

TABLE OF THE NORTH AMERICAN SPECIES OF MEDETERUS, WITH DESCRIPTIONS OF THREE NEW FORMS.

BY M. C. VAN DUZEE,
Buffalo, N. Y.

Medeterus longinervis, new species.

Male; 2-2.2 mm. Face black; front brown. Antennæ black, third joint small; artista apical; lower orbital cilia whitish.

Thorax and abdomen black with green reflections; dorsum of thorax more brown with gray pollinose vittæ; the posterior depression reaches the middle of the mesonotum, where the acrostichal bristles end, they are in two rows with a slight copery vitta between them; one small black bristle above each fore coxa; scutellum with two pair of bristles, the outer pair half as long as the middle ones; hairs of abdomen and hypopygium white; hypopygial appendages brownish yellow.

Coxæ black, anterior pair with pale hairs on front surface and one small black bristle at tip. Femora blackish; tibiæ and tarsi yellowish brown, all their hairs white; middle tibiæ with a small black bristle at basal fourth and posterior pair with one near apical fourth. Joints of hind tarsi as 17-27-14-7-6.

Wings grayish, veins brown; last section of fifth vein 28, of cross-vein 9 fiftieths of a millimeter long.

Type, male, No. 1887, Calif. Acad. Sci., Taken by Edward P. Van Duzee, June 15, 1925, at Olney, Oregon. Two paratypes were taken at the same time and place and are also in the Academy collection.

Medeterus albosetosa, new species.

Male: Length 2 mm. Face and front gray with pollen, which covers the ground color. Antennæ black, the two basal joints more brown, third small, scarcely as long as wide, a little pointed in the middle; arista apical, orbital cilia whitish.

Thorax brown with gray pollen, which leaves narrow brown lines along the rows of bristles; prothorax with two large whitish bristles above each fore coxa; scutellum with two pair of large bristles. Abdomen and hypopygium black with white hair; hypopygial appendages yellowish brown.

Coxæ black, anterior pair nearly bare with black bristles at tips. Femora black with apical third yellow; tibiæ and tarsi yellow, the latter scarcely darker at tip; tibiæ without bristles; joints of fore tarsi as 19-17-10-5-5; of middle pair as 29-21-13-5-6; those of posterior pair as 11-31-12-8-5. Calypters, their cilia and the halteres yellow.

Wings grayish, veins yellow when seen against a dark background; last section of fifth vein 14, cross-vein 10 fiftieths of a millimeter long; venation normal.

Described from one male, taken at Galveston, Texas, in May, by F. J. Snow.

Type in the Kansas University collection.

***Medeterus ciliata*, new species.**

Male; length 3 mm. Face and front black, rather dull, with scarcely a trace of green color. Antennæ wholly black, small; lower orbital cilia brownish yellow.

Thorax and abdomen dark green, a little shining; pollen of thorax dark gray, almost brown; scutellum with two pair of bristles; prothorax with two or three small black bristles above each fore coxa; hairs of the abdomen and legs black; hypopygium and its appendages black.

Coxæ, femora, tibiæ and tarsi black, knees narrowly yellow; fore coxæ with short black hair; fore and middle femora below and posterior pair on anterior surface with long brown hair, some of these hairs being as long as width of femora. Joints of fore tarsi as 15-21-14-5-7; of middle tarsi as 33-17-10-8-5; those of posterior pair as 20-30-14-9-8. Calypters yellow with a black edge and brown cilia; knobs of halteres yellow, their stems brown.

Wings grayish, rather dark; last section of fifth vein 32, cross-vein 16 fiftieths of a millimeter long.

Described from one male taken at Niagara Falls, Ontario, July 17, 1921, by the author.

Type in the author's collection.

Table of North American species of Medeterus.

- 1 Scutellum with one pair of bristles, there may be a small pair of hairs outside of these. 2
Scutellum with two pair of bristles, the outer pair may be small. 12
- 2 Antennæ, proboscis and legs, including the fore coxæ, yellow, (Virginia). *novus* Van Duzee.
Antennæ, proboscis and more or less of the femora black. 3
- 3 Thorax with distinct vittæ. 4
Thorax without distinct vittæ. 10
- 4 Thorax with a median blue vitta, (New York).
obesus Van Duzee.
Thorax with a median brown stripe running its entire length. 5
- 5 Wings with a brown cloud at base of third vein. 6
Wings without a distinct cloud at base of third vein. 7
- 6 Tibiæ and tarsi yellow, (California). *cuneiformis* Van Duzee.
Tibiæ brownish; tarsi black with the base of the basitarsus yellowish, (California). Female of. *nitidiventris* Van Duzee.
- 7 Abdomen bluish with gray pollen; front in male produced into a four sided pyramid, (Washington).
petulcus Wheeler.
Abdomen shining black, or with green reflections. 8
- 8 Tibiæ and tarsi mostly yellow, (California).
similis Van Duzee.
Tibiæ and tarsi black, green or brown. 9
- 9 Last section of fifth vein only a little longer than the cross-vein, (California). *æqualis* Van Duzee.
Last section of fifth vein one and a half times as long as the cross-vein, (California). *nitidiventris* Van Duzee.
- 10 Last section of fifth vein only a little more than half as long as the cross-vein, (Alaska). *minima* Van Duzee.
Last section of fifth vein longer than the cross-vein. 11

