

A NEW GENUS AND NEW SPECIES OF FUNGUS GNATS (DIPTERA: MYCETOPHILIDAE) FROM DOMINICAN AMBER

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Résumé. – Nouveau genre et nouvelles espèces de Diptères Mycetophilides (Diptera : Mycetophilidae) de l'ambre Dominicain. – Un nouveau genre, *Metaleia* Baxter, et trois nouvelles espèces de Diptères Mycetophilidae fossiles appartenant aux sous-familles des Gnoristinae et Leiinae de l'ambre Dominicain sont décrits. Les espèces sont : *Tetragoneura brevistipitis* Baxter, n. sp., *Metaleia maculicauda* Baxter, n. sp. et n. gen., and *Aphrastomyia planistylus* Baxter, n. sp. Des notes sur les caractères diagnostiques et sur les récentes formes alliées sont données.

Abstract. – A new genus, *Metaleia* Baxter, and three new species of fossil fungus gnats belonging to the subfamilies Gnoristinae and Leiinae of the family Mycetophilidae are described from Dominican amber. These include *Tetragoneura brevistipitis* Baxter, n. sp., *Metaleia maculicauda* Baxter, n. sp. and n. gen., and *Aphrastomyia planistylus* Baxter, n. sp. Brief notes on diagnostic characters and extant related forms are given.

Fungus gnats of the superfamily Mycetophiloidea (Diptera) are one of the most common groups of flies encountered as inclusions in amber deposits. The majority of fossil fungus gnats has been described from Baltic amber by Meunier (1904, 1917a, 1917b, 1922, 1923) and Loew (1850). Additional contributions have been made by Giebel (1856), Edwards (1921) and Matile (1979) from Baltic amber; Cockerell (1917, 1923) from Burmese and Columbian amber; Hong (1981) and Hong *et al.* (1974) from Chinese amber; and Matile (1981) from French amber. Gagné (1980) has discussed the presence of fungus gnats in Mexican amber.

Fungus gnats are also common in Dominican amber, but thus far only a single species, *Proceroplatus hennigi* Schmalfus (1979) (Keroplastidae), has been described from these insect-rich deposits.

In the Poinar collection of Dominican amber maintained at the University of California, Berkeley, fungus gnats make up a major portion of the dipteran specimens represented. Most of these are keroplastids as well as mycetophilids of the tribe Exechiini. Representatives of other mycetophiloid taxa, on the other hand, appear to be relatively rare.

The three species described here are among the few rarer mycetophilid taxa represented in this collection. Two of these belong to existing genera presently included in the

subfamilies Gnoristinae and Leiinae, and one belongs to a genus described here as new in the Leiinae.

Materials and Methods

Pieces of amber with insect inclusions were cut to provide a suitable plane for observing the specimens. In many cases, the cut surface was further abraded with silicon paper and then polished. During examination either a drop of clear mineral oil was placed on the surface to be viewed or the entire piece of amber was submerged in mineral oil. Drawings and measurements were made using a Kyowa KIS-2 dissecting microscope with ocular grid.

All fossils discussed in the present study are believed to have come from amber mines located in the Cordillera Septentrional, between Santiago and Puerto Plata, in northern Dominican Republic. These mines are in the Altamira facies of the El Mamey Formation (Upper Eocene) and are estimated to range from 23-40 million years (Lower Miocene to Upper Eocene) (Lambert, *et al.* 1985).

Tetragoneura brevistipitis Baxter, n. sp.

(Figs. 1-4, 11, 12)

