

- ³⁴WALKER, T. J., AND M. D. GREENFIELD. 1983. Songs and systematics of Caribbean *Neoconocephalus* (Orthoptera:Tettigoniidae). Trans. American Entomol. Soc. 109: 357-389.
- ³⁵WALKER, T. J., AND J. J. WHITESELL. 1978a. *Neoconocephalus maxillosus*: a Caribbean conehead in south Florida (Orthoptera: Tettigoniidae). Florida Entomol. 61: 1-3.
- ³⁶WALKER, T. J., AND J. J. WHITESELL. 1978b. New species of conehead from Florida Everglades (Orthoptera: Tettigoniidae: *Neoconocophalus*). Entomol. News 89: 27-32.
- ³⁷WALKER, T. J., J. J. WHITESELL, AND R. D. ALEXANDER. 1973. The robust conehead: two widespread sibling species (Orthoptera: Tettigoniidae: *Neoconocephalus* "robustus") Ohio J. Sci. 73: 321-330.

AMERICAN PREDACEOUS MIDGES OF THE SUBGENUS
EUKRAIOHELEA OF *STILOBEZZIA*
(DIPTERA: CERATOPOGONIDAE)

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ABSTRACT

A key is presented to distinguish the four species of the subgenus *Eukraiohelea* Ingram & Macfie of the genus *Stilobezzia* Kieffer that occur in the Western Hemisphere. *Stilobezzia elegantula* (Johannsen) and *S. amnigena* Macfie are redescribed and illustrated; the latter species is a new U.S. record. Males of *S. amnigena* were previously misidentified as *S. elegantula* in North America. *S. maculitibia* Lane & Forattini is a junior synonym of *S. elegantula* (New Synonymy).

RESUMEN

Se presenta una clave para distinguir a las cuatro especies del subgenero *Eukraiohelea* Ingram & Macfie, del genero *Stilobezzia* Kieffer, que se hallan en el hemisferio Occidental. Se redescrivo e ilustra a *Stilobezzia elegantula* (Johannsen) y *S. amnigena* Macfie, representando esta ultima una nueva cita para los Estados Unidos. Los machos de *S. amnigena* de America del Norte fueron previamente identificados en forma erronea, como *S. elegantula*. *S. maculitibia* Lane & Forattini es reconocida como sinonimo de *S. elegantula* (Nuevo Sinonimo).

Predaceous midges of the genus *Stilobezzia* Kieffer are common inhabitants of aquatic environments but are often overlooked because of their small size (1-3 mm). Larvae are found in a wide variety of aquatic and semi-aquatic habitats such as stream, lake, and pond margins, puddles, swamps, rice fields, rock pools, mosses, and wet tree cavities. Adult females are predaceous on other small soft-bodied insects, especially midges of the family Chironomidae.

Eighteen species of *Stilobezzia* were recorded from North America by Wirth (1965) and Wilkening et al. (1985), and one new species was recently added by Wirth & Grogan (1981). There was previously only one recorded species of the subgenus *Eukraiohelea* Ingram & Macfie from North America, *S. elegantula* (Johannsen), which has been recorded from Kansas and Louisiana to Maryland and Florida, and also from French Guiana. While studying a long series of *Eukraiohelea* from Florida we found that two species were represented, and that these had been confused in publications by Wirth (1953) and Wirth & Grogan (1981). In addition, it appears that the species described by Lane & Forattini (1956) as *Stilobezzia maculitibia* from Panama is the same as *S. elegantula* (Johannsen 1907). We identified the second Florida species as *S. amnigena* Macfie (1935), which was originally described from Brazil.

Two additional Neotropical species, known only from the original descriptions, were listed in the subgenus *Eukraiohelea* by Lane & Forattini (1961). We give the diagnostic characters of *S. dorsofasciata* (Lutz)(1914) from Brazil and *S. subsessilis* Kieffer (1917) from Paraguay. The latter is very similar to *S. elegantula* but was insufficiently described, and we consider it a *species inquirenda*. We take this opportunity to redescribe and figure *amnigena* and *elegantula*, and to give a key for the separation of the four species recognized here.

Wirth (1953) published a revision of the North American species, Wirth & Grogan (1981) presented a useful review of most of the species from eastern North America, and Wilkening et al. (1985) gave an annotated check list of the species found in Florida. Lane & Forattini (1961) published the most recent key to the Neotropical species. Terminology of taxonomic characters used here follows that of Downes & Wirth (1981) and Wirth & Grogan (1988).