- 11 Femora mostly yellow; mesonotum and abdomen light green.
(California).....*longinquus* Van Duzee.
Femora mostly black; mesonotum coppery; abdomen dark
green, (California).....*aeneus* Van Duzee.
Femora mostly black; mesonotum nearly opaque with gray
pollen, so as to appear gray, (California).
falcatus Van Duzee.
- 12 Bright metallic species.....13
Darker species, usually blackish, sometimes very dark
green.18
- 13 Anterior tarsi plain.....14
Fore tarsi modified, ornamented.....16
- 14 First joint of hind tarsi only a little shorter than the second;
length over 3 mm., (Guatemala). . .*planipes* Van Duzee.
Posterior tarsi with the second joint twice as long as first.. 15
- 15 Legs altogether black; second joint of hind tarsi more than
twice as long as first, (North America). . .*nigripes* Loew.
Legs wholly yellow; first and second joints of hind tarsi as
19 to 37, (Eastern).*aberrans* Wheeler.
- 16 Length 2 mm.; male with a lobe on the side of third joint of
fore tarsi, (New Jersey; Ontario). . . .*lobatus* Van Duzee
Length 3 mm.; fore tarsi otherwise formed.....17
- 17 Fore tarsi a little widened from base to tip of second joint;
third joint only a little narrowed at base, but suddenly
narrowed to a slender projection, to which the fourth
joint is attached; fourth and fifth joints slender, (Guate-
mala).*abruptus* Van Duzee.
Fore tarsi with the second and third joints very much com-
pressed and expanded on upper edge; fourth and fifth
joints minute, (Guatemala).*flavipes* Van Duzee
- 18 Bristles above fore coxæ black.19
Bristles above fore coxæ pale, white or yellowish.41
- 19 Second joint of hind tarsi more than twice as long as first.20
Second joint of fore tarsi twice or less than twice as long as
first...21
- 20 Legs altogether black, (North America). . .*nigripes* Loew.
Tibiæ largely yellow, (Eastern).*vittatus* Van Duzee.

- 21 Antennæ wholly black. 22
 Antennæ partly yellow. 30
- 22 Knobs of halteres blackish. 23
 Knobs of halteres yellowish. 24
- 23 Last section of fifth vein to cross-vein as 9 to 28, (Oregon)
longinervis Van Duzee, new species.
 Last section of fifth vein and cross-vein of about equal
 length, (Ontario). *halteralis* Van Duzee.
- 24 Second joint of hind tarsi slightly more than twice as long as
 first. 25
 Second joint of hind tarsi considerably less than twice as
 long as first. 26
- 25 Metallic blue in color, (Illinois). *cærulescens* Malloch.
 Black in color, (Eastern). *vitatus* Van Duzee.
- 26 Hairs of the abdomen black. 27
 Hairs on the abdomen pale. 29
- 27 Second joint of hind tarsi one and a fourth times as long as
 the first; last section of fifth vein over twice as long as the
 cross-vein, (Ontario; New York). . . *frontalis* Van Duzee.
 Second joint of hind tarsi one and a half times as long as
 first. 28
- 28 Last section of fifth vein only a little longer than the cross-
 vein, (California). *obscuripennis* Van Duzee.
 Last section of fifth vein twice as long as the cross-vein,
 (Ontario). *ciliata* Van Duzee, new species.
- 29 Second joint of hind tarsi nearly one and three-fourths times
 as long as first, (Alaska). *bicolor* Van Duzee.
 Second joint of hind tarsi about one and a third times as
 long as first, (Alaska). *parvus* Van Duzee.
- 30 Thorax with distinct gray vittæ. 31
 Thorax without distinct vittæ. 33
- 31 Dorsum of thorax with four gray vittæ (Idaho)
aldrichi Wheeler.
 Dorsum of thorax with a distinct gray stripe each side of the
 acrostichal bristles. 32
- 32 Last section of fifth vein one and a half times as long as the
 cross-vein, (Washington; Alaska). . . . *viduus* Wheeler. . .

