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New species of *Campsicnemus* Haliday (Diptera: Dolichopodidae) from Moloka‘i, Hawaiian Islands[1]

Neal L. Evenhuis
Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai‘i 96817-2704, USA; email: neale@bishopmuseum.org

Introduction

The Hawaiian Islands are home to an incredible diversity of species of the predatory dolichopodid genus *Campsicnemus* Haliday with an estimated 250–300 species found only on this island archipelago. Recent studies on this group in the Hawaiian Islands (e.g., Evenhuis 2003, 2007a, 2011, 2012a, 2012b, 2013a; Evenhuis & O’Grady 2010, Goodman *et al*. 2014) have shown that since the revision of the genus in Hawai‘i by Hardy & Kohn (1964), there are still a large number of new species being discovered on all the islands.

The current study is restricted to just the island of Moloka‘i. It harbors an interesting diversity of species, and a number of new species have been discovered through Malaise and yellow pan trapping in recent years. Of the 33 species of *Campsicnemus* currently known to occur on Moloka‘i, seven are here described as new to science. The new species are described and illustrated to allow their names to appear in forthcoming publications of the genus in Hawai‘i and the Pacific.

Material and Methods

Specimens examined in this study derive primarily from collections of the Bishop Museum (BPBM) including recently collected material for molecular analysis funded in part by the National Science Foundation (DEB-0842348), with all vouchers deposited in BPBM. Additional specimens were borrowed from the University of Hawaii Insect Museum, University of Hawai‘i at Mānoa (UHIM). Morphological terminology, description format, and abbreviations used in the description follow Evenhuis (2013a). Holotypes of all new species are deposited in BPBM. Paratypes are deposited in BPBM and/or UHIM as indicated below.

Taxonomy

Genus *Campsicnemus* Haliday

Medeterus (Camptosceles) Haliday, 1832: 357. Type species: *Dolichopus scambus* Fallén, 1823 (by subsequent designation of Coquillett 1910: 518). Suppressed by I.C.Z.N. 1958: 349 (Opinion 531).

Leptopezina Macquart, 1835: 554. Type species: *Diastata gracilis* Meigen, 1820, by monotypy. *Nomen oblitum* (see Evenhuis 2003: 3).

Campsicnemus Haliday *in* Walker, 1851: 187. Type species: *Dolichopus scambus* Fallén, 1823, by validation of I.C.Z.N. 1958: 351. *Nomen protectum* (see Evenhuis 2003: 3).

Camptoscelus Kertész, 1909: 306 (unjustified replacement name for *Camptosceles* Haliday). Type species: *Dolichopus scambus* Fallén, 1823, automatic.

1. Contribution No. 2015-001 the Hawaii Biological Survey.

With the seven new species described herein, there are currently 181 described species of Hawaiian *Campsicnemus* (all endemic) known from this remote island group in the Pacific Ocean, with many more new species awaiting description. A large diversity of this genus also exists in French Polynesia (Societies, Marquesas, and Australs) with more than 50 undescribed species having been discovered in recent surveys from these islands (some 30 from the Marquesas alone) (see Evenhuis 2000, 2008, 2009, 2013b for keys to proposed species groups and descriptions of some of the newly discovered species). Additional species occur westward as far as Fiji (undescribed species are known from Tonga and Fiji). As more Malaise and yellow pan trapping and other collecting is done in suitable habitats on the south Pacific islands, many more new species should be found.

New Species Descriptions

Campsicnemus adachiae Evenhuis, **n**. **sp**.
(Figs. 1, 2)

Diagnosis. Most similar to *C. amblytylus* Hardy & Kohn from Kahuku Ranch on the Big Island, but differs from it by the all white legs (yellow with brown tarsi in *C. amblytylus*), the lack of an apical flap-like process on the mid femur (present in *C. amblytylus*), the absence of a conspicuous dense patch of small black setae on the venter of the mid femur forming a point (present in *C. amblytylus*), the strongly bent mid tibia (slightly bent in *C. amblytylus*), and the lateral patch of short fine hairs on the apical third of the mid tibia (these hairs much longer and thicker in *C. amblytylus*).

Description. **Male** (Fig. 1): Body length: 1.2 mm. Wing length: 1.4 mm.