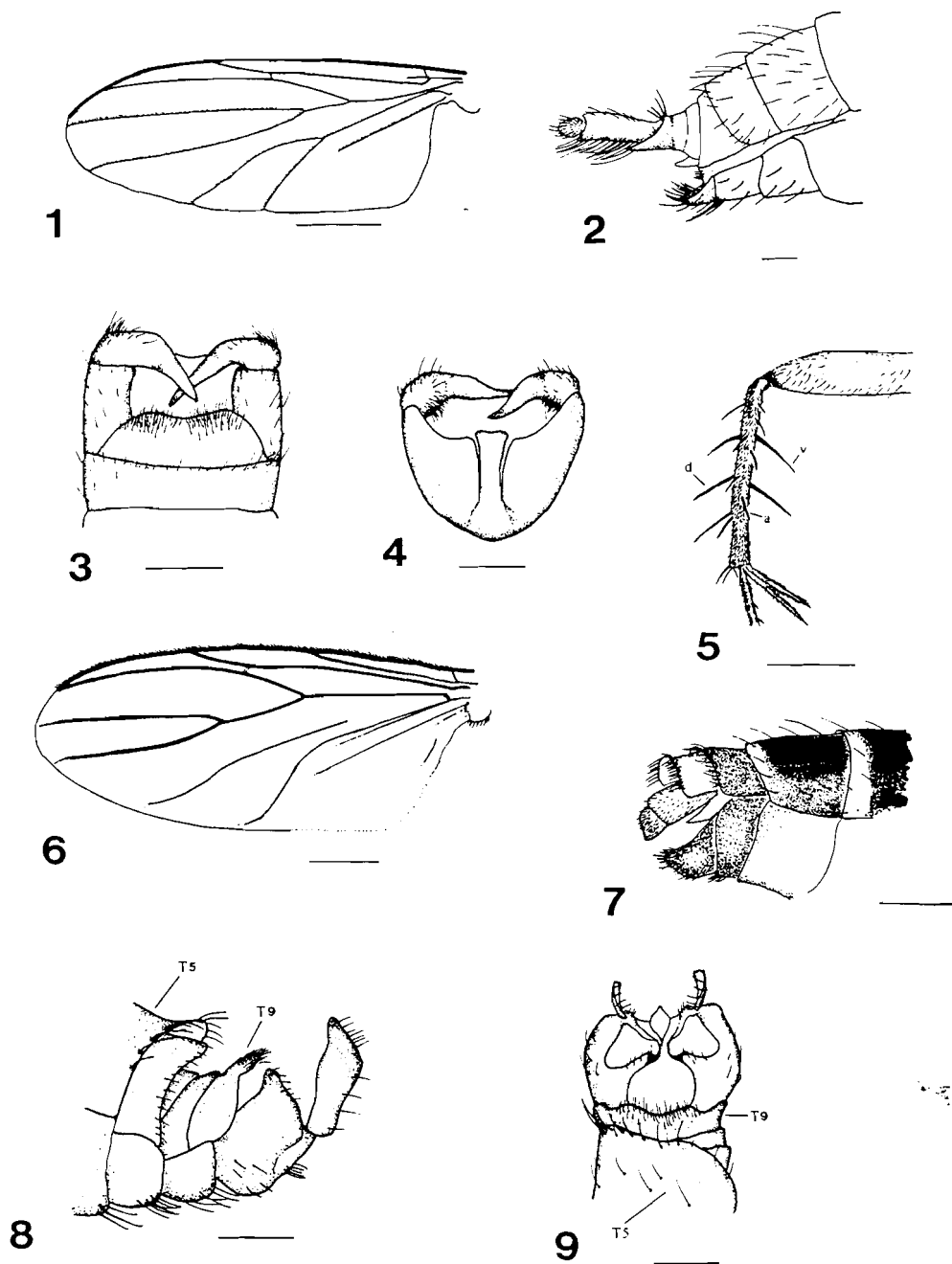
Description. – Length 2.3-2.9 mm. Color mostly black. – *Head.* Head black, mouthparts yellow. Vertex with three ocelli arranged in transverse line, lateral ocellus 3-4 times its own diameter from margin of compound eye; with moderately long, thick, black setae, some as long as length of scape and pedicle combined. Area of frons between base of antennae and ocelli bare. Antennae 2 + 14, black, about as long as thorax; scape and pedicle subequal in length, elongate and conical; pedicle with long setae dorso-apically at least one of which is slightly longer than combined length of scape and pedicle, and with a tuft of shorter setae ventro-apically; flagellomeres cylindrical, slightly longer than wide, separated from each other by broad constriction; first flagellomere about as long as length of pedicle, distal flagellomeres shorter. Clypeus slightly shorter than combined length of scape and pedicle and clothed in dense short setae. Palps 0.75 times as long as antennae, four segmented; basal segment short and globular; second segment 1.5 times as long as basal segment, subtriangular, broad basally, narrow distally and projecting beyond base of segment three; segment three long and slender, a little more than twice as long as the second segment; fourth segment very slender, weakly dilated distally, and a little longer than length of third segment.