Key to the American Species of *Stilobezzia* (*Eukraiohelea*)

1. Veins R2+3 and r-m nearly perpendicular, r-m crossvein slightly shorter than stem of vein M; costal ratio 0.64; 5th tarsomeres with 1 pair of batonnets on all legs *dorsofasciata* (Lutz)
- Veins R2+3 and r-m oblique; r-m crossvein longer than stem of vein M; costal ratio 0.76-0.80; 5th tarsomeres of fore and midlegs with 2 pairs of batonnets 2
2. Halter brownish; larger species, wing length about 2.0 mm; costal ratio 0.80 *amnigena* Macfie
- Halter pale, base of knob contrasting blackish; smaller species, wing length 1.40-1.50 mm; costal ratio 0.75 3
3. Thorax yellowish, with 2 anterior dark brown marks on scutum; fore and mid tibiae, narrow apices of hind femur, and basal 2/5 of hind tibia blackish; fore femur with 2-3 spines *elegantula* (Johannsen)
- Thorax entirely reddish, pleura grayish pruinose; posterior knees and end of hind tibia blackish; fore femur with 4 spines *subsessilis* Kieffer

Stilobezzia (*Eukraiohelea*) *elegantula* (Johannsen) (Figs. 1-7)

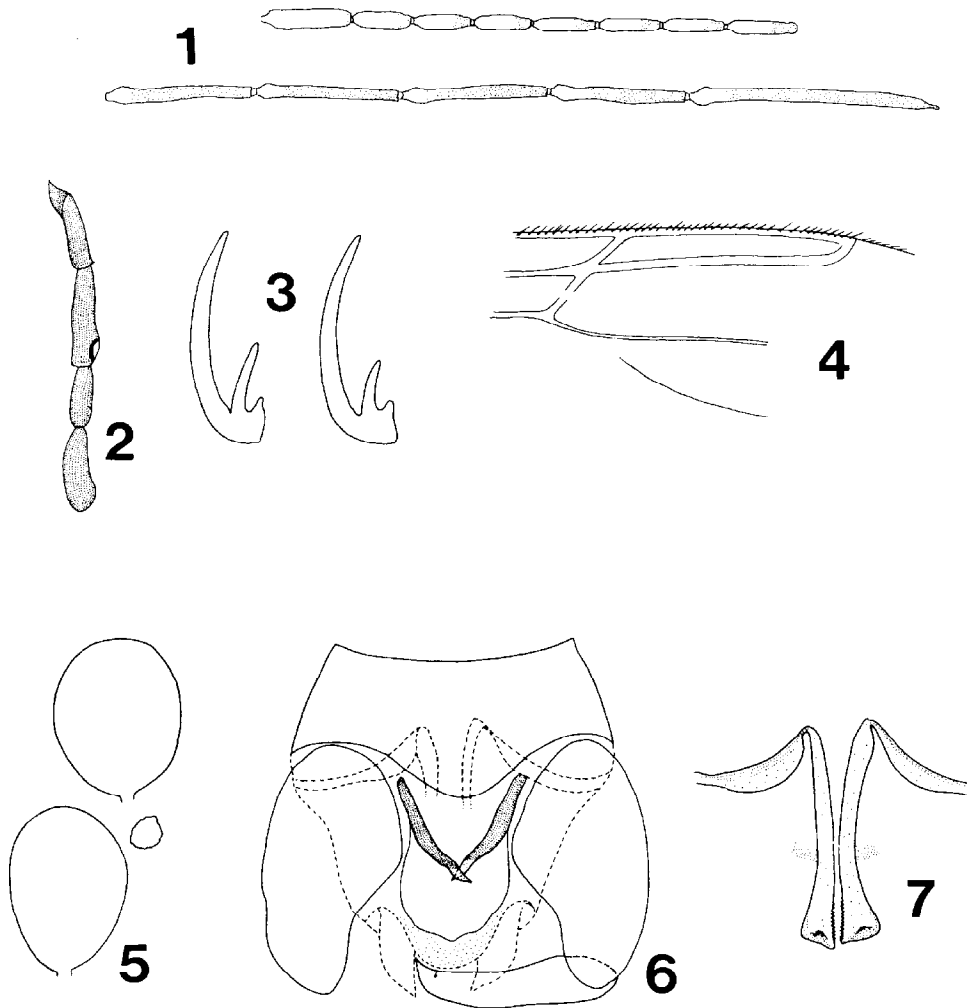
Bezzia elegantula Johannsen, 1907: 109 (female; Kansas).