Head: Face, front and clypeus black; oc and vt black, about two-thirds length of antennal arista; occiput, and vertex black with blue-gray highlights; postgena with sparse short black hairs; face constricted at middle, separated by width of one ommatidium; palpus small, brown; proboscis yellowish brown, extending below eye in lateral view; antenna with scape and pedicel yellow; scape subcylindrical, length 1.5 × width; pedicel obconical, with ring of short spiky black setae subapically; postpedicel yellow with brown border, subtriangular, length 2 × width, acute apically; arista slightly longer than head height.

Thorax: Mesonotum and scutellum yellow, mesonotum with pair of brown admedian vittae; pleura yellow except brown anepimeron; thoracic setae black: 4 dc; 2 np; 2 ph; 1 pa; 1 sc; ac absent; halter stem and knob white.

Legs: Coxae with CII brown, remainder of legs yellowish; fore and hind legs unmodified and without MSSC; FII with row of 7 long stiff black setae along medial portion of ventral surface (MSSC); TiII (Fig. 2) bent slightly beyond middle, medial surface with row of 9 long thin peg-like setae and row of 8 shorter spiny setae adjacent to peg-like setae (MSSC); lateral surface with small patch of pale hairs subbasally, paired row of 6 strong setae near middle, and dense patch of short fine brown hairs at apical 1/3 (MSSC); IIt_1 2/3 length of tibia. Remaining leg segments unmodified and without MSSC.

Wing: Subhyaline, veins pale brownish; posterior crossvein length 1/4 apical segment of CuA_1.

Abdomen: Brown dorsally, yellow laterally; tergal vestiture sparse, black. Hypopygium yellow with brown cerci, not dissected.

Figure 1. *Campsicnemus adachiae*, n. sp., holotype male habitus.

Female: Unknown.

Material Examined. *Type*. HOLOTYPE ♂ (BPBM 17,568) from HAWAIIAN ISLANDS: **Moloka'i**: TNCH Kamakou Preserve, sweeping along small stream behind Kolekole cabin, 21°06.456'N 156°53.817'W, 10 Jan 2011, S. Wang (BPBM).

Etymology. The species is named to honor the memory of the late Marion Adachi Kohn, who described and/or illustrated many new species of *Campsicnemus* from the Hawaiian Islands.

Campsicnemus bartletti Evenhuis, **n**. **sp**.
(Fig. 3)

Diagnosis. Similar to *C. penicillatus* Hardy & Kohn from the Big Island (cf. Fig. 4), but differs from it by the size (*C. bartletti* roughly 1/2 the size of the much larger *C. penicillatus*) and by the different patterning of the mid tibia: the less extensive setation in the medial transverse band of hairs (more extensive in *C. penicillatus*) and the lack of a sagittally oriented row of setae between the two subapical patches of hairs (present in *C. penicillatus*).

Description. **Male**: Body length: 2.3 mm. Wing length: 3.0 mm.

Head: Face, front and clypeus yellow, golden tomentose; oc and vt black, about two-thirds length of antennal arista; occiput, and vertex black with blue-gray highlights; postgena with sparse stiff black hairs; face constricted at middle, holoptic for a length of 4 ommatidia; palpus small, brown; proboscis brown, not extending below eye in lateral view; antenna with all segments yellowish brown; scape subcylindrical, length subequal to width; pedicel obconical, with ring of short spiky black setae subapically; postpedicel subtriangular, length 2 × width, rounded apically; arista slightly longer than head height.

Figures 2–4. *Campsicnemus* left male mid tibiae. **2**. *C. adachiae*, n. sp. **3**. *C. bartletti*, n. sp.; **4**. *C. penicillatus* Hardy & Kohn. Arrows show areas of differentiation.

Thorax: Mesonotum and pleura (except dark brown anepimeron) grayish brown, paler on humeral and callus and posterior margin of scutellum; thoracic setae black: 4 dc; 2 np; 2 ph; 1 pa; 1 sc (minute hairs laterally and medially); 10 ac; halter and knob yellow.

Legs: Coxae with CI and CIII yellow, CII brown laterally; femora and tibiae yellowish brown, remainder of legs brown; FI with dense patch of stiff long black hairs basoventrally; hind legs unmodified and without MSSC; FII without row of strong black hairs ventrally; TiII (Fig. 3) broad, widest apically, with patches (bands) of black hairs in three areas: basally, at basal third, and subapically, bands at basal third and subbasally each appearing almost as two patches (MSSC); row of strong setae mesally, longest apically; single strong wavy seta originating from subbasal band on lateral surface (MSSC). IIt_1 short, with strong thick black apical process; IIt_2 originating subapically on IIt_1 (MSSC). Remaining leg segments unmodified and without MSSC.

