by a number of characters, among which may be mentioned the stalking of vein 3 of fore wings, the short cell of the hind wings, and the short palpi, which exceed the head by less than its length. The accompanying figures (fig. 9) illustrate the venation, the head, and the fore leg, the latter showing greatly developed coxa and femur, which are very thick though flat, evidently used for grasping firmly the hairs of the host. Unfortunately it is impossible to give any description of the vestiture of the species, owing to the condition of the specimens, other than to say they are small dark-gray moths, expanding about 16 mm.

It is probable that the moths live continuously in the fur of the sloth, and no doubt the larvæ also, to whose work the matted

condition of the animal's hair is in all probability due.

The specimens, three in number, have been marked with the U. S. National Museum type number 11500. They were collected at Tabernilla, in the Canal Zone, Panama, by Mr. August Busck, June, 1907.

NEW GENERA AND SPECIES OF DIPTERA.

By D. W. Coquillett.

Dicranomyia curvivena, n. sp.

Very near cinerca, but with no dark stripes on the pleura; both species are peculiar in having a very short second vein which is evenly arcuate and reaches the costa at a point less than one-third of the distance from apex of first vein to that of the third. Yellow, the antennæ and palpi brown, upper side of thorax reddish yellow, opaque, thinly grayish pruinose. Wings hyaline, stigma very pale; base of second vein midway between base of third vein and apex of the auxiliary, auxiliary cross-vein about one-third of this distance before apex of auxiliary vein; third vein toward its apex strongly converging with the fourth, first section of the third vein much shorter than the small cross-vein, the latter scarcely shorter than the hind cross-vein; discal cell closed, second posterior cell about twice as long as the discal. Length 3 mm.

Plummers Island, Maryland. A specimen of each sex collected July 15 and 24, 1903, by Mr. W. V. Warner.

Type.—No. 11506, U. S. National Museum.

Tanypus arietinus, n. sp.

Near tenebrosus, but much smaller and wholly black except the whitish stems of the halteres and the brown legs. Body polished, mesonotum not vittate. Legs short-haired, tarsi only pubescent, the fourth

joint slender and slightly longer than the fifth. Wings hyaline, crossveins not darkened, first vein simple and terminating at four-fifths of the length of the wing. Length 2 to 2.75 mm.

Plattsburg, N. Y. Five males and 4 females bred from August 20 to September 1, 1905, by Dr. H. G. Dyar. *Type.*—No. 11507, U. S. National Museum.

Chironomus compes, n. sp.

Brownish black, the scutellum and halteres yellow, basal half of front femora and a broad band before apex of each middle and hind femur yellow, tibiæ and first joint of middle and hind tarsi except at each end, also broad bases of other tarsal joints, whitish. Mesonotum largely gray-pruinose, hind margin of each segment of the abdomen except the last one gray-pruinose, hairs of body yellowish, front tarsi not fringed with hairs, first joint of front tarsi about one and one-half times as long as its tibia. Wings hyaline, veins yellow, the small cross-vein pale brown. Length 5 mm.

Plummers Island, Maryland. Nine males and two females collected by Messrs. E. A. Schwarz, H. S. Barber, and W. V. Warner, May 10 and 20, August 26 and 28, and September 3. *Type.*—No. 11508, U. S. National Museum.

Chironomus fascipes, n. sp.

Head and antennæ yellow, mouth parts brown. Mesonotum yellow, gray-pruinose, and with three somewhat polished yellowish-brown vittæ, pleura and metanotum chiefly brown, scutellum yellow. Abdomen light yellow, the last three segments and the genitalia brown, gray-pruinose. Legs yellow, apices of front femora, a band beyond their middle, both ends of front tibiæ, and apices of joints of front tarsi, brown; front tarsi of male not fringed with hairs, the first joint only slightly longer than its tibia. Halteres yellow. Wings hyaline, the veins pale. Length 5 mm.

Riverton, New Jersey. A male specimen collected August 11 by Mr. C. W. Johnson.

Type.—No. 11509, U. S. National Museum.

Misgomyia, n. gen., Leptidæ.

Near Arthroceras, but the hind tibiæ two-spurred and the wings with only four posterior cells. Antennæ shorter than the head, the basal half broadly subconical, the remainder rather narrow, linear, annulate, the apex bearing a few short bristles. Eyes oval, not notched. Face bare. Proboscis short, fleshy, palpi large. Body and legs devoid of macrochæta, front tibiæ without spurs, the middle and hind tibiæ two-spurred, empodium and pulvilli pad-like. Third vein forked,

four posterior cells, three veins extend from the discal cell to the wing margin, anal cell narrowly open. Calypteres minute.

Type.—The following species:

Misgomyia obscura, n. sp.

Black, including the halteres; head and thorax grayish-pruinose. Wings hyaline, the stigma pale brown. Length nearly 3 mm.

Virginia, opposite Plummers Island, Maryland. A female specimen collected April 28, 1907, by Mr. W. L. McAtee. *Type.*—No. 11510, U. S. National Museum.

Scatophaga cerea, n. sp.

Yellow, the antennæ and all bristles black, the broad frontal vitta orange-yellow. Arista pubescent. Two bristles below each vibrissa, no others along the oral margin; one propleural bristle, one sternopleural, two or three mesopleural; sternopleura and mesopleura hairy, pteropleura bare. Scutellum bears four bristles. Femora without bristles except on the upper side; each tibia bears three or four besides those Wings gravish-hvaline, the cross-veins not clouded. at the apex. Length 4 mm.

Orange Mts., New Jersey. A female specimen collected in May by Mr. A. J. Weidt.

Type.—No. 11511, U. S. National Museum.