Thorax. Uniformly black with black setae. Lateral lobes of pronotum with three long, dorsomedially curved bristles arranged in straight vertically oriented row, middle and dorsal bristles reaching midline of thorax behind head. Proepisternum clothed in short hairs and with one long ventrally directed bristle. Acrostichal and dorsocentral bristles on scutum each consisting of a band of 4 to 5 longitudinal rows of short bristles, with narrow bare region between bands, and with longest bristles no longer than length of scape; infra-alars consisting of 3-5 rows of short bristles; supra-alars consisting of a single row of sparse but robust bristles. All pleurites bare. Laterotergite bare, keeled. Scutellum with 2 pair long apical bristles reaching the level of the posterior margin of T_2 . Halteres yellow with knob moderately swollen and sometimes brown-tinged.

Legs. Coxae and femora dark but yellow-tinged and covered with very sparse and short setae, hind coxa with a row of longer setae along posterolateral margin. Fore and middle tibiae without conspicuous bristles. Hind tibia with a sparse anterodorsal and denser posterodorsal row of bristles, each consisting of fine bristles much shorter than length of distal tibial diameter. Tibial spurs 1-2-2; inner spur on middle and hind tibiae about 2 times as long as distal tibial diameter, outer spur about half as long as inner. Tarsi dark, claws simple and small. Average length of leg segments (*Cx-fm-tb-tr*) in mm.: fore leg, 0.6-0.7-0.5-1.3; middle leg, 0.5-0.9-0.8-1.2; hind leg, 0.6-1.1-1.2-1.3.

Wing (Fig. 1). Length 1.9-2.4 mm. C ending near wing tip, extending beyond the end of R_5 for 0.8 times the distance between R_5 and M_1 . Sc very short, ending free. R_1 ending in C at about 0.7 times the wing length from wing base, bare ventrally and setose dorsally. Stem of R bare

ventrally and setose dorsally. Crossvein $r-m$ 1.7 times as long as section of R_1 beyond base of R_s , bare ventrally and with long setulae dorsally. R_4 absent. Stem of medial fork very weak, bare, 0.6 times as long as $r-m$; base of medial fork before the level of R_s ; M_1 nearly straight and ending at wing tip; M_2 diverging from M_1 ; both branches with long conspicuous setulae dorsally and ventrally. Posterior fork with base slightly before the level of the base of the medial fork, both branches as well as stem setose ventrally. A_1 long, though weak, almost reaching level of posterior fork, setose ventrally.



Figs. 1-9, fungus gnats in Dominican amber. -1, *Tetragoneura brevistipis*, n. sp., wing. Scale bar = 0.5 mm. - 2, *T. brevistipis*, n. sp., female terminalia, lateral aspect. Scale bar = 0.1 mm. - 3, *T. brevistipis*, n. sp., male genitalia, dorsal aspect. Scale bar = 0.1 mm. - 4, *T. brevistipis*, n. sp., male genitalia, postero-ventral aspect. Scale bar = 0.1 mm. - 5, *Metaleia maculicauda*, n. sp., right middle tibia, anterior aspect. Abbrev. : a, anterior bristle; d, dorsal bristle; v, ventral bristle. Scale bar = 0.5 mm. - 6, *M. maculicauda*, n. sp., wing. Scale bar = 0.5 mm. - 7, *M. maculicauda*, n. sp., female terminalia, lateral aspect. Scale bar = 0.25 mm. - 8, *Aphrastomyia planistylus*, n. sp., male genitalia, lateral aspect. Scale bar = 0.1 mm. - 9, *A. planistylus*, n. sp., male genitalia, dorsal aspect. Scale bar = 0.1 mm.

Abdomen. Black, clothed with sparse short setae, with seven visible pregenital segments in the male (segment 7 and 8 telescoped into 6, but with segment 8 narrowly visible in lateral aspect) and eight visible pregenital segments in the female; segment 2 twice as long as segment 1; segments 3, 4, and 5 each subequal in length to segment 2; remaining segments progressively shorter. Sterna without longitudinal flexion lines.

Male. – Middle tibia without dorso-apical “sensory organ”. Terminalia (figs. 3 and 4) small, no wider than width of abdomen, strongly cupulate, black. T_9 about one-third as long as genital capsule, weakly bilobed posteriorly. Gonocoxites strongly oblique ventrally in lateral aspect and separated ventromedially by a narrow, distally bilobed sclerite (? S_9) which projects slightly beyond posteroventral margins of gonocoxites. Gonostyli rather broad basally, abruptly bent forward and tapered in distal half.