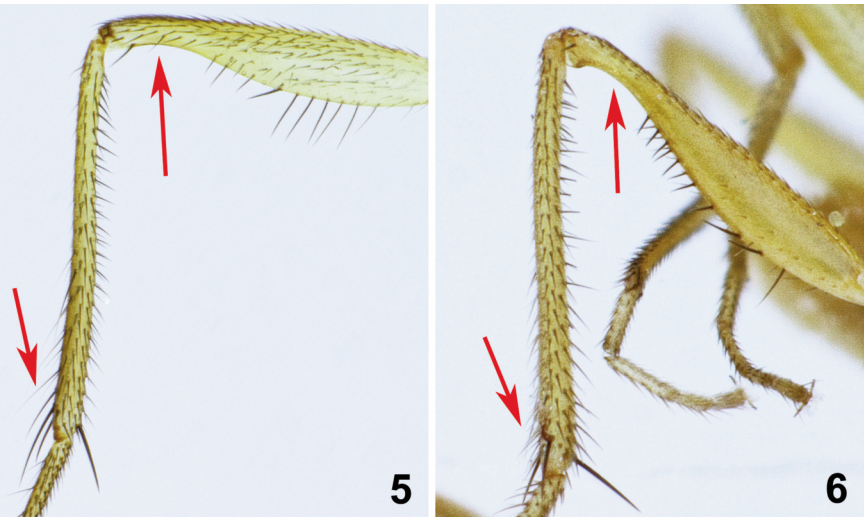
Wing: Subhyaline, veins yellowish; posterior crossvein length 1/4 apical segment of CuA_1.

Abdomen: Entirely dark brown; tergal vestiture sparse, black. Hypopygium brown with yellowish brown cerci, not dissected.

Female: Unknown.

Material Examined. *Type*. HOLOTYPE ♂ (BPBM 17,539) from HAWAIIAN ISLANDS: **Moloka‘i**: “E. Molokai T.H.”, 3000 ft [915 m] , 19 Mar 1966, J.W. Beardsley (BPBM). Paratypes: 2♂ from HAWAIIAN ISLANDS: **Moloka‘i**: Kamoku, 19 Jul 1963, D.E. Hardy (UHIM); 1♂, Puu O Kaeha, 3100 ft [965 m], Jul 1953, D.E. Hardy (UHIM).

Remarks. This species is one of a complex of species with similar patches of stiff hairs on the mid tibia that I call the *penicillatus* group. Hardy & Kohn (1964) and Tenorio (1969) recorded *C. penicillatus* from islands other than the island of Hawai‘i (its type



Figures 5–6. *Campsicnemus* left male midlegs (femur and tibia). **5**. *C. hiwi*, n. sp.; **6**. *C. rectus* Malloch (from Ko‘olau population). Arrows show areas of differentiation.

locality), namely, Moloka‘i, Maui, and Kaua‘i. These specimens from islands other than the Big Island have since been shown to be separate species, e.g., *C. penicillatoides* Evenhuis from Kaua‘i (Evenhuis 2003), *C. makawao* Evenhuis from Maui (Evenhuis 2007a), and *C. bartletti*, n. sp. from Moloka‘i described here.

Etymology. The specific epithet honors Randall Bartlett of the East Maui Watershed Partnership, who generously helped us with field logistics on Pu‘u Kukui, West Maui in 2011.

Campsicnemus hiwi Evenhuis, **n**. **sp**.
(Fig. 5)

Diagnosis. Similar to the O‘ahu *C. rectus* Malloch (cf. Fig. 6) but differs from it by the long apical hairs on the lateral surface of the male mid tibia (these hairs a continuation of the short hairs along the entire lateral surface in *C. rectus*) and the presence of a minute hairs throughout the posterior surface (this surface predominantly bare in *C. rectus*).

Description. **Male**: Body length: 2.5–2.8 mm. Wing length: 2.4–2.8 mm.

Head: Face, front and clypeus dark brown; oc and vt black, about two-thirds length of antennal arista; occiput, and vertex black with blue-gray and brassy highlights; postgena with short stiff black hairs; face constricted at middle, holoptic for a length of 5 ommatidia; palpus small, brown; proboscis brown, only slightly extending below eye in lateral view; antenna with all segments yellowish brown; scape subcylindrical, length subequal to width; pedicel obconical, with ring of short spiky black setae subapically; postpedicel broken off and missing in all 3 specimens known.

