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A REVIEW OF THE NORTH AMERICAN SPECIES OF THE GENUS
OTITES LATREILLE, WITH DESCRIPTIONS OF TWO NEW SPECIES
(DIPTERA: OTITIDAE)

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In 1961 (Steyskal, 1961), I placed the genus *Otites* in a key to the North American genera of Otitidae and indicated the synonymy of the genus *Ortalimyia*. Bibliography and synonymy of the hitherto known species of our area will be found in the *Catalog of the Diptera of America North of Mexico* (Stone *et al.*, 1965). The only previously published key to our species was by Hendel (1911, as *Ortalis*), wherein were included *Ceroxys latiusculus* (Loew) and the four species now known as *Otites bimaculatus* (Hendel), *O. erythrocephala* (Hendel), *O. pyrrhocephala* (Loew), and *O. stigma* (Hendel). The present treatment excludes *Ceroxys* but includes *O. snowi* (Cresson) and two new species here described as *O. erythrosceles* and *O. michiganus*, making a total of seven species.

The species form two rather distinct groups based on the width of the fronto-orbital pruinosity and the nature of the closure of the anal cell of the wing, as set forth in the following key. However, *O. stigma* (Hendel), while referable to the second group, shows characters indicating rapprochement to the first group.

The generic name, although not found in large Greek lexicons, is of a form that corresponds to a rather large class of Greek nouns ending in *-ites* (ποιητής, αὐλητής, πολίτης). As these words are all of masculine gender, it seems reasonable, in the absence of other decisive evidence, to treat *Otites* as masculine.

KEY TO THE NORTH AMERICAN SPECIES OF *OTITES* LATREILLE

- 1 (6) Frontal orbits broadly white pruinose, pruinosity surrounding several hairs for whole length of front; scutellum bare or hairy on disc; mesonotum nearly shining to heavily pruinose; anal cell with small point in lower corner extending slightly farther apicad than median arcuation of anal crossvein; legs largely black.
- 2 (3) Disc of scutellum with many hairs, especially toward base; legs with only knees reddish; wings with distinct subbasal brown band

- from tip of costal cell to base of discal cell and also some brownish coloration about end of 1st vein; apical wing spot confined to tip of 2nd vein; mesonotum moderately and evenly grayish pruinose *O. bimaculatus* (Hendel)
- 3 (2) Disc of scutellum usually bare, if with several hairs, wing pattern different; legs with knees and mid-basitarsus reddish.
- 4 (5) Wings hyaline, marked as in *O. bimaculatus*, but lower part of apical spot rather diffuse and extending into area about tip of 3rd vein; denser pruinosity of mesonotum (viewed from rear) usually concentrated into 3 longitudinal strips in presutural area *O. michiganus*, n. sp.
- 5 (4) Wings whitish, subbasal and apical markings very faint or lacking; mesonotum quite heavily whitish to ochreous pruinose *O. snowi* (Cresson)
- 6 (1) Front with very narrow white pruinose orbital margins not surrounding more than a few hairs (anteriorly); scutellum bare or with a few discal hairs; mesonotum largely shining; anal cell with minute lower point not extending farther apicad than does median arcuation of anal crossvein; legs sometimes largely reddish.
- 7 (8) Head with occiput, upper parafrontals, antennal grooves, and oral margin blackish; mesonotum lightly and diffusely pruinose; apical wing spot extending well into tip of marginal cell; subbasal wing mark hardly developed; pruinosity of frontal orbits anteriorly sometimes involving bases of a few hairs *O. stigma* (Hendel)
- 8 (7) Head nearly wholly reddish; mesonotum wholly subshining or with pruinose longitudinal stripes; apical wing spot various; subbasal mark sometimes developed; pruinosity of frontal orbits not involving bases of hairs.
- 9 (10) Legs nearly wholly reddish; mesonotum dully shining; scutellum with a few discal hairs; apical wing spot large and diffuse, extending well into tip of marginal cell; dorsum of abdomen shining *O. erythroscelus*, n. sp.
- 10 (9) Legs largely black; mesonotum subshining or with pruinose longitudinal stripes; scutellum bare; apical wing spot extending no more than slightly into tip of marginal cell; dorsum of abdomen shining or dull.
- 11 (12) Legs wholly black; mesonotum with 3 narrow longitudinal pruinose stripes; abdomen practically polished; subbasal wing mark distinct in tip of costal cell and across bases of 2nd and 3rd veins; apical wing spot extending slightly into tip of marginal cell *O. pyrrhocephala* (Loew)
- 12 (11) Knees and mid-basitarsus reddish; mesonotum subshining, without pruinosity; dorsum of abdomen dulled with very fine but dense shagreening; subbasal wing mark indistinct or lacking; apical spot confined to tips of submarginal and 1st posterior cells *O. erythrocephala* (Hendel)

