

The Muscoid Genus *Genea* in North America (Dipt.).

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Rondani established the genus *Genea* in 1850 (Nuov. An. Sci. Nat. Bologna, ser. iii, vol. ii, p. 172), with the type and sole species *maculiventris*, new, from Venezuela. He dedicated it to "my very dear friend and master lately deceased, Professor Joseph Gené." The accent should be on the second syllable, and it might well have been spelled *Genaea* to bring this out. Rondani's description is masterly and sufficient, and, on account of its inaccessibility, I translate it entire from the Latin.

"Genus **GENEA** mihi.

Third and fourth veins of the wing reaching the costa separately, the fourth curved, not angulate, and thence arcuate outwardly; hind crossvein more distant from the anterior one than from the bend of fourth. Antennae of ordinary length, reaching almost to the epistoma, inserted on the front well above the middle of the eyes, the third joint three times the second. Arista a little tomentose or with very short pilosity, the second joint short but distinct. Eyes bare. Frontal bristles not continuing upon the face. Proboscis filiform, quite elongated. Palpi cylindrical and long, reaching to the middle of the proboscis and distinctly beyond the epistoma. Abdomen with only marginal macrochaetae, not provided with forceps or large and stout appendages nor curved under. See figures 4-5. Related to *Myobia* and *Fischeria*.

"Species ***Genea maculiventris*** mihi, Patria Venezuela.
Length: 7 mm.

Male. First two antennal joints and base of third fulvescent, remainder of the third black. Arista very briefly pilose, black. Face a little whitish-sericeous. Front fulvescent, the bristles in two rows. Facial ridges with hardly a single bristle above the vibrissae; some bristles around the peristome; frontals hardly produced below the root of the antennae. Palpi and proboscis pale at base, the latter blackish apically, the former with small black hairs above and below. Thorax lutescent, middle of the dorsum black, pleura with a small blackish spot and others on pectus, metathorax blackish in middle. Scutellum lutescent. Abdomen lutescent, the second segment above with a triangular black spot behind, and a black dot at either side on the hind edge; third segment with a median black vitta dilated behind

and a small black spot on the hind edge at each side; fourth segment with two small lateral black spots behind. First abdominal segment without macrochaetae, second with two marginals, third and fourth with several marginals. Legs lutescent, tarsi black. Wings subhyaline; first longitudinal vein wholly setulose above, third setulose to the small crossvein."

The National Museum has a Brazilian specimen, female, one of the old H. H. Smith collection that was purchased by Dr. Williston and afterwards secured by the American Museum of Natural History, from which Townsend obtained it. The exact locality is "Piedro B."* It agrees perfectly with the description, and is very close to *texensis* Townsend. The black spots of the abdomen are smaller in all of our North American specimens except the one from Mexico, identified as *longipalpis* Van der Wulp, and we have none with the proboscis quite so elongated and slender, though the difference in this is not great. On the whole, after much consideration, I think it best to regard *texensis* and *longipalpis* as distinct species for the present, but further material may enable us to unite them with *maculiventris*.

In the table of Coquillett's Revision, *Genea* runs readily to *Leskiomima*, from which it separates by having long palpi; unless the proboscis is greatly retracted, the palpi project far beyond the epistoma in a very characteristic manner. Both *Leskiomima* and *Genea* have elongate form, yellow color, first vein hairy, arista pubescent, ocellar bristles small to minute and identical chaetotaxy. *Leskiomima* has but one described species, *tenera*. In this the male has long claws and pulvilli, and has no orbitals.

Genea has perhaps four species, but two may be synonyms. Besides the type species already noted these are the following:

***Genea analis* Say.**

Dexia analis Say, Jour. Acad. Nat. Sci. Phil., vi, 1829, 177; Comp. Works, ii, 367.

Leskiomima tenera Wiedemann (in part), Coquillett, Revis. Tachin., 1897, 67 (the specimen from Chester Co., Pa.).

[* Possibly Piedra Blanca, Bolivia, four miles west of Corumbá, Brazil. H. H. Smith, quoted in Ann. Carnegie Museum, Pittsburgh, vi, p. 77. 1909.—Ed.]

Say's description being readily accessible, I will merely state that his specimen was a yellow fly 8.75 mm. long, evidently with the arista at least pubescent or he would not have called it *Dexia*, and he adds the important note, "The proboscis and palpi are much elongated."

Coquillett misidentified the species in his Revision and made it out the same as his own *Myobia depile*, there referred to the genus *Leskia*, while he placed a female belonging to *analys* in his lot of *Leskiomima tenera*, along with two specimens of the species later described as *texensis*. *Analys* in this mistaken sense was split up by Townsend into *Myobiopsis similis* and *Leskiopalpus calidus* (Proc. U. S. N. M., vol. 49, 1916, 628, 629); the latter of these is a synonym of *depile* Coquillett, as pointed out by Smith in Proc. Ent. Soc. Wash., xix, 1917, 125. All this, however, has nothing to do with the true *analys* as I make it out.