Thorax: Mesonotum dirty yellow with thin brown admedian vittae and broad posta-

lar vitta, admedian and postalar vittae coalesce posteriorly in prescutellar area; scutellum dirty brownish, slightly darker than mesonotum; upper pleura brown, lower pleura yellow; thoracic setae black: 3 dc; 2 np; 2 ph; 1 pa; 1 sc; ac absent; halter stem brown, knob yellowish brown.

Legs: Coxae with CI and CIII white, CII brown on anterior half, white on posterior half, with numerous short hairs apically on anterior surface; foreleg with curved tibia bearing row of minute spiky hairs along anterior surface (MSSC); It_3 longer than It_2; hind legs unmodified and without MSSC; FII (Fig. 5) with row of 8–10 black hairs along mesoventral surface, posterior surface with minute hairs throughout and single stiff black hair subventroapically; TiII (Fig. 5) long, straight, with row of short stiff black setae along mesal surface (MSSC), lateral surface with short hairs along entire length, apical 3/5 with long setae (mixed black and white when viewed with a black background) (MSSC), apex with 3 strong long black setae. IIt_1 about 1/2 length of TiII, with row of long apically curved black and white hairs (latter hairs best viewed with black background) along entire length (MSSC). Remaining leg segments unmodified and without MSSC.

Wing: Subhyaline, veins yellowish brown; posterior crossvein length about 1/3 apical segment of CuA_1.

Abdomen: Brown, darker brown along posterior margins; tergal vestiture sparse, black. Hypopygium brown with brown cerci, not dissected.

Female: Unknown.

Material Examined. *Type*. HOLOTYPE ♂ (BPBM 17,556) and paratype ♂ from HAWAIIAN ISLANDS: **Moloka‘i**: TNCH Kamakou Preserve, stream along trail from cabin to bog, 11 Jan 2011, yellow pan traps, N.L. Evenhuis. *Other paratype*: HAWAIIAN ISLANDS: **Moloka‘i**: 1♂, TNCH Kamakou Preserve, 11 Jan 2011, S. Wang. Holotype and paratypes in BPBM.

Remarks. In their treatment of *C. rectus*, Hardy & Kohn (1964) mentioned variation in the mesonotal coloration, from brown to yellowish with brown vittae. *Campsicnemus hiwi*, n. sp., specimens are all a dirty yellow (yellowish brown) with brown admedian and postalar vittae. In making comparisons of this new species from Moloka‘i, I have examined the O‘ahu types of *C. rectus* Malloch and *C. flavicornis* Van Duzee (both currently considered synonymous). There are some differences in thoracic coloration and differences in leg characters that indicate the latter two may each be good species. It is evident that there is a species complex from O‘ahu and Moloka‘i that have outwardly similar leg shapes and setal patterns (currently observed in *C. rectus*, *C. hiwi*, n. sp., and the type series of *C. flavicornis*): all species characteristically have a similar mid tibial setal pattern, the fore leg with tibia curved, and It_3 longer than It_2. Further detailed study (outside the scope of this paper) may show that O‘ahu populations from the Wai‘anae Mountains (type locality of *C. flavicornis*) and the Ko‘olau Mountains (type locality of *C. rectus*) belong to two separate species. For now I keep them synonymous pending further study. For leg comparisons made in this study, specimens of *C. rectus* from Kawailoa Trail in the Ko‘olau Mountains were used (cf. Fig. 6).

Etymology. The specific epithet derives from the Hawaiian *hiwi* = skinny; referring to the long, thin male mid tibia.

Figure 7. *Campsicnemus kolekole*, n. sp., male habitus.

Campsicnemus kolekole Evenhuis, **n**. **sp**.
(Figs. 7, 8)

Diagnosis. Similar to *C. restrictus* Hardy & Kohn from Lāna‘i, this rather tiny species is easily distinguished from it by the different setation of the male mid tibia: a small patch of 3 short stiff black setae subbasally (these setae absent in *C. restrictus*), row of 11–12 long setae on apical 3/5 of lateral surface (long hairs on lateral surface restricted to medial third in *C. restrictus*), and rows of very short hairs along mesal surface (this surface with longer slightly curved hairs on apical half in *C. restrictus*).

Description. **Male** (Fig. 7): Body length: 1.8–2.0 mm. Wing length: 2.0–2.2 mm.