Probezzia elegantula (Johannsen); Malloch, 1914: 137 (combination).

Parabezzia elegantula (Johannsen); Malloch, 1915: 359 (combination).

Parabezzia (*Eukraiohelea*) *elegantula* (Johannsen); Johannsen, 1934: 345 (notes; status).

Eukraiohelea elegantula (Johannsen); Johannsen, 1943: 781 (combination).



Figs. 1-7. *Stilobezzia (Eukraiohelea) elegantula*: 1-5, female; 6-7, male: 1, antenna; 2, palpus; 3, fore and mid (left) and hind (right) tarsal claws; 4, radial field of wing; 5, spermathecae; 6, genitalia, parameres omitted; 7, parameres.

Stilobezzia (Eukraiohelea) elegantula (Johannsen), in part, female; Wirth, 1953: 62 (combination; redescribed; figs.; distribution); Wirth, 1974: 43 (Neotropical catalog); Wirth & Grogan, 1981: 78 (redescribed; figs.; Potomac Valley records); Wilkening et al., 1985: 525 (Florida records).

Stilobezzia (Eukraiohelea) maculitibia Lane & Forattini, 1956: 207 (female, male; Panama; fig. wing, male genitalia); Lane & Forattini, 1961: 84 (in key); Wirth, 1974: 43 (catalog ref.). **New Synonymy.**

FEMALE. Wing length 1.40 (1.36-1.46, n = 5) mm; breadth 0.58 (0.56-0.61, n = 5) mm.

Head: Yellowish. Eyes bare, narrowly separated. Antenna (Fig. 1) with yellow scape and pedicel; first 8 flagellomeres pale on proximal portions, apices brown; distal 5 brown except narrow bases pale; lengths of flagellomeres in proportion of 20-11-12-12-13-13-13-15-30-30-30-28-50; antennal ratio 1.48 (1.45-1.54, n = 5). Palpus (Fig. 2) dark

brown; lengths of segments in proportion of 9-16-25-15-22; 3rd segment with subapical round sensory pit; palpal ratio 3.40 (2.80-3.60, n = 5). Mandible with 7 teeth.

Thorax: Scutum yellowish, with 2 anterolateral dark brown marks; 4 prealar setae, 1 postalar; scutellum yellowish. Legs yellowish, fore and mid knees slightly darkish; narrow apices of hind femur and of all tibiae dark brown, as well as basal 2/5 of hind tibia; fore femur with 2-3 short ventral spines; hind tibia with 3-4 large dorsal setae in midportion and 3-5 short dorsal setae distally; hind tibial comb with 5 bristles; hind tarsal ratio 3.00 (n = 5); basitarsi with a basal spine; ventral palisade setae in one row on tarsomeres 1-2 of fore and mid legs and tarsomere 2 of hind leg, in two rows on hind basitarsus; 4th tarsomeres cordiform; 5th tarsomeres of fore and mid legs with 2 pairs of basal batonnets, one pair on hind leg; claws unequal (Fig. 3), talon lengths in the following proportions (fore, mid and hind): 3:1, 3:1, 3:0.75. Wing (Fig. 4) hyaline, anterior veins yellowish; r-m crossvein oblique, somewhat faint in midportion, slightly longer than stem of vein M; costal ratio 0.76 (0.75-0.78, n = 5). Halter pale, base of knob contrasting blackish.

Abdomen: Yellowish, terga with lateral L-shaped brown markings, smaller on anterior segments. Spermathecae (Fig. 5) small, ovoid with short necks; subequal, measuring 0.046×0.041 mm; a globose vestigial 3rd spermatheca present.

MALE. Wing length 1.25 mm; breadth 0.42 mm; costal ratio 0.71. Similar to female with usual sexual differences. Claws large, unequal; tips bifid, a small external tooth present on mid and hind legs.

Genitalia (Fig. 6): Sternite 9 broad, with rounded caudomedial extension; tergite 9 rounded distally, cerci elongated; sternite 10 rounded, spiculate. Gonocoxite stout, mediangular process poorly developed, blunt; gonostylus nearly straight, slightly shorter than gonocoxite, tip pointed and curved. Aedeagus represented by 2 slightly arched sclerites, distomedial tips pointed and crossing on the midline; hyaline extension broad (not illustrated). Parameres (Fig. 7) with well-developed basal apodemes fused to distal portions; distal portions slender, serrate on the internal margin subapically, tips recurved ventrally.