Female. – Terminalia as in figure 2., black. Cerci yellowish, first segment two times as long as length of sixth abdominal segment and clothed in long hairs with longest hairs on ventral surface; second segment short and ovate.

Type material. – **Holotype male**, Dominican amber, in subconical piece of amber (9 x 8 mm.), specimen near face at base, no. D-7-128. **Paratypes**, 5 females, nos. D-7-135, D-7-136, D-7-137, D-7-138 and D-7-139. All material in Poinar collection at UCB.

Etymology. – From Latin *brevis* “short” + Latin *stipitis*, genitive singular of *stipes* (masc.) “stem”. Named for the short stem of the medial fork.

Remarks. – The genus *Tetragoneura* Winnertz is represented in the recent fauna by around 90 species from all major biogeographical regions except Africa. Sixty-one of these species are Neotropical, but none has been reported from the Caribbean. Additionally, eleven fossil species, all from Baltic amber, are attributed to the genus.

Tetragoneura is much in need of revision. The genus, as currently understood, is probably paraphyletic. Traditionally it has been included in the Leiinae (or Leiini) on the basis of the short R_1 and the more or less horizontally oriented $r-m$ crossvein, both of which appear to be good synapomorphies of the Leiinae. Recent workers, however, have suggested that these similarities to the Leiinae are due to convergence and that *Tetragoneura* may be more closely related to such gnoristine genera as *Dziedzickia* and *Synapha* (Chandler, 1980; Väisänen, 1986). Many species of *Tetragoneura*, for example, possess fold lines on the abdominal sterna similar to those found in the Gnoristinae, and the males of some species have a “mid-tibial organ”, a structure also found in the Gnoristinae (for example, in *Synapha fasciata* Meigen). These considerations, among others, led Väisänen (1986) to tentatively include *Tetragoneura* in the Gnoristinae.

Although *Tetragoneura brevistipitis* lacks sternal fold lines on the abdomen and the mid-tibial organ in the male, it is most similar to *T. pectinata* Freeman and *T. nigripalpis* Freeman (Freeman, 1951) from South America. *T. brevistipitis* can be readily distinguished from these by the structure of the male genitalia, the absence of the mid-tibial organ in the male and the length of the stem of the medial fork, which in *T. brevistipitis* is conspicuously shorter than the $r-m$ crossvein. In contrast, the stem of the medial fork in *T. pectinata* and *T. nigripalpis*, as in the majority of recent species of *Tetragoneura*, is at least as long as $r-m$ or longer.

METALEIA Baxter, n. gen.

Description. – *Head.* Vertex with three ocelli, laterals touching margin of compound eye, middle ocellus small. Antennae 2 + 14, scape and pedicel subconical, flagellomeres cylindrical. Palps four-segmented, the distal two segments each longer than the length of the basal two combined.

Thorax. Lateral lobes of pronotum with strong dorsomedially curved bristles. Mesoscutum cloth in short, fine, sparse seta on most of disc, but with well-developed supra-alar and postalar, as well as at least one pair prescutellar dorsocentral, bristles. Scutellum with two pair apical bristles. Laterotergite moderately keeled and setose. Mediotergite and other pleurites bare.

Legs. Coxae and femora sparsely setose. Tibial spurs 1-2-2. Middle tibia with at least two long ventral bristles and with anterior, anterodorsal and posterodorsal bristle rows. Hind tibia with anterior, anterodorsal, and posterodorsal bristle rows. Tarsal claws simple.

Wing (fig. 6). Costa ending at apex of R_5 and before apex of wing. Subcosta ending in C . Sc_2 absent. Crossvein $r-m$ subequal in length to or slightly longer than R_1 . Medial fork with stem longer than length of $r-m$ and with branches subparallel to slightly divergent distally. M_+ ($=CuA_1$) widely detached at base, straight proximally and weakly sigmoid distally; CuA ($=CuA_2$) strongly sigmoid beyond fork. A_1 strong and well-developed, straight and extending well beyond base of posterior fork.

Abdomen. Eight visible pre-genital segments in female. Sterna without longitudinal fold lines. Cercus of female two-segmented, second segment sub-auriculate and much shorter than first segment.

Type species. – *Metaleia maculicauda* Baxter, new species.

Etymology. – From Greek *meta*, “with”, + “*Leia*”.