Head: Face, front and clypeus dark brown; oc and vt black, about two-thirds length

of antennal arista; occiput, and vertex black with blue-gray highlights; postgena with fine white hairs; face constricted at middle, holoptic for a length of 3 ommatidia; palpus small, brown; proboscis brown, slightly extending below eye in lateral view; antenna with all segments yellowish brown; scape subcylindrical, length 1.5 × width; pedicel obconical, with ring of short spiky black setae subapically; postpedicel subtriangular, yellowish with brown tip, length slightly longer than width, acute apically; arista slightly longer than head height.

Thorax: Mesonotum, scutellum, and upper pleura (except brown anepimeron) tan, paler on postalar callus, lower pleura yellow; thoracic setae black: 1+3 dc; 2 np; 2 ph; 1 pa; 1 sc; 6 ac; halter stem and knob white.

Legs: Coxae with CI white; CII brown, CIII yellow; CI with 3–4 curved black hairs anteroapically. Femora white, tibiae yellowish white. Fore femur with patch of 5 thick black setae subapically on ventral surface at end of row of 3 more sparsely placed stiff setae ventrally (MSSC). TiII (Fig. 8) slightly curved at base, otherwise straight, thin, with small patch of very short black peg-like setae subbasally near small bulbous process mesally, row of 4–5 longer peg-like setae at basal third of mesal surface (MSSC), row of fine hairs on apical half of mesal surface; lateral surface with row of long, stiff, slightly curved setae on apical 3/5 (MSSC); apex with 2 strong black setae. IIt_1 1.5 × length of IIt_2; all tarsi and remaining leg segments unmodified and without MSSC.

Wing: Subhyaline, veins yellowish brown; posterior crossvein length about 1/3 apical segment of CuA_1.

Abdomen: Brown, tergites I–II tan medially; tergites darker brown along posterior margins; tergal vestiture black, sparse. Hypopygium light brown with brown cerci, not dissected.

Female: Unknown.

Material Examined. *Types*. HOLOTYPE ♂ (BPBM 17,547) and paratype ♂ from HAWAIIAN ISLANDS: **Moloka‘i**: TNCH Kamakou Preserve, Kolekole cabin, 3900 ft [1188 m], 21–25 Oct 1997, Malaise trap, D.A. Polhemus. *Other paratype*: **Moloka‘i**: 1♂, TNCH Kamakou Preserve, Pu‘u Kolekole 3854 ft [1175 m], 28–30 Jul 2005, P. O’Grady. Holotype and paratypes in BPBM.

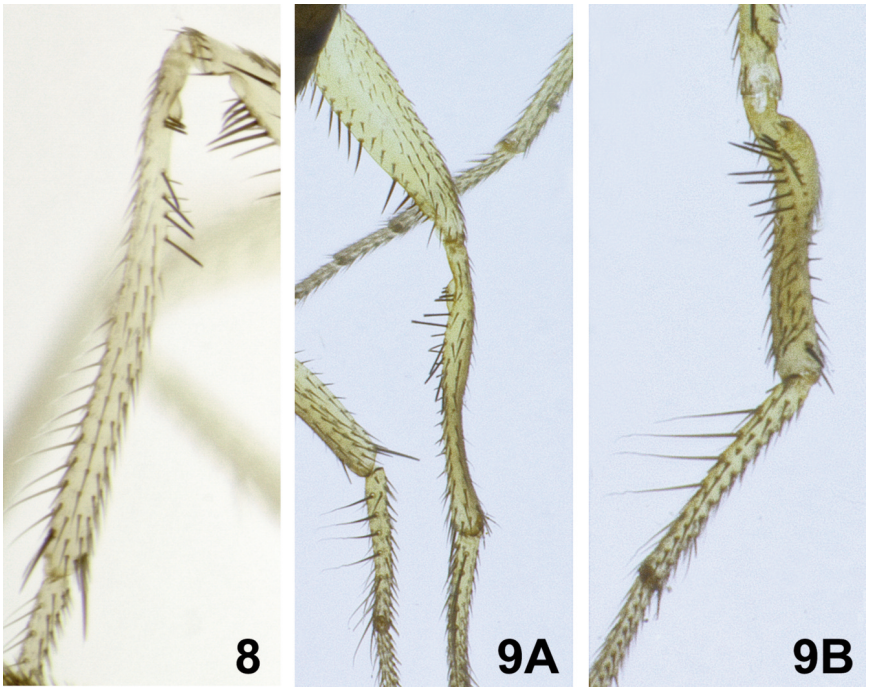
Etymology. The specific epithet derives from the type locality at Kolekole cabin in the TNCH Kamakou Preserve.

