

NEW SPECIES AND RECORDS OF NEARCTIC
PSYCHODIDAE

(Diptera)

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Since the publication of a revision of North American Psychodidae (Quate, 1955), additional information on Nearctic psychodids has accumulated. To be able to incorporate this into the forthcoming catalogue of Nearctic Diptera, the unpublished data are presented at this time. Included are descriptions of three new species of *Telmatoscopus* and one of *Threticus* and new distributional records for other Nearctic psychodids.

This paper is in effect a supplement to my 1955 revision, and to understand the relationships of the new species to previously described ones, the reader is referred to that earlier study. New distributional data for known species are given where the range has been extended to U.S. states not listed in that revision. Abbreviated bibliographic citation only is given to the complete references given in 1955. In the case of generic reassignments, the reader is referred to Quate (1959) for details on the classification of the Psychodini.

Mr. W. E. Snow and Dr. R. H. Jones have provided interesting material, and their efforts and interest in collecting psychodids are appreciated. I also thank other collectors, listed with the collection data, for loans or gifts of specimens.

TRICHOMYIA NUDA (Dyar). Quate, 1955:119.

TENNESSEE: Morgan Creek, Kentucky Reserve, Decatur County, VII-7-54 (W. E. Snow); Sugar Tree, Decatur County, V-26-55, tree hole (Snow).

TRICHOMYIA WIRTHI Quate. Quate, 1955:119.

TENNESSEE: Edgemoor, Anderson County, VII-28-55 (Snow).

PERICOMA SCOTIAE (Curran). Quate, 1955:127.

COLORADO: Grand Lake, Grand County, VI-2-32 (H. G. Dyar); Steamboat Springs, 12 mi. S., Routt County, VII-24-55 (Quate).

PERICOMA LASSENICA LASSENICA Quate. Quate, 1955:130.

COLORADO: Steamboat Springs, 12 mi. S., Routt County, VII-23-55 (Quate).

PERICOMA KINCAIDI Quate. Quate, 1955:141.

COLORADO: Steamboat Springs, 12 mi. S., Routt County, VII-24-55 (Quate). IDAHO: Bear Lake, Bear Lake County, VI-25-48 (D.

G. Denning). ONTARIO: Black Ash Creek, Collingwood Township, V-23-55 (F. P. Ide).

PERICOMA SICULA Quate. Quate, 1955:145.

CALIFORNIA: Mt. Lassen, 3 mi. E., Lassen County, VII-8-52 (J. W. MacSwain).

TELMATOSCOPIUS VARITARSIS (Curran). Quate, 1955:161.

MASSACHUSETTS: Holliston, Middlesex County, VI-21 (N. Banks).

Telmatoscopus latipenis Quate, new species

(Figs. 1 a-j)

Male.—Species similar to *quadripunctatus*; antenna with long scape, first flagellar segments with enlarged node; head and prothorax without sensory organs; wing with dark spots at apices of veins, other markings not discernible (pinned specimens unavailable); base of aedeagus very broad. *Head*: eyes separated by distance equal to nearly four facets, interocular suture convex with posterior spur at midline; frons with hairs arranged in rectangular patch on anterior part and band extending posteriorly nearly to suture; palpus about one-quarter as long as antenna, ratio of segments 5:6:6:10. Antenna with 16 segments, as figured. *Wing* narrow, three times as long as wide; membrane without infuscations; venation as figured. Sternite two of abdomen a narrow, strap-like sclerite. *Genitalia* as figured.

Measurements: antenna 1.4 mm.; wing length 1.9 mm.; wing width 0.6 mm.

Female.—Unknown.

Pupa.—Respiratory horn rather short, dark brown, surface reticulate, inner chamber expanded distally; double row of pits interrupted near center. Details of ornamentation on abdomen as figured.

Holotype male, MADISON, DANE COUNTY, WISCONSIN, May 22, 1954, adult reared from pupa (R. H. Jones), deposited in the U.S. National Museum. Male paratype, same data.