***Metaleia maculicauda* Baxter, n. sp.**
(Figs. 5-7, 10)

Description. – **Female** : Length : 4.1-4.3 mm. – *Head.* Head and mouthparts yellow-brown. Three ocelli present on vertex, enclosed by black maculae which sometimes connect to form transverse band. Vertex sparsely covered with setae with longest setae subequal in length to pedicel and located immediately behind level of ocelli. Antennae about as long as thorax; scape and pedicel together about as long as first 3 flagellomeres combined; pedicel with at least one long dorso-apical seta; flagellomeres only slightly longer than wide. Clypeus mostly bare. Palps four-segmented; segments one and two short; segment three slightly longer than basal two segments combined, brown with large oval sensory pit basally; segment four slender, sub-clavate, 1.6 to 2 times as long as third segment.

Thorax. Pronotum yellow-brown; lateral lobes with three stout, dorsomedially curved bristles arranged in oblique dorsoventrally oriented row, middle bristle reaching midline of scutum. Mesoscutum yellow-brown with narrow black transverse band posteriorly, with row of supra-alar bristles anterior to and above wing base, two pair postalar and one pair prescutellar dorsocentral bristles; bristles in latter two groups stout and posteriorly directed, reaching beyond posterior margin of scutellum. Scutellum yellow-brown. Laterotergite dark brown and with short, fine yellow setae. Mediotergite and other pleurites yellow-brown. Halteres yellow.

Legs. Mostly yellow-brown, darker distally. Coxae with sparse brown, short setae which are longer distally. Femora with very short, sparse brown setae; hind, and sometimes middle, femur black apically. Fore tibia without strong bristles. Middle tibia (fig. 5) with a stout anterior, anterodorsal, dorsal and posterior bristle apically, the last 1.5 times as long as distal tibial diameter, and with four rows of bristles on shaft consisting of 2 (rarely 3) ventrals, 4 anteriors, 4 anterodorsals and 4 posterodorsals; bristles in latter two rows distinctly paired with each other; ventrals and distal posterodorsals 2.5 times as long as, anteriors and anterodorsals subequal to or shorter than, distal tibial diameter. Hind tibia with three rows of bristles consisting of 7-8 anteriors, 4-5 anterodorsals, and 5 posterodorsals; distal posterodorsals and anterodorsals about 1.5 times as long as distal tibial diameter, other bristles shorter. Average length of leg segments in mm. (coxa/femur/tibia/tarsus): foreleg, 0.8-0.8-0.6-1.1; middle leg, 0.8-0.9-1-1.6; and hind leg, 0.9-1.3-1.6-1.7.

Wing (fig. 6). Length 3.1-3.2 mm., dusky, without conspicuous spots, 1.2 to 1.5 times as long as abdomen. Subcosta ending at one-third of wing length from wing base, with macrotrichia

ventrally and bare or with a few distal macrotrichia dorsally. R_1 ending in C at two-thirds of wing length from wing base; R setose for entire length dorsally and beyond base of $r-m$ ventrally. R_s short, oblique, about four times its length from apex of R_1 . Crossvein $r-m$ with base slightly beyond level of apex of Sc and setose dorsally and ventrally. R_3 setose dorsally and ventrally. Medial fork with branches about 2.5 times as long as its stem, subparallel distally, weak at wing margin; M_1 ending at wing apex. Posterior fork with base of M_2 before level of apex of Sc ; M , Cu and A veins bare. A_2 strong but short and with distal portion detached. Venation otherwise as in generic description.

Abdomen. Eight visible pregenital segments. Tergites yellow-brown, usually with large black sublateral maculae on $T2-6$ and sometimes also on $T1$; maculae increasing in size posteriorly; $T7$ and $T8$ almost entirely black; lighter specimens with lateral maculae on at least $T2$ and $T3$. Sterna $1-6$ without longitudinal flexion lines, yellow; $S7$ and $S8$ often wholly or partially dark brown. Segment 10 and cerci yellow-brown. Terminalia as in figure 7.

Male. – Unknown.