Campsicnemus kumukumu Evenhuis, **n**. **sp**.
(Fig. 9)

Diagnosis. This species is similar to *C. clinotibia* Hardy & Kohn and *C. fulvifacies* Hardy & Kohn (both from Moloka‘i) on the basis of the mid basitarsus possessing long mesal hairs or setae. It is distinguished from both by the distinct row of peg-like setae mesally at the basal third of the mid tibia (lacking in *C. clinotibia* and *C. fulvifacies*) and by the distinctly bowed-out section of the mid tibia at the basal third (this area only slightly curved but not bowed out in *C. clinotibia* and *C. fulvifacies*).

Description. **Male**: Body length: 1.2–1.3 mm. Wing length: 1.7–1.8 mm.

Head: Face, front and clypeus dark brown; oc and vt black, about two-thirds length of antennal arista; occiput and vertex black with blue-gray highlights; postgena with sparse short stiff black setae; face constricted at middle, holoptic for a length of 4 ommatidia; pal-



Figures 8–9. *Campsicnemus* male midlegs. **8**. *C. kolekole*, n. sp., left mid tibia, posterior view; **9**. *C. kumukumu*, n. sp., **A**. anterior view showing peg-like setae of mid tibia of left leg (at right) and long hairs of mid basitarsus of right midleg (at left); **B**. mesal view of left mid tibia and basitarsus showing rows of setae on mesal surface.

pus small, brown; proboscis dark brown, slightly extending below eye in lateral view; antenna with all segments yellowish brown; scape subcylindrical, length subequal to width; pedicel obconical, with ring of short spiky black setae subapically; postpedicel subtriangular, length subequal to width, acute apically; arista slightly longer than head height.

Thorax: Mesonotum, scutellum, and upper pleura (except dark brown anepimeron) brown, paler on humeral and postalar calli, lower pleura yellowish white; disc of mesonotum darker brown than surrounding mesonotum; thoracic setae black: 4 dc; 2 np; 2 ph; 1 pa; 1 sc; ac absent; halter stem and knob white.

Legs: Coxae with CI and CIII white, CII brownish medially; femora yellowish white, remainder of legs light brown; coxae with normal anteroapical setation; fore and hind legs unmodified and without MSSC; FII (Fig. 9A) with row of 8–10 stiff black hairs along ventral surface, row of 4 minute black setae subapically on ventral surface (MSSC); TiII (Fig. 9) as long as FII, bowed (cf. Fig. 9B) in basal third, slightly curved (cf. Fig. 9A) in apical half; 4 minute peg-like setae mesally in association with small bulbous mesal projection subbasally, 4–6 longer stiff peg-like setae on mesal side of bowed portion, rows of short stiff hairs laterally and mesally (MSSC); single strong apical seta. IIt_1 about 1.2 × length of IIt_2, with row of 4 long stiff apically crinkled setae mesally, long hairs, 4–5 long

straight hair at apex (cf. fig 9A) (MSSC). Remaining leg segments unmodified and without MSSC.

Wing: Subhyaline, veins yellowish brown; posterior crossvein length 1/4 apical segment of CuA_1.

Abdomen: Brown, tergites darker brown along posterior margins; tergal vestiture sparse, black. Hypopygium dark brown with brown cerci, not dissected.

Female: Unknown.

Material Examined. *Type*. HOLOTYPE ♂ (BPBM 17,565) from HAWAIIAN ISLANDS: **Moloka'i**: Kolekole cabin, general sweeping, N 21°06.457'N 156° 53.817'W, 11 Jan 2011, Brian Ort. Holotype in BPBM.

Etymology. The specific epithet derives from the Hawaiian "*kumukumu*" = truncated stumps, stubble of a beard; referring to the peg-like setae on the basomesal portion of the male mid tibia. The name is treated as a noun in apposition.

Campsicnemus poho Evenhuis, **n**. **sp**.
(Figs. 10, 11)

"Campsicnemus elysium205364": Goodman *et al*. 2014: 235 (MS name).