T. latipenis would key out to *varitarsis* in my key (Quate, 1955:158) but can be distinguished from that species by the unusually broad aedeagus, the enlarged first flagellar node of the antenna and the medial fork being well basad of the level of the radial rather than near the same level as in *varitarsis*.

Telmatoscopus subtilis Quate, new species

(Figs. 1 k-o)

Male.—Species similar to *nebraskensis*; antenna with long scape, basal flagellar segments with short internodes; head and prothorax without sensory organs; wings apparently unmarked (pinned specimens not available). *Head*: eyes separated by distance equal to two and one-half facets, interocular suture convex; frons with spatulate hairs arranged in rectangular patch on anterior part and band extending posteriorly nearly to suture; palpus about one-third as long as antenna, ratio of segments 7:10:10:17. Antenna with

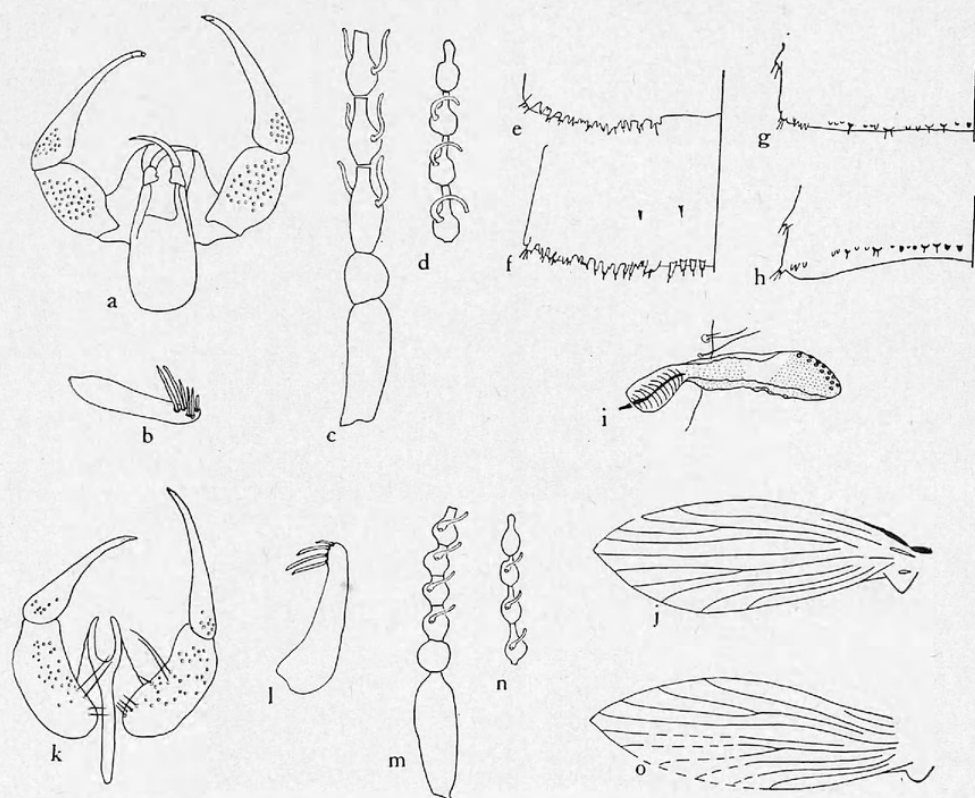
16 segments, as figured. *Wing* narrow, three times as long as wide; membrane lightly infuscated in costal and anal cells; venation as figured. Sternite two of abdomen a narrow, strap-like sclerite. *Genitalia* as figured, aedeagus Y-shaped.

Measurements: antenna 1.4 mm.; wing length 2.4 mm.; wing width 0.8 mm.

Female.—Unknown.

Holotype male, TAJIQUE, TORRANCE COUNTY, NEW MEXICO, June 28, 1947 (R. H. Beamer), deposited in the University of Kansas collection.