DISTRIBUTION. U.S.A. (Kansas and Louisiana to Maryland and Florida); Panama; ? Puerto Rico.

TYPES. *Bezzia elegantula*: Types not designated. Females "collected in July at electric light on bridge across Kansas river at Lawrence, Douglas County, Kansas, by E. S. Tucker." (in Snow Museum, University of Kansas, Lawrence).

Stilobezzia maculitibia: Holotype, female, Mandinga, Panama, ix.1952, F. S. Blanton; allotype, male, Tocumen, Panama, x.1952, F. S. Blanton (in USNM). Paratypes, 10 females, 4 males, from Aguadulce, Almirante, Patino Point, and Tocumen, Panama.

SPECIMENS EXAMINED. **Florida.** Alachua Co., Gainesville, 3.v.1967, F. S. Blanton, 3 females. Alachua Co., Hawthorne, 27.iv.1968 (FSB), 1 male; Gainesville, 20.iv.1967, W. W. Wirth, 1 male; West Gainesville, many dates, Blanton & Fletcher, 10 females, 3 males; Chantilly Acres, many dates (FSB), 118 females, 117 males. Orange Co., Rock Springs, 21.iv.1970 (WWW), 3 females, 9 males. Putnam Co., Lons Lake, vi.1971 (FSB), 3 females, 1 male. Sarasota Co., Myakka River St. Park, 21.v.1973 (WWW), 2 females. **Maryland.** Prince Georges Co., Patuxent Wildlife Refuge, 17.vii.1979, J. Edmiston, 1 female.

DISCUSSION. The synonymy of *Stilobezzia maculitibia* with *S. elegantula* is made on the basis of comparison of the original descriptions, which unfortunately apply only to the female sex, but nevertheless they mention several of the diagnostic characters given in the above key.

We were misled for a period of time by the figure of the male genitalia of *S. maculitibia* given by Lane & Forattini (1956), which shows the parameres very short and broad, the aedeagal sclerites displaced and crossing, but we have concluded that

this figure was drawn diagrammatically from a severely flattened slide preparation. Such preparations often give distorted appearances similar to this, in which cylindrical structures are compressed until they appear unnaturally broad.

Stilobezzia (Eukraiohelea) amnigena (Macfie)
(Figs. 8-9)

Eukraiohelea amnigena Macfie, 1935: 56 (female; Brazil).

Stilobezzia (Eukraiohelea) amnigena Macfie; Lane & Forattini, 1958: 203 (combination; Jamaica); Lane & Forattini, 1961: 84 (in key).

Stilobezzia (Eukraiohelea) elegantula (Johannsen), in part, misident.; Wirth, 1953: 62 (male descr.; figs.); Wirth & Grogan, 1981: 78 (male descr.; figs.).

DIAGNOSIS (female). A darkish species very similar to *S. elegantula*, from which it can be distinguished by its darker general coloration, 5 prealar setae, extra dark ring subbasally on mid tibia, claw talon proportions 3:1, 3:1, 3:1, and halter knob dark brown.

Male Genitalia (Fig. 8): Sternite 9 with broad, shallow, caudomedian excavation; tergite 9 very hairy distally, with a pair of slender, closely approximated, apicolateral processes, each with an apical long and short seta; cerci small; sternite 10 somewhat elongated, spiculate. Gonocoxite stout, mediangular process poorly developed, pointed; gonostylus stout, swollen in midportion, tip curved and pointed. Aedeagus represented by 2 arched sclerites, distomedian tips pointed and crossing on the midline; hyaline extension broad (not illustrated). Parameres (Fig. 9) with basal apodemes short, separate from distal portions; distal portions long, very slender, apex slightly swollen, palplike and bent ventrolaterad 90°.