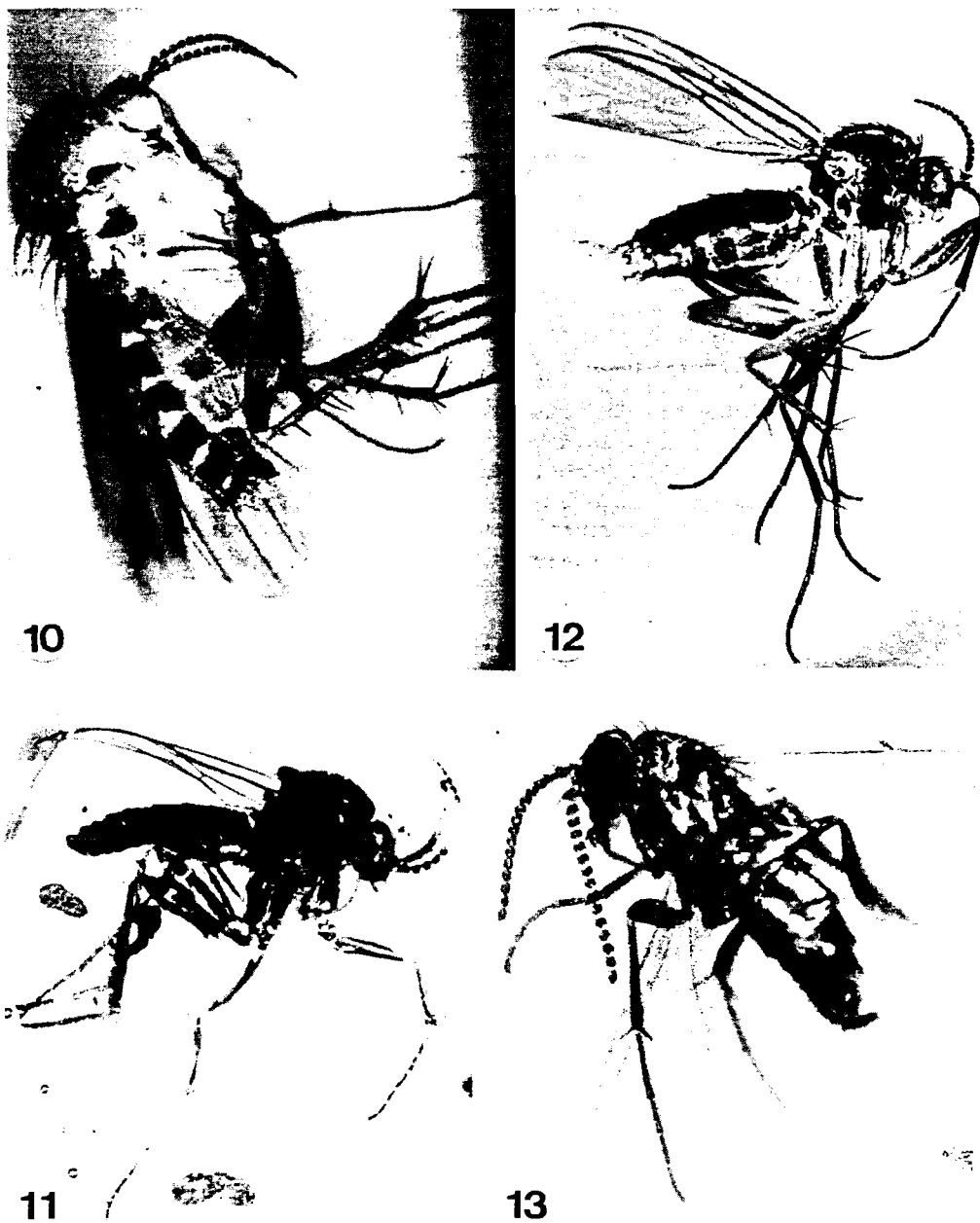
Type material. – **Holotype female**, Dominican amber, in 13 X 5 X 5 mm piece of amber, no. D-7-129. **Paratypes**, 4 females, nos. D-7-131, D-7-132, D-7-133 and D-7-134. All material in Poinar collection at UCB.

Etymology. – From Latin *macula*, past passive participle of *maculo* “to spot” + Latin *cauda*, nominative singular (fem.) “tail”.