A male taken at the same time and place as the above female differs only in having the cheeks, face, and front, except the upper corners of the latter, black, and is evidently the opposite sex of the same species.

Omomyia hirsuta Coq.

This genus and species was founded on male specimens only (Can. Ent., March, 1907, page 76). The female is very dissimilar to the male, so much so that she would never be suspected of belonging to the same species. Instead of being very hairy she appears to be nearly glabrous, the hairs being short and sparse; the body is wholly black, the humeri being sometimes yellow; the scutellum is of the normal form, being wider than long. In the males these characters are variable, some of the smaller ones having the hairs almost as short and sparse as in the female, while the scutellum has the same form as in the female. The size is very variable in both sexes, the length ranging all the way from slightly over 2 mm. to 5 mm. Mr. H. S. Barber collected a fine series of this species at Hesperia, in the eastern end of the Mojave desert, California. Several pairs were captured in coitu. In both sexes the small cross-vein is at two-thirds of the length of the discal cell.

Rhagoletis grindeliæ, n. sp.

Distinguished by the wholly black scutellum and the markings on the wings. Black, the front deep brown, the face, antennæ, mouth parts, cheeks, halteres, tibiæ, tarsi, and apices of femora, yellow. Proboscis very slender, the labella longer than the proboscis proper. Mesonotum opaque, grayish pruinose, pleura highly polished, the abdomen somewhat polished. Wings hyaline, stigma yellow, before its apex with a brown spot which extends to the second vein, a second spot midway between this and apex of second vein, crossing the marginal cell; one at apex of second, third, and fourth veins, at middle of last section of third vein and of penultimate section of the fifth; small and hind cross-veins narrowly bordered with brown; small cross-vein at middle of discal cell; veins except the first vein bare. Length 3 mm.

Clarendon, Tex. Two males bred June 2, 1906, from flower heads of *Grindelia squarrosa nuda* by Mr. W. D. Pierce, the flower heads having been collected September 19, 1905.

Type.—No. 10035, U. S. National Museum.

Three additional specimens which were also bred from flower heads of this plant indicate that the markings on the wings are somewhat variable, the brown stigmal spot sometimes extending to the small cross-vein, or even crossing the discal cell, while some of the other brown spots are more extended than in the type specimen.

Mutiloptera, n. gen., Geomyzidæ.

Readily recognized by the unusually narrow wings, which are over six times as long as wide. Third joint of antennæ oval, the arista subbasal, sparsely short-plumose. Two pairs of vertical bristles, one pair of fronto-orbital, ocellars present, postvertical wanting. Face in profile strongly concave, vibrissæ present, a stouter bristle a short distance behind each, cheeks less than one-fifth as wide as the eye-Proboscis short, robust, labella terminal, height, occiput convex. palpi clavate, well-developed. Thorax bears three pairs of dorsocentral bristles, three supra-alar, two notopleural, one humeral, one sternopleural; scutellum with only one pair. Tibiæ without bristles except at the apices of the inner side of the middle and hind pairs. Wings strongly convex on the costa, the latter not spined, hind margin of wings strongly curved inward in the middle, extending along the hind edge of the anal cell, thence to the middle of the hind edge of the discal cell which it follows to its apex, then extends parallel with the fourth vein, finally curving forward to meet the costa at the tip of the third vein; first vein reaches the costa at a point less than half way from the humeral to the small cross-vein, auxiliary vein ends in the first before the apex of the latter; basal, anal, and discal cells present, the latter unusually narrow.

Type.—The following species:

Mutiloptera apicalis, n. sp.

Yellow, the abdomen black, halteres white. Wings hyaline, the apex brown, which color extends half way to the hind cross-vein, the latter not longer than the small cross-vein and clouded with brown. Length slightly over 2 mm.

Tower City, N. Dak. Two females collected June 19, 1906, by Mr. G. I. Reeves.

Type.—No. 11512, U. S. National Museum.

Pseudiastata, n. gen., Geomyzidæ.

Near Diastata, but the second basal cell is coalescent with the discal, the three pairs of fronto-orbital bristles are arranged in a single row on either side of the front, etc. Third joint of the antennæ subelliptical, the arista basal and almost bare. Two pairs of vertical bristles, the postvertical and ocellar bristles present. Face concave, vibrissæ well-developed, cheeks less than one-eighth as wide as the eye-height. Proboscis short, robust, labella terminal, palpi clavate, well-developed. Thorax bears one pair of acrostichal bristles, two dorsocentrals, three supra-alars, two notopleurals, one humeral, and two sternopleural, scutellum with two pairs of nearly an equal size. Front and hind tibiæ with a short but stout preapical bristle, the middle tibiæ with a transverse pair. Wings broad, anal angle well-developed, auxiliary vein terminating in the first near its base, apex of first vein opposite the small cross-vein, anal cell present.

Type.—The following species:

Pseudiastata nebulosa, n. sp.

Yellow, the abdomen brown. Front sparsely covered with short hairs. Mesonotum densely covered with short hairs, not arranged in rows. Wings hyaline, marked with six brown bands; of these the first extends from the apex of the first vein over the small cross-vein and stops at the middle of the discal cell; the second extends from the costa to the discal cell a short distance before its apex; the third extends from the costa to the third vein; the fourth covers the hind cross-vein; the fifth extends from the costa to the middle of the first posterior cell and at its costal end is connected with the sixth, which extends from the costa to the third vein a short distance before its tip. Length slightly over 3 mm.

Plummers Island, Maryland. A single specimen collected August 1, 1902, by Mr. H. S. Barber.

Type.—No. 11513, U. S. National Museum.