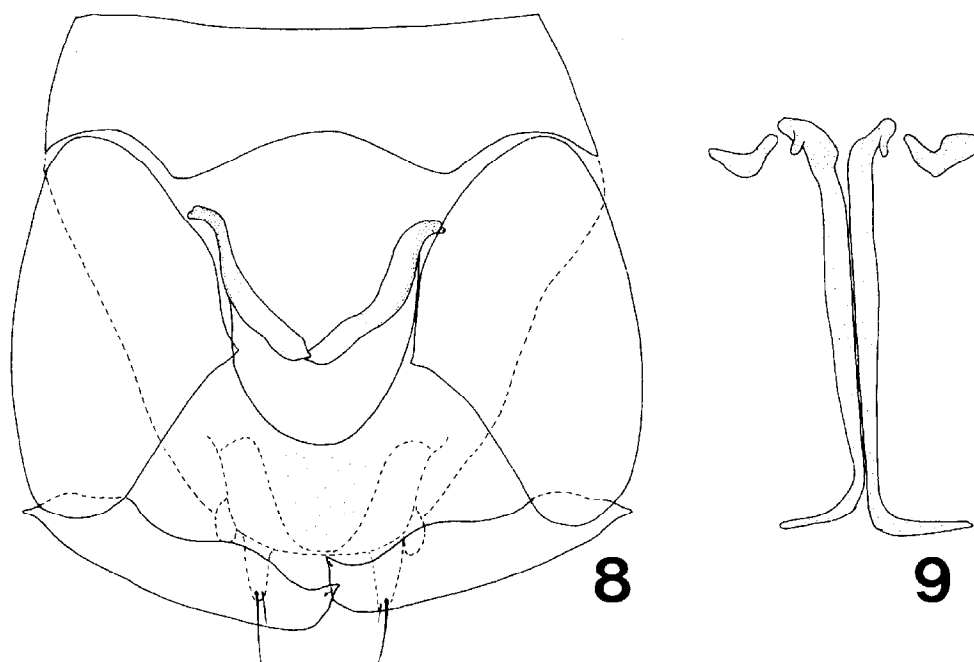
DISTRIBUTION. Brazil; ? Jamaica, ? Puerto Rico, U.S.A. (Florida, South Carolina).

TYPE. Holotype female, Tutoia, near Parnahyba, Est. Piaui, Brazil, iv-v.1934, E. M. Lourie (in British Museum (Nat. Hist.), London). The locality was erroneously stated to be on the River Amazon, but Macfie later (Stylops 4: 89) made the correction.

SPECIMENS EXAMINED. **Florida.** Alachua Co., Gainesville, 20.iv.1967, W. W. Wirth, 1 female, 3 males; Chantilly Acres, 19.iv.1967, F. S. Blanton, 1 female. Dade Co., Homestead, 9.ix.1968, R. M. Baranowski, UVLT, 1 female. Jefferson Co., Monticello, ix.1969, W. H. Whitcomb, UVLT, 1 female. Leon Co., 3 mi N Tallahassee, v.1970 (FSB), 8 female, 7 males; Tall Timbers Res. Sta., 28.v.1973 (WWW), 2 females. Putnam Co., Lons Lake, vi.1971 (FSB), 4 females, 1 male. Santa Rosa Co., Blackwater A&M Biol. Sta., 21.v.1971, G. B. Fairchild, UVLT, 1 female. Wakulla Co., Ochlockonee River St. Park, 20.iv.1970 (WWW), 1 female. **South Carolina.** Georgetown Co., Hobcaw House, viii.1972, Mrs. L. Henry, light trap, 1 female.

DISCUSSION. Wirth (1953) and Wirth & Grogan (1981) recorded males of this species from Florida as *Stilobezzia elegantula*. The male figured by Wirth (1953, fig. 11g) was from Panama City Beach, Bay County, Florida, 2.vi.1950, McElvey, light trap. The male figured by Wirth & Grogan (1981, fig. 32b,d,k,n-o) was from Gainesville, Florida, 20.iv.1967, W. W. Wirth, light trap, taken at the same time and place as the female that they correctly identified, and described and figured as *S. elegantula*.

Although the females of *S. amnigena* are very similar to the females of *S. elegantula*, the males of the two species differ in many genital characters, such as sternite 9 with caudomedian excavation in *amnigena* (with caudal extension in *elegantula*); tergite 9 with slender apicolateral processes in *amnigena* (absent in *elegantula*); cerci short in *amnigena* (stout in *elegantula*); gonostylus swollen in middle in *amnigena* (nearly straight in *elegantula*); and parameres with shorter apodemes and much elongated and slender main portion in *amnigena*.



Figs. 8-9. *Stilobezzia (Eukraiohelea) amnigena*, male: 8, genitalia, parameres omitted; 9, parameres.

Stilobezzia (Eukraiohelea) dorsofasciata (Lutz)

Palpomyia dorsofasciata Lutz, 1914: 18 (female; Brazil; fig. wing, abdomen).