The National Museum contains the following material assigned by me to this species:

One male, Chain Bridge, Virginia, VIII, 3, 1923 (Aldrich); one female, same place and collector, VI, 25, 1923; one female, Great Falls, Virginia; IX, 20, 1917 (C. T. Greene); one female, Plummer's Island, Maryland, IX, 29, 1912 (P. R. Myers); one female, same, VIII, 5, 1914 (Shannon); one female, same, VIII, 18, 1912 (Malloch); one female, Chain Bridge, Virginia, on *Ceanothus*, VI, 23, 1916 (Greene); one female, Chester County, Pennsylvania, VIII, 25, 1895 (C. W. Johnson); and one female, Lafayette, Indiana, IX, 9, 1916 (Aldrich).

The differences between this and *texensis* are discussed below.
***Genea texensis* Townsend.**

Dejeaniopalpus texensis Townsend, Proc. U. S. N. M., Vol. 51, 1916, 312.

Leskiomima tenera Wiedemann (in part), Coquillett, Revis. Tachin., 1897, 67 (the two specimens from New York City).

Townsend described the species from a single female labeled "Tex.," failing to observe two more specimens among Coquillett's set of *Leskiomima tenera*. The following material assigned by me to this species is in the National Museum:

One male, Virginia across the river from Washington, bred

by Pergande (No. 3661) from a Lepidopterous larva sp. (*Botys* sp.) which "curiously rolls up the terminal leaves of a fern into a perfect ball," VII, 3, 1885; one female, Texas, type of the species; two females, New York City, VIII, 8, 1890 (E. B. Southwick); one female, Pocono Lake, Pennsylvania, VII, 11, 1911 (Greene, in the Walton coll.); and one female, Ithaca, New York (Banks).

It will be observed that we have a single male of *analis* and the same of *texensis*. The capture of the male of *analis*, on Aug. 3, 1923, absolutely ruined the first draft of the present paper, which was committed to a single North American species of *Genea*, at least in the United States. This male proved conclusively that the material must be distributed between two species, a fact which could not be established from females alone.

The two males differ in the following characters:

That of *analis* is larger (8.75 mm., exactly as given by Say); its front is .23 of the headwidth by micrometer, and has no orbitals; the claws and pulvilli are long on all the tarsi; the width of the third antennal joint is 5 and the length 15 by micrometer.

The male of *texensis* is smaller (6.5 mm.); the front is .30 of the headwidth, and has two pairs of orbitals; the claws and pulvilli are all small; the width of the third antennal joint is 6 and the length 13 by micrometer.

I can make out no other differences of any significance at all. The ones noted are sexual characters and would not show in the female, except size and the shape of the third antennal joint. Size of course is variable and may mislead; the three females first mentioned under *analis* are large like the male, all the rest smaller and agreeing in this respect with *texensis*. I have depended most on the shape of the third antennal joint for placing the females; some agree with the respective males so as to leave little doubt of their relations, but several are intermediate and I am not quite sure to which they belong.

Rondani's statement that the frontals are in two rows in his male shows that orbitals were present, and his species is more nearly related to *texensis* than to *analis*.

***Genea longipalpis* Van der Wulp.**

Myobia longipalpis Van der Wulp, Biologia, Dipt., II, 1890, 138.

A female identified as this by Townsend is in the National Museum. He placed it naturally under his *Dejeaniopalpus*. It is from San Rafael, Vera Cruz, Mexico, Mar. 8 (Townsend). It has a slightly shorter proboscis than our female of *maculiventris*, but is probably the same species. It seems prudent to see the male before definitely dropping the name into synonymy. Both of these specimens have a large, triangular median black spot on both second and third segment, the apex of the spot reaching to the front edge of the segment.

Obviously the genus *Dejeaniopalpus*, type *texensis*, is a synonym of *Genea*.

Brauer and Bergenstamm seem to be in error (Zweifl. Kais. Mus., VI, 1893, 132) in making *Spathipalpus* Rondani (type *philippii* Rondani from Chile), a synonym of *Genea*. The Chilean species has the frontals extending upon the face, according to the description, and the palpi are spatulate. It is a black species, and may be a Dejeaniine with hairy first vein.

**On the Identity of the Genus *Ernestia* R. D.
(Tachinidae, Dipt.).***

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In his "Revision of the Nearctic Species of the Tachinid Genus *Ernestia* R. D." (Can. Ent., Sept. 1921, p. 199 etc.), Dr. J. D. Tothill pointed out certain characters separating the various groups which he included under this genus. The chief characters of the subgenus *Meriana*, as outlined by him in the revision, were the absence of discal macrochaetae on the second abdominal segment and hairy parafacials. Neither of these characters can be regarded as of generic value in most cases, and they were not so considered by Tothill. Perhaps the most significant statement, from a generic standpoint, is the indication

* Contribution from the Division of Systematic Entomology, Entomological Branch, Dept. of Agric., Ottawa.



Aldrich, John Merton. 1924. "The muscoid genus *Genea* in North America." *Entomological news, and proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia* 35, 210–214.

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