- Last section of fifth vein scarcely longer than the cross-vein,
(Washington; Alaska). female of. *viduus* Wheeler..
- 33 Mesonotum with thick brown pollen. 34
Mesonotum with thin grayish pollen.. . . . 36
- 34 Fore coxæ almost bare, except a few black bristles at tip;
large species, (Ontario; New York).. . . .
emarginatus Van Duzee.
Fore coxæ with a row of hairs or bristles on outer anterior
edge. 35
- 35 Hypopygial lamellæ black, (Alaska) *viridifacies* Van Duzee.
Hypopygial lamellæ yellow, (Alberta) *trisetosus* Van Duzee.
- 36 Last section of fifth vein one and a half times long as the
cross vein. 37
Last section of fifth vein not but little longer than the
cross vein. 40
- 37 Cilia of the calypters black, (Illinois). . . *cærulescens* Malloch.
Cilia of the calypters pale. 38
- 38 Fore coxæ with black hair, (New Hampshire).
maurus Wheeler.
Fore coxæ with pale hairs. 39
- 39 Middle femora with yellowish bristles below; second joint
of hind tarsi one and three fourths times as long as the
first, (Alaska). *bicolor* Van Duzee.
Middle femora without yellowish bristles below; second joint
of hind tarsi one and a third times as long as first, (Alaska).
parvus Van Duzee.
- 40 Hypopygial lamellæ black; second joint of hind tarsi one
and three-fourths times as long as first; last section of
fifth vein in male three fourths, in female a little more
than the length of the cross-vein, (Oregon).
oregonensis Van Duzee.
Hypopygial lamellæ yellowish; second joint of hind tarsi one
and a half times as long as first; last section of fifth vein
and the cross-vein of nearly equal length, (Alberta). male
of. *trisetosus* Van Duzee.
- 41 Abdomen blue. 42
Abdomen bronze, green or black. 43

- 42 Dorsum of thorax with a yellowish vitta; antennæ wholly black, (Idaho). *aurivittatus* Wheeler.
Dorsum of thorax opaque with gray pollen; first two joints of antennæ yellow, (Washington). *cyanogaster* Wheeler.
- 43 Males and females. 44
Males only. 53
- 44 Thorax with distinct vittæ. 45
Thorax without distinct vittæ. 50
- 45 Last section of fifth vein only half as long as the cross-vein, (New Jersey). *princeps* Wheeler.
Last section of fifth vein as long or longer than the cross-vein. 46
- 46 Last section of fifth vein about the same length as the cross-vein. 47
Last section of fifth vein distinctly, although only a little longer than the cross-vein. 49
- 47 Legs and feet black; knobs of halteres infuscated, (New Jersey). *modestus* Van Duzee.
Tips of femora, tibiæ, base of tarsi and knobs of halteres yellow. 48
- 48 Tips of third and fourth veins close together, as is typical of the genus; rather large species, (California).
californiensis Wheeler.
Tips of third and fourth veins a little wider apart than usual, (North America). *veles* Loew.
- 49 Abdomen and pleuræ black; face opaque with brown pollen; thoracic vittæ very distinct; tips of third and fourth veins rather far apart, (North America). *veles* Loew.
Abdomen, pleuræ and face distinctly green; thoracic vittæ less distinct; tips of third and fourth veins close together as usual in the genus, (New York; New Jersey; Alaska).
distinctus Van Duzee.
- 50 Legs yellow; cross-vein with a stump vein at its center, (Wyoming). *appendiculatus* Wheeler.
Legs black, at least the femora largely black; cross-vein normal, without a stump vein. 51

- 51 Knobs of halteres infuscated, at least on one side, (New Jersey). *modestus* Van Duzee.
Knobs of halteres yellow. 52
- 52 Last section of fifth vein only half as long as the cross-vein, (California). *xerophilus* Wheeler. .
Last section of fifth vein a little longer than the cross-vein, (specimens in which the thoracic vittæ are obsolete), (North America). *veles* Loew.
Last section of fifth vein twice as long as the cross-vein, (New York; New Jersey; Alaska). . . *distinctus* Van Duzee
- 53 Posterior cross-vein with a stump vein near its center, (California). *xerophilus* Wheeler. .
Cross-vein normal, without a stump vein. 54
- 54 Posterior basitarsus narrowed at base below and with a small tooth on this narrowed portion. 55
Posterior basitarsus without a tooth below, not narrowed at base. 56
- 55 Small species, 2 mm.; third and fourth veins rather far apart at their tips for the genus, (North America).... .
veles Loew.
Larger species; 3 mm. or over; third and fourth veins with their tips close together as usual in the genus, (California).
californiensis Wheeler.
- 56 Last section of fifth vein only half as long as the cross-vein, (California). *xerophilus* Wheeler. .
Last section of fifth vein longer than the cross-vein, or equal to it in length. 57
- 57 Last section of fifth vein and the cross-vein of nearly equal length; knobs of halteres more or less infuscated, New Jersey). *modestus* Van Duzee...
Last section of fifth vein much longer than the cross-vein. 58
- 58 Length of last section of fifth vein to cross-vein as 14 to 10, (Texas). *albisetosa* Van Duzee, new species....
Last section of fifth vein twice as long as the cross-vein, (New York; New Jersey; Alaska). . . *distinctus* Van Duzee