Eukraiohelea dorsofasciata Lutz; Macfie, 1935: 56 (combination).

Stilobezzia (Eukraiohelea) dorsofasciata (Lutz); Lane & Forattini, 1961: 84 (combination; in key); Wirth, 1974: 48 (catalog reference).

DIAGNOSIS (from original description). Length about 2 mm. Head brown. Scape and pedicel reddish-brown; flagellum pale, proximal 8 segments pyriform, distal 5 very elongated. Palpus reddish brown. Thorax pale brown, with lateral and posterior brown marks. Legs pale, knees brownish; narrow base and apex of hind tibia infuscated; (fore femoral spines not mentioned); tarsomeres with short apical spines; 5th tarsomeres with 1 pair of batonnets on all legs; claws unequal. Spines on fore femur not mentioned. Wing pale; R2+3 and r-m crossvein nearly perpendicular; r-m slightly shorter than stem of vein M; costal ratio 0.64. Halter pedicel and base of knob pale, distal portion of knob dark. Abdomen whitish; dorsum with 6 brown marks with pale areas included (pale areas larger in the 3 posterior marks).

DISTRIBUTION. Brazil.

TYPE. Holotype female, Manguinhos, Rio de Janeiro, Brazil, at light, A. Lutz (in Instituto Oswaldo Cruz, Rio de Janeiro).

DISCUSSION. The short costa (CR 0.64), nearly perpendicular r-m crossvein, long stem of the media, and presence of only 1 pair of batonnets on the 5th tarsomeres, readily distinguish *S. dorsofasciata* from its American relatives of the subgenus *Eukraiohelea*.

Stilobezzia (Eukraiohelea) subsessilis Kieffer

Stilobezzia subsessilis Kieffer, 1917: 311 (female; Paraguay).

Stilobezzia (Eukraiohelea) Kieffer; Lane & Forattini, 1961: 84 (combination; in key); Wirth, 1974: 48 (catalog reference).

DIAGNOSIS (from original description). Length 1.5 mm. Dull red. Antenna pale, scape reddish yellow, 5 distal segments brownish black; long and slender, segments 4-10 subcylindrical, at least 3 times as long as wide, weakly swollen on distal extremity; 10-14 filiform, together little longer than 3-10 combined, each as long as 8-10 combined. Palpus brownish black. Thorax very convex, higher than long, dorsally with long, sparse, black setae; shoulders pale, pleura somewhat grayish pruinose. Halter pale, knob brown. Wing subhyaline, without macrotrichia; vein R4+5 nearly reaching distal 1/4 of wing (CR 0.75), parallel to costa, to which it joins abruptly; first radial cell absent; r-m crossvein and distal part of radius oblique; stem of media very short, not as long as r-m crossvein. Legs yellow, posterior knees, end of hind tibia, joints and 5th tarsomeres of all tarsi blackish; fore femur with 4 black spines; 5th tarsomeres each with 2 pairs of black batonnets. Abdomen depressed, scarcely longer than rest of body, brownish dorsally, posterior border of tergites pale.

DISTRIBUTION. Paraguay.

TYPE. Female, "Paraguay (Fiebrig)." (in Mus. Nat. Hungarici, Budapest; destroyed by fire).

DISCUSSION. *Stilobezzia subsessilis* is known only from the original description as the type is lost. The species is very similar to *S. elegantula*, differing in minor characters as given in the key. The wide gap in distribution from that of *elegantula* precludes our suggesting a synonymy. We regard this species as a *species inquirenda*.