This species would key out to *T. quadripunctatus* in my key (Quate, 1955:158) but can be separated by the quadrate appearance of the basal flagellar segments, different shape of the male aedeagus and longer, more slender dististyle. It is most closely related to *nebraskensis* Quate (1955:163) but is separable from that species in that R_5 ends beyond the wing apex and the male



EXPLANATION OF FIGURES

Fig. 1, *a - j*, *Telmatoscopus latipenis* Quate, *a*, male genitalia, dorsal; *b*, male surstyle; *c*, base of male antenna; *d*, tip of male antenna; *e*, pupa, sternite four; *f*, pupa, sternite five; *g*, pupa, tergite four; *h*, pupa, tergite five; *i*, pupa, respiratory horn; *j*, wing. *k - o*, *Telmatoscopus subtilis* Quate. *k*, male genitalia, dorsal; *l*, male surstyle; *m*, base of male antenna; *n*, tip of male antenna; *o*, wing.

aedeagus has a longer basal stem and hence shorter arms than in *nebraskensis*.

TELMATOSCOPIUS NEBRASKENSIS Quate. Quate, 1955:163.

WISCONSIN: Madison, Dane County, V-22-54 (R. H. Jones).

TELMATOSCOPIUS PATIBULUS Quate. Quate, 1955:167.

MISSISSIPPI: Tishomingo, Tishomingo County, VI-2-56 (Snow).

TELMATOSCOPIUS FURCATUS (Kincaid). Quate, 1955:169.

WISCONSIN: Dane County, VI-11-53 (L. Limpel); Washburn County, VIII-8-50, light trap (R. H. Jones). KANSAS: Manhattan, Riley County, VI-8-32 (C. W. Sabrosky). COLORADO: Estes Park, Larimer County, VIII-11-52 (R. R. Dreisbach). OREGON: Hood River, Hood River County, VI-19-17 (F. R. Cole).

TELMATOSCOPIUS SUPERBUS (Banks). Quate, 1955:183.

TENNESSEE: Tusculum College, Greene County, V-2-46, light trap. NEBRASKA: Lincoln, Lancaster County, VI-30-54, larva *ex* maple tree hole (Quate and E. W. Hamilton). KANSAS: Lawrence, Douglas County, light trap (A. R. Barr).

Telmatoscopus macdonaldi Quate, new species

(Figs. 2 *a-i*)

Male.—Species similar to *superbus*; head and prothorax without sensory organs; apparently vestiture light in color, wings with dark spots at apices of veins (pinned specimens unavailable); dististyle of male genitalia sigmoid-shaped. *Head*: eyes separated by distance equal to about two facets; interocular suture nearly straight; frons with hairs arranged as triangular patch on anterior part and narrow band extending posteriorly to suture; palpus about three-fifths as long as antenna, ratio of segments 6:12:11:15. Antenna with 16 segments, as figured.

Measurements: antenna 1.3 mm.; wing length 2.2 mm.; wing width 0.8 mm.

Female.—Similar to male. Eyes separated by four facets; wing membrane lightly infuscated. Genitalia as figured.

Measurements: antenna 1.3 mm.; wing length 2.5 mm.; wing width 1.0 mm.

Pupa.—Respiratory horn light brown, i.e., of body color, inner chamber of uniform width; row of pits interrupted near center. Details of ornamentation on abdomen as figured.

Holotype male, SANTA MONICA CANYON, LOS ANGELES COUNTY, CALIFORNIA, October 30, 1954, adult reared from pupa *ex* maple tree hole (W. A. McDonald), deposited in the California Academy of Sciences. Allotype female (CAS) and paratype female, same data as holotype.