Diagnosis. This large, dark, water-skating species is a member of the *kuku* group of species (*crossotibia, disjunctus, ephydrus, flavipes, grimshawi, kokokekuku, kuku, latipenna*, and *viridulus*), which are characterized by the pointed barb-like process on the basomesal portion of the mid tibia. No previously described species in this group have been reported from Moloka'i. The most similar of these in appearance to *C. poho*, n. sp. is *C. kokokekuku* Evenhuis from the Big Island. Both species possess a long barb-like process with numerous minute setulae in a row along its length. This species can be separated from *C. kokokekuku* by the presence of 5 thick stiff black setae laterally near the medial third of the mid tibia (these setae more hair-like and present along the entire lateral surface in *C. kokokekuku*) and the dense setation basally on the mid tibia (this portion of the mid tibia almost bare in *C. kokokekuku*).

Description. **Male** (Fig. 10). Body: 3.5–3.8 mm; wing: 3.5–4.0 mm.

Head: Face and clypeus white, front and vertex shining black; oc and vt black, about one-half length of antennal arista; clypeus slightly yellowish pollinose; face only slightly constricted at middle, eyes dichoptic below antennae by 2 × width of median ocellus; palp small, brown; proboscis brown to yellowish-brown, extending below eye in lateral view; antennal scape and pedicel dark brown; postpedicel subhemispherical, rounded apically, length subequal to width; arista slightly longer than head height.

Thorax: Mesoscutum, scutellum, and upper pleura dark brown, lower pleura yellow; anterior portion of mesonotum clothed with fine hairs between humeral calli; thoracic setae black: 4 dc; 7–8 ac; 2+1 np; 2+1 ph; 1 pa; 1 sc; halter stem and knob pale yellow.

Legs: Coxae with CI yellow, CII and CIII coxa brown; Femora yellow; tibiae and tarsi dark brown. Leg I unmodified, without MSSC. FII swollen basally, tapering to thin apex, row of 20 fine stiff setae along ventral ventral surface (MSSC); single long stiff seta subapically on anterior surface; TII (Fig. 11) 2 × length of basitarsus, with basal barb-like projection bearing row of minute peg-like setae, 5–6 long lateral seta at medial 1/3, fine setae basally and along mesal and lateral surfaces (MSSC); IIt_1 2 × length of IIt_2; IIt and leg III unmodified, without MSSC.

Figure 10–11. *Campsicnemus poho*, n. sp., **10**. Male habitus; **11**. Male mid tibia.

Wing: Subhyaline, veins brown; posterior crossvein length less than 1/2 apical segment of CuA_1.

Abdomen: Shining dark brown with short black hairs dorsally on each tergite, a few longer hairs laterally; venter paler brown. Hypopygium brown, not dissected.

Female. Female. Body: 3.8–4.5 mm; wing: 4.8–5.0 mm. As in male except as follows: eyes more dichoptic, width equal to separation of antennal sockets; postgena with white intermixed with black hair ventrally; katepisternum with magenta highlights; mesonotum laterally and abdominal tergites with greenish brassy highlights; legs without MSSC.

Material Examined. *Type*. HOLOTYPE ♂ (BPBM 17,532) and 2♂,1♀ paratypes from HAWAIIAN ISLANDS: **Moloka'i**: TNCH Kamakou Preserve, bog on trail near Transect 7, 12 Jan 2011, skating on small pools, N.L. Evenhuis, K.R. Goodman, B. Ort. *Other paratypes*: **Moloka'i**: 1♂, 1♀, TNCH Kamakou Preserve, rim of Pelekunu Valley, 4000 ft [1220 m], 22 Aug 1991, D.A. Polhemus; 4♂, 7♀, small forest pools along headwater tributary to headwaters East Fork Kawela Gulch, Transect 7 above Kolekole cabin, 4200 ft [1280 m], 5 May 1993, CL 8148, D.A. Polhemus. Holotype and paratypes in BPBM.

Etymology. The specific epithet derives from the Hawaiian "*poho*" = bog; referring to the bog near Transect 7 in the Kamakou Preserve where specimens of this species were hand-collected while they were water skating on small pools.

***Campsicnemus zoeae* Evenhuis, n. sp.**
(Fig. 14)

Campsicnemus diffusus, in part. Hardy & Kohn, 1964: 75, misidentification.