REFERENCES CITED

- DOWNES, J. A., AND W. W. WIRTH. 1981. Ceratopogonidae, pp. 393-421 in McAlpine, J. F., et al. [eds.]. Manual of Nearctic Diptera. Vol. 1. Agriculture Canada Monograph No. 27, 674 pp.
- JOHANNSEN, O. A. 1907. Some new species of Kansas Chironomidae. Kansas Univ. Sci. Bull. 4: 109-112.
- JOHANNSEN, O. A. 1934. New species of North American Ceratopogonidae and Chironomidae. J. New York Entomol. Soc. 42: 343-352.
- JOHANNSEN, O. A. 1943. A generic synopsis of the Ceratopogonidae (Heleidae) of the Americas, a bibliography, and a list of the North American species. Ann. Entomol. Soc. America 36: 763-791.
- KIEFFER, J. J. 1917. Chironomides d'Amerique conserves au Musee National Hongrois de Budapest. Budapest Magyar Nemzeti Muz., Ann. Hist. Nat. 15: 292-364.
- LANE, J., AND O. P. FORATTINI. 1956. Neotropical *Stilobezzia* Kieffer, 1911 I. Nine new Panamanian species (Diptera, Nematocera, Ceratopogonidae). Revta. Brasileira Malariol. 8: 207-226.
- LANE, J., AND O. P. FORATTINI. 1958. Neotropical *Stilobezzia* II. Fourteen new species, chiefly from Panama (Diptera, Ceratopogonidae). Revta. Brasil. Entomol. 8: 203-224.
- LANE, J., AND O. P. FORATTINI. 1961. Neotropical *Stilobezzia* Kieffer, 1911 III. Key for the adults of this genus and description of one new species (Diptera, Ceratopogonidae). Revta. Brasil. Entomol. 10: 83-94.
- LUTZ, A. 1914. Contribuicao para o conhecimento das Ceratopogoninas do Brazil. Terceira memoria. Aditamento terceiro e descricao de especies que nao sugam sangue. Mem. Inst. Oswaldo Cruz 6(2): 81-99, 2 plates.

- MACFIE, J. W. S. 1935. Ceratopogonidae (Dipt.) from the River Amazon. *Stylops* 4: 56.
- MALLOCH, J. R. 1914. Synopsis of the genus *Probezzia*, with description of a new species. *Proc. Biol. Soc. Washington* 27: 137-140.
- MALLOCH, J. R. 1915. The Chironomidae, or midges, of Illinois, with particular reference to the species occurring in the Illinois River. *Bull. Illinois St. Lab. Nat. Hist.* 10: 275-543, 23 plates.
- WILKENING, A. J., D. L. KLINE, AND W. W. WIRTH. 1985. An annotated checklist of the Ceratopogonidae (Diptera) of Florida with a new synonymy. *Florida Entomol.* 68: 511-537.
- WIRTH, W. W. 1953. Biting midges of the heleid genus *Stilobezzia* in North America. *Proc. U.S. Natl. Mus.* 103: 57-85.
- WIRTH, W. W. 1965. Family Ceratopogonidae (Heleidae), pp. 121-142 in Stone, A., et al. [eds.]. *A catalog of the Diptera of America north of Mexico*. U.S. Dept. Agric. Agric. Handb. 276: 1-1696.
- WIRTH, W. W. 1974. A catalog of the Diptera of the Americas south of the United States. 14. Ceratopogonidae. *Mus. Zool. Univ. Sao Paulo* 14: 1-89.
- WIRTH, W. W., AND W. L. GROGAN, JR. 1981. Natural History of Plummers Island, Maryland XXV. Biting midges (Diptera: Ceratopogonidae). 3. The species of the tribe Stilobezziini. *Bull. Biol. Soc. Washington* no. 5: 1-102.
- WIRTH, W. W., AND W. L. GROGAN, JR. 1988. The predaceous midges of the world (Diptera: Ceratopogonidae; Tribe Ceratopogonini). *Flora & Fauna Handbook* no., 4: 1-160. E. J. Brill, Leiden.

IMMATURE STAGES OF *FORCIPOMYIA SEMINOLE* WIRTH AND A RELATED NEW NEOTROPICAL SPECIES (DIPTERA: CERATOPOGONIDAE)

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ABSTRACT

Three species of the genus *Forcipomyia* subgenus *Lepidohelea* of the *Forcipomyia bicolor* group are distinguished in a taxonomic key and assigned to a new *Forcipomyia seminole* subgroup. They are *F. beckae* Wirth from Florida, *F. seminole* Wirth, with new records from Florida to Brazil, and *F. luteigenua* Wirth & Spinelli, **New Species**, which is widely distributed from Florida and Mexico to Brazil and Colombia. Immature stages are described for *F. seminole* and *F. luteigenua*, the first descriptions of immatures of any Western Hemisphere species of the subgenus *Lepidohelea*.

RESUMEN

Tres especies del genero *Forcipomyia*, subgenero *Lepidohelea*, del grupo *Forcipomyia bicolor* se reconocen en una clave taxonomica, y se las incluye en el subgrupo *Forcipomyia seminole* (nuevo subgrupo). Ellas son: *F. beckae* Wirth, de Florida, *F.*