind coxae glued to point; genitalia glued to cellophane card pinned below insect. pin

1980	Evenhuis: Type catalog, Rachiceridae, Scenopinidae, Empididae	215
kraussi Quate, Drapetis		HOLOTYPE ♂ 2905 pin
1960 <i>Insects Micronesia</i> 13 (3): 61-62 Fig. 1k-n		
MICRONESIA: GILBERT IS: Butaritari I: Butaritari Atoll XII.1957 N.L.H. Krauss		
ALLOTYPE ♀ 2905a, on pin.		
maai Saigusa, Rhamphomyia (Pararhamphomyia)		HOLOTYPE ♂ 9640 pin
1966 <i>Pac. Insects</i> 8 (4): 908-10 Fig. 2		
CHINA (S): Fukien Prov: Shaowu: Tachulan 23-28.XI.1942 T.C. Maa		
Left wing on slide, macerated genitalia glued on card pinned below insect.		
savaiiensis Collin, Drapetis		SYNTYPES 521 pin
1929 <i>Insects of Samoa</i> . Part 6(4): 183-84 Fig. 2		
WESTERN SAMOA: Savaii I: Salailua: rain forest 610-1220 m 23.V.1924 E.H. Bryan, Jr.		
tachulanensis Saigusa, Rhamphomyia (Pararhamphomyia)		HOLOTYPE ♂ 6941 pin
1966 <i>Pac. Insects</i> 8 (4): 911-13 Fig. 3		
CHINA (S): Fukien Prov: Shaowu: Tachulan 10-19.III.1943 T.C. Maa		
Right wing on slide, macerated genitalia glued to card pinned below insect; left wing glued to point, left mid and hind legs beyond coxae glued to minuten.		

GENUS-GROUP INVENTORY

Austrodrapetis: coxalis
 Chersodromia: dissita
 Crossopalpus: kraussi
 Drapetis: kraussi, savaiiensis
 Metatrichia: papuana, thailandica
 Rachicerus: bifidus, boarius, endymion, flabellum, fluidus, maai, nigellus, nimbosus, obatratus, tenuiculus,
 tenuis, tigrinus
 Rhamphomyia (Orientomyia): basisetosa
 Rhamphomyia (Pararhamphomyia): maai, tachulanensis
 Scenopinus: adventicius, maai, thailandicus
 Seguyella: maai
 Syneches: brevispinus

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