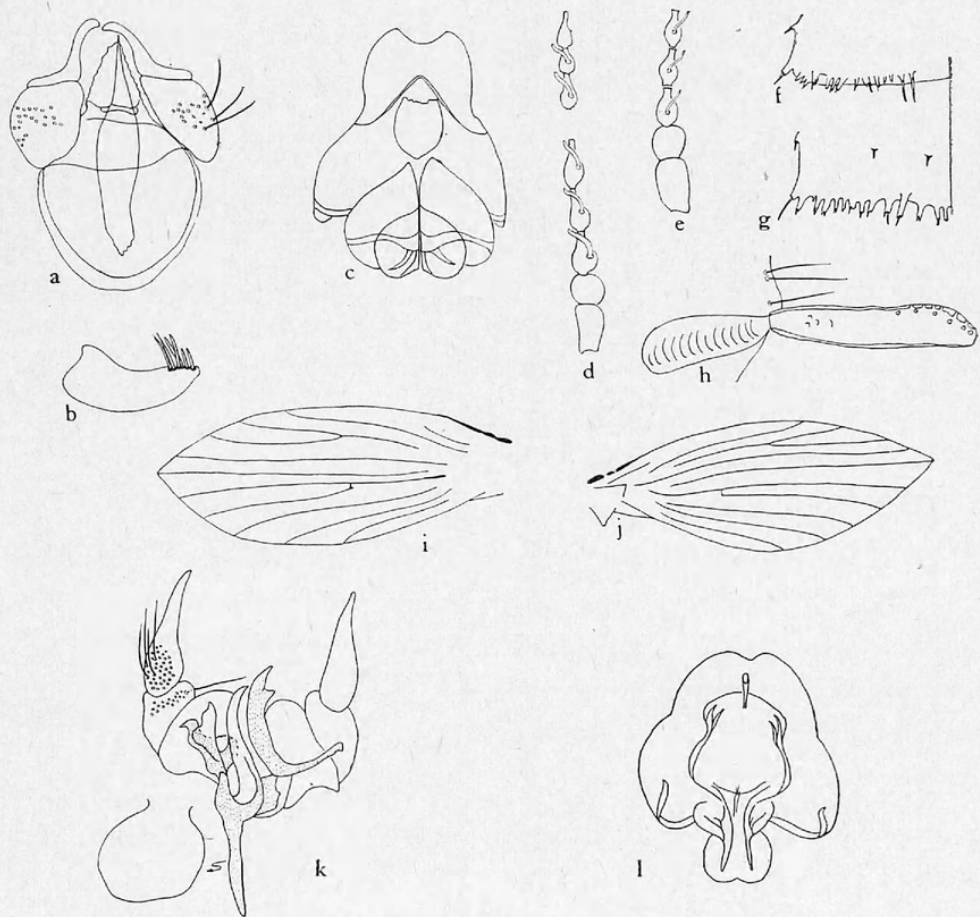
T. macdonaldi would key out to *superbus* in my key (Quate,

1955:158) but may be recognized by the male and female genitalia; the sigmoid dististyle of the male and the lack of tennis racquet-shaped structure on the face of the female subgenital plate (as in *superbus*) being the most obvious recognition characters. Otherwise, the two species are similar and hard to separate.

This species is named in honor of Dr. W. A. McDonald, who collected the types and has made other interesting psychodid collections in California.

PSYCHODA SETIGERA Tonnoir. Quate, 1955:202.

TENNESSEE: Decatur, Meigs County, V-16-56, oak tree hole (Snow).



EXPLANATION OF FIGURES

Fig. 2, a - i, *Telmatoscopus macdonaldi* Quate. a, male genitalia, dorsal; b, male surstyle; c, female genitalia; d, base and tip of male antenna; e, base of female antenna; f, pupa, sternite four; g, pupa, sternite five; h, pupa, respiratory horn; i, wing. j - l, *Threticus bicolor* (Banks). j, wing; k, male genitalia, dorsal; l, female genitalia.

PSYCHODA MINUTA Banks. Quate, 1955:203.

TEXAS: Kerrville, Kerr County, XI-53 (L. J. Bottimer).

PSYCHODA PUSILLA Tonnoir. Quate, 1955:206.