Remarks. – The venation in *Metaleia* suggests a relationship of this genus to such genera as *Acrodicrania* Skuse (8 spp.; Australia, Malaysia, India, and South Africa), *Ateleia* Skuse (1 sp., Australia), *Cawthronia* Tonnoir and Edwards (1 sp., New Zealand), and *Anomalomyia* Hutton (10 spp., New Zealand) and, possibly, to *Cycloneura* Marshall (3 spp., New Zealand), *Paradoxa* Marshall (1 sp., New Zealand), *Paracycloneura* Tonnoir and Edwards (1 sp., New Zealand), *Procycloneura* Freeman (5 spp., South America), and *Sigmoleia* (1 sp., New Zealand). All of these genera, except *Anomalomyia* and *Sigmoleia*, have M_2 widely detached at the base, and most of these taxa also possess a noticeably sinuous CuA . These two characters are unquestionably apomorphic, and may well be synapomorphies that unite the above genera into a monophyletic group. However, there is considerable homoplasy when other characters – position of the lateral ocelli, setation of the laterotergite, arrangement of tibial bristles, etc. – are taken into account. Furthermore, in the Leiinae it is not at all unusual for M_2 to be at least narrowly interrupted at the base, and CuA usually shows some degree of sinuosity. The possibility of convergence cannot be ruled out until a more comprehensive analysis of the Leiinae has been made.

Be that as it may, the sinuosity of CuA in *Metaleia*, *Acrodicrania*, *Ateleia* and *Anomalomyia* has the same strong, symmetrically sigmoid shape (see fig. 6), which we presently regard as a synapomorphy. According to Tonnoir (1929), *Cawthronia* is very similar to *Ateleia*; thus it too may belong here, in which case the undulating course of CuA in this genus would have to be regarded as a secondary modification. Specimens of *Acrodicrania* and *Anomalomyia* that we have examined in the collection of the California Academy of Science agree very closely with *Metaleia* in the anterior concavity of the thorax, position of the lateral ocelli near to or touching the margin of the compound eyes, thoracic setation, details of the female genitalia, and the arrangement of bristles on the middle tibia. The phylogenetic significance of these similarities, however, needs further assessment. We have not seen *Ateleia* and *Cawthronia*, but judging from their original descriptions, these two genera differ from *Metaleia*, *Acrodicrania*, and *Anomalomyia* in the arrangement of mid-tibial bristles and in the location of the lateral ocelli far from the margin of the compound eyes.

If, as we suggest, the above five genera form a monophyletic group, then the basally complete M_4 in *Anomalomyia* is either a reversal—which we regard as unlikely—or the wide detachment of M_4 is a synapomorphy of *Metaleia* + *Acrodicrania* + *Ateleia* + *Cawthronia*. In the latter case, *Anomalomyia* would be the sister group of the other four genera. Alternatively, the detached M_4 could be a parallelism in *Metaleia* + *Acrodicrania* and *Ateleia* + *Cawthronia*.



Figs. 10-13, fungus gnats in Dominican amber. — 10, *Metaleia maculicauda*, n. sp., holotype female. — 11, *Tetragoneura brevistipis*, n. sp., paratype female. — 12, *T. brevistipis*, n. sp., holotype male. — 13, *Afrastomyia planistylus*, n. sp., holotype male.

Metaleia differs from *Acrodicrania*, *Ateleia*, and *Cawthronia* in the termination of the costa at the apex of R_5 (C is produced beyond R_5 in the other three genera), and from *Acrodicrania* and *Ateleia* by the absence of Sc_2 . We regard the termination of C at R_5 as

an autapomorphy of *Metaleia*. The loss of Sc_2 in *Metaleia*, *Cawthronia*, and *Anomalomyia* (1) appears to be convergent.

***Aphrastomyia planistylus* Baxter, n. sp.**
(Figs. 8, 9, 13)

Description. – **Male** (2) : Length 1.8 mm. – **Head.** Light brown. Vertex with sparse moderately long brown setae, with three ocelli very close together near midline, middle ocellus minute, less than one-third as large as lateral ocellus. Frons with short, sparse setae. Antennae 2 + 14, brown, about as long as head and thorax combined; scape and pedicel conical, subequal, the first with 2-3 long dorso-apical setae; flagellomeres cylindrical, distal ones about as long as wide, basal ones slightly longer than wide and with 2-3 moderately-long setae on dorsal face. Clypeus brown and apparently bare. Mouthparts long and narrow, slightly longer than the distance from apex of clypeus to posterior part of vertex; labrum well-developed, triangular, strongly sclerotized and about as long as length of pedicel; palps about as long as labium, brown, with basal two segments small and oval, third segment slender and twice as long as combined length of basal two, and distal segment slender and 1.5 times as long as the third; maxillary blades not evident; labium long and two-segmented, with proximal segment (probably postmentum) slightly longer than, and distal segment (prementum) 2-3 times as long as, length of labrum; labellum reduced.