Diagnosis. Similar to *C. diffusus* Hardy & Kohn and *C. scolimerus* Hardy and Kohn from the Big Island of Hawai'i, all three of which form what I call the *scolimerus* group. The group is defined by the following: antennal arista 1.5 × head height; slightly S-shaped apical portion of male mid femora with patch of hairs dorsoapically; mid tibia with a patch of hairs or setae laterally in basal third; mid basistarsus with apically curved hairs along entire length, hairs longest basally and becoming progressively shorter apically. *Campsicnemus zoeae* is distinguished from each of the other two species in the group by the longer and more numerous hairs subapically on the mid tibia [these hairs shorter (*C. diffusus*) or sparser (*C. scolimerus*) in the other two species] (cf. Figs. 12–14); and the predominantly bare posterior surface of the mid femur (dorsal setation extending laterally onto the posterior surface in *C. diffusus*; subventrally with a row of short hairs along basal two-thirds in *C. scolimerus*).

Description. **Male**: Body length: 2.5 mm. Wing length: 3.1 mm.

Head: Face, front black, clypeus white; oc and vt black, about 1/2 length of antennal arista; occiput, and vertex black with blue-gray highlights; postgena with long fine white hairs; face constricted at middle, holoptic for a length of 4 ommatidia; palpus small, ovate; proboscis pale brown, extending below eye in lateral view; antenna with all segments yellowish brown apically; scape subcylindrical, length subequal to width; pedicel obconical, with ring of short spiky black setae subapically; postpedicel subtriangular, length 1.2 × width, acute apically; arista long, length ca. 1.5 × head height.

Thorax: Uniformly brown; thoracic setae black: 4 dc; 2 np; 2 ph; 1 pa; 1 sc; ac absent; halter stem and knob white.

Legs: Coxae with CI and CIII white, CII brown; CI with 3–4 small black hairs apically; fore and hind legs unmodified and without MSSC; FII (Fig. 14) slightly S-shaped apically, ventrally with row of 8–9 stiff black hairs interrupted by distinct gap in medial portion of ventral surface, patch of short hairs dorsoapically, row of 3 stiff hairs in apical third of posterior surface (in between dorsoapical patch and ventral row); TiII (Fig. 14) slightly bowed, lateral surface with dense patch of short setae subbasally and row of long hairs on apical third; mesal surface with row of short hairs along entire length; two strong black apical setae (all MSSC). IIt_1 (Fig. 14) about 2 × length of IIt_2, with row of long apically curved hairs along entire length, longest basally and tapering to shortest hairs apically (MSSC); IIt_2 and IIt_3 with sparse curved hairs laterally. Remaining leg segments unmodified and without MSSC.

Wing: Subhyaline, veins yellowish; posterior crossvein length 1/3 apical segment of CuA_1.

Abdomen: Uniformly brown; tergal vestiture sparse, black. Hypopygium brown with pale brown cerci, not dissected.

Figures 12–14. *Campsicnemus* left male mid tibiae, posterior view. **12**. *C. scolimerus* Hardy & Kohn; **13**. *C. diffusus* Hardy & Kohn. **14**. *C. zoeae*, n. sp. Arrows point to areas of differentiation on mid tibia.

Female: Body length: 2.5–2.7 mm. Wing length: 3.0–3.3 mm. As in male except as follows: eyes dichoptic, width equal to separation of antennal sockets; face, front, and clypeus brown; halter knob yellow; CIII brown; legs without MSSC.

Material Examined. *Type*. HOLOTYPE ♂ (BPBM 17,548) and 2♀ paratypes from HAWAIIAN ISLANDS: **Moloka'i**: TNCH Kamakou Preserve, W. Fork, Kawela Gulch at Pu'u Kolekole trail, 1040 m [3400 ft], 21°06'43"N, 156°54'26"W, 16 May 1992, D.A. Polhemus. *Other paratypes*: HAWAIIAN ISLANDS: **Moloka'i**: 1♂, Kahuaawi Gulch, Jul 1952, D.E. Hardy (BPBM); 1♂, Manawainui Valley, Jul 1952, D.E. Hardy (UHIM). Holotype in BPBM.

Remarks. In describing their new species *C. diffusus*, Hardy & Kohn (1964) included three specimens from Moloka'i: Manawainui Valley, Kahuaawi Gulch, and Waikolu Valley. The first two specimens were located and examined and found to belong to *C. zoeae*. The Waikolu Valley specimen could not be located but is presumed to also belong to *C. zoeae* as it is the only species of the *scolimerus* group known from Moloka'i.

Etymology. The specific epithet is named after the first wife of R.C.L. Perkins, Zoe [née Atkinson] Perkins. Zoe was Queen Lili'uokalani's social secretary at the time Perkins arrived in the Hawaiian Islands to conduct his zoological survey for the British Association for the Advancement of Science (Evenhuis 2007b).

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