OREGON: Hood River, Hood River County, VII-9-17 (F. R. Cole). WASHINGTON: Endicott, Whitman County, VII-12-56; Oaksdale, Whitman County, VI-13-56; Pullman, Whitman County, VII-18-56; Anatone, Asotin County, VI-30-56. All specimens reared from cow dung, except one from pig dung.

PSYCHODA RAROTONGENSIS Satchell. Quate, 1955:208.

GEORGIA: Savannah, XI-3-55, "privy trap" (H. R. Dodge).

PSYCHODA TRINODULOSA Tonnoir. Quate, 1955:208

WISCONSIN: Madison, Dane County, IV-29-54, light trap (R. J. Dicke).

PHILOSEPEDON INTERDICTA (Dyar). Quate, 1955:227, 1959:449.

WISCONSIN: Madison, Dane County, XI-29-53, *ex* slime on dead oak tree.

THRETICUS JONESI (Quate). Quate, 1955:231; 1959:450.

MISSISSIPPI: Tishomingo, Tishomingo County, VI-2-56 (Snow).

TENNESSEE: Sugar Tree, Decatur County, VII-7-54, tree hole (Snow).

THRETICUS BICOLOR (Banks). Quate, 1955:233; 1959:450.

NEBRASKA: Morse Bluff, Saunders County, VI-(5, 10, 11)-57 (Quate); same, VI-14-55 (W. F. Rapp, Jr.).

The illustration of the male genitalia by Quate (1955, fig. 82a) is incomplete, and a more accurate illustration is given here (fig. 2k). In the male specimen drawn previously a sclerotized rod adjacent to the main shaft of the aedeagus apparently was lost in the dissection, and the new figure shows the complex aedeagus with the full complement of parts.

The females of the Nebraska specimens differ from those in the eastern U.S. by the absence of a pair of horn-like structures distad of the spermatheca. A new figure (fig. 2l) of the female genitalia is given here based on the specimens from Nebraska.

The above specimens were collected in sedges growing in a moist, shady area at the base of a bluff where clear water seepage kept the ground wet and muddy. *Telmatoscopus furcatus* (Kincaid) was collected at the same place in association with *bicolor*. Immature stages of *furcatus* were strained from the

mud, but none definitely associable with adults of *bicolor* were found.

MARUINA LANCEOLATA (Kincaid). Quate, 1955:239.

COLORADO: Steamboat Springs, 12 miles S., Routt County, VII-24-55 (Quate).

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A NEW SPECIES OF ANEFLOMORPHA CASEY ASSOCIATED WITH CITRUS IN ARIZONA

(Coleoptera: Cerambycidae)

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The genus *Aneflomorpha* Casey, as currently defined, comprises nineteen described species, sixteen from the United States and three from northern Mexico. The larvae are twig borers and girdlers in broad-leaved trees. Those of *A. subpubescens* (LeConte) attack and destroy young oak and chestnut seedlings and sprouts, and *A. lineare* (LeConte) girdles twigs of oak (Craighead, 1923). The adults are nocturnally active and are frequently attracted to light.

The following species, because of its occurrence on citrus in Arizona, may have some economic significance. The author is indebted to Dr. P. D. Gerhardt, University of Arizona, and Dr. E. G. Linsley, University of California, Berkeley, for the opportunity of describing this species, and to the latter also for the use of his manuscript key to the species of *Aneflomorpha*.

Aneflomorpha citrana Chemsak, new species

Male.—Form elongate, slender; integument uniformly dark brownish testaceous; pubescence moderately dense, fairly short, subrecumbent and suberect. *Head*: coarsely, densely, subconfluently punctate on vertex and between eyes, densely pubescent; antennae exceeding elytral apices by more than one segment, segments three to six spinose at apices, ciliate internally, spine of third segment longer than second segment, spines on segments four to six rapidly decreasing in length, sixth very short, segments three to nine carinate above, eleventh segment appendiculate, scape coarsely confluent punctate. *Pronotum*: longer than broad, sides broadly rounded, surface coarsely confluent punctate, faint traces of an irregular dorsal callus evident, moder-



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