Thorax. Lateral lobe of pronotum brown, with three long, dorsomedially curved bristles. Mesoscutum mostly brown, with three bright-ocherous longitudinal vittae, and yellowish along lateral margins; bare on most of disc except for one pair of prescutellar dorsocentral bristles; with only 4-5 robust, presutural supra-alar bristles and a few shorter ones above wing base; and with a single pair of postalar bristles. Scutellum brown with ocherous longitudinal streak continuous with acrostichal vitta and with two pair of apical bristles. Mediotergite brown with ocherous medial streak on anterior third. Laterotergite light brown, bare. Pleurites yellowish. Halter with stalk yellow and knob brown, large and swollen.

Legs. Brown tinge on yellow background, dark distally. Setae on coxae and femora very short and sparse; tibial setulae denser, irregularly arranged but almost in regular rows on distal third. Tibiae without notable bristles on fore leg, with sparse posteroventral and posterior row on middle leg, and with anterodorsal row of short bristles on hind leg; bristles short and fine, barely distinguishable from setulae. Tarsal claws small and simple. Average length of leg segments (*cx/fm/tb/tar*) in mm.: fore leg, 0.4-0.4-0.4-0.6; middle leg, 0.4-0.6-0.5-0.7; hind leg, 0.5-0.6-0.6-0.6.

Wing. Length 1.5 mm. Costa ending slightly before wing apex, produced beyond R_5 for 0.8 times the distance between R_5 and M_1 . Sc very short and ending in R . R_s slightly before mid-length of wing. $r-m$ crossvein about 0.1 mm in length. R_1 beyond R_s subequal in length to $r-m$. R veins, including $r-m$, with short sparse setulae dorsally. Stem of medial fork twice as long as $r-m$; M_1 ending slightly anterior to wing tip. Base of posterior fork slightly distal to level of base of $r-m$. Posterior veins (M and Cu) bare and very weak.

Abdomen. Seven visible pregenital segments, terga light brown and irregularly shaded, sterna yellowish and without longitudinal fold lines. T_2 to T_5 subequal in length and about 1.5 times as long as T_1 ; posterior margin of T_5 ovate and produced posteriorly beyond posterior margin of S_5 . Segments 6 to 8 conspicuously shorter and less in diameter than preceding segments, in dorsal aspect hidden from view by T_5 . Segment 7 telescoped into segment 6 but discernible in caudal aspect.

Terminalia. As in figures 8 and 9. Genital capsule rotated about 40 degrees counterclockwise with respect to segment 5. T_9 about one-third as long as genital capsule and with posterior

(1) The species of *Anomalomyia* that have been described thus far all lack Sc_2 . In the collection of the California Academy of Sciences, we have seen two specimens from Papua New Guinea in which Sc_2 is distinctly present and located distally as in *Acrodicrania*.

(2) During examination of the male holotype, mineral oil apparently seeped into the specimen through a fissure, turning part of the thorax, legs and head darker. The coloration given in the description is the original. This coloration is preserved in the paratype.

margin slightly bilobed. Gonocoxite with narrow dorsomedial piece near midlength which extends toward midline of genital capsule then continues posteriorly and ventrally to base of gonostylus. Gonostylus subquadrate, laterally flattened and plate-like, and medially convex.

Female. Unknown.

Type material. – *Holotype male*, Dominican amber, in four-sided, roughly obelisk-shaped piece of amber measuring 10 X 5 mm.; specimen near apex of obelisk, no. D-7-130. *Paratype*, undet. sex (missing tip of abdomen), no. D-7-140. All specimens in Poinar coll. at UCB.

Etymology. – From Latin *planus*, “flat” + Latin *stylus*, nominative singular (masc.) “stylus”. Named for the laterally flattened gonostyli.

Remarks. – *Aphrastomyia* Coher and Lane is known from three recent Neotropical species (Brazil and Peru) and an undescribed species from the southeastern U.S.A. Additionally, Matile (1978) has made reference to an undescribed species from the Antilles, but no further information was given as to the locality. The specimen described here is the first fossil occurrence reported for the genus. The structure of the mouthparts attests to the monophyly of this genus.

A. planistylus agrees in all major details with the description given for the genus by Coher and Lane (1949), with the exception of the presence of the medial ocellus, which these authors report as absent. According to Matile (1978), however, the median ocellus is present in some. Presumably it was overlooked due to its small size.

A. planistylus is most similar to *A. cramptoni* Coher and Lane – both species have the mesoscutum striped – but differs significantly in details of the posterior abdomen and male genitalia.

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