First Group
Otites bimaculatus (Hendel)

In addition to the characters cited in the key, the male postabdomen is very similar to that figured by me (Steyskal, 1961, figure 4) for *Idana marginata* (Say), but the mesal side of the surstylus at its base bears three strong simple teeth spaced the diameter of their bases apart and the epiphallus (posterior to base of aedeagus) consists of a pair of short but rather narrow processes, the tips of which are turned sharply laterad and end in a sharp point.

The type of *O. bimaculatus* is from Southern Colorado; that of the synonym *carbona* Cresson from Carbon County, Wyoming, and that of *longicauda* Hendel from Wells, Elko Co., Nevada. I have examined material from the following localities: Colorado (Florissant, Teller Co.); Wyoming (Carbon Co., type of *carbona*; Lyman, Uintah Co.; Yellowstone Park); Utah (St. George, Washington Co.; Salt Lake City, Salt Lake Co.); Washington (Sprague, Lincoln Co.); Oregon (Wheeler Co.; Worden, Klamath Co.); Nevada (Red House Ranch, Eureka Co.; Wells, Elko Co.; Winnemucca, Humboldt Co.); California (Big Pine, Inyo Co.; Hallelujah Jct., Spauldings, and Susanville, Lassen Co.; Tule Lake district and Goose Lake, Modoc Co.; Fales Hot Springs, Mono Co.; 4 mi. west of Quincy, Plumas Co.); Manitoba (Baldur; Stony Mountain).

Otites michiganus, new species

Male. Length of wing, 5.5 - 6.0 mm.

Head largely orange or reddish, only proboscis, large areas on upper occiput next to eyes, ocellar triangle, upper parafrontals, and sometimes clypeus blackish. Third antennal segment obovate to a little reniform (dorsal margin concave), 1.6 - 1.75 times as long as wide, apical two-thirds to three-fourths often strongly infuscated; arista 2.2 times as long as third segment.

Thorax black. Mesonotum covered with rather thin grayish pruinosity when viewed from rear, with three longitudinal stripes of denser pruinosity; hairs black, rather short and reclinate.

Legs black, only knees narrowly and mid-basitarsus, except tip, reddish.

Wings slightly infumated, nearly hyaline, with brown markings as follows: Humeral cell and small basal part of costal cell; subbasal marking consisting of apical one-third of costal cell and contiguous area tapering and fading out into base of discal cell; antero-apical spot extending basad two-thirds of distance from wing tip to posterior crossvein (thereby well into tip of marginal cell), basal margin irregularly transverse, darkest anteriorly and fading out in first posterior cell; halter and squamae pale yellowish.

Abdomen shining black, with sparse and very fine microsetae, distinctly but lightly pruinose only close to base. Postabdomen very similar

to that of *O. bimaculatus*, but base of mesal side of surstylus with three closely spaced simple strong teeth and farther mesad a few strong setae; epiphallus (posterior to base of aedeagus) consisting of a closely adjacent pair of short, parallel-sided, obtusely tipped processes.

Female. Length of wing, 5.6 - 6.2 mm.; ovipositor with fine wavy crossbands of light pruinosity; otherwise similar to male.

Types. Holotype ♂, allotype ♀, and one pair of paratypes, Mackinaw County, Michigan, July 5, 1937 (R. R. Dreisbach), no. 57887 in U.S. Natl. Mus. Paratypes: ♂, same data as holotype, in C. W. Sabrosky collection; ♀ Mackinaw Co., Mich., July 4, 1936 (R. R. Dreisbach); ♀ same locality, Aug. 3, 1936 (R. R. Dreisbach); 3 ♂ Mason Co., Mich., June 14, 1941 (R. R. Dreisbach); 2 pairs, Edmonton, Alta. lot 301, 1932 (Owen Bryant); ♂ Medicine Hat, Alta., June 14, 1930 (F. S. Carr); one pair, "Colorado"; one pair, Platte Canyon, nr. Idlewild, Park Co., Colo., June 10, 1927 (J. M. Aldrich); ♂ Salina, Sevier Co., Utah, June 24, 1946 (G. F. Knowlton); 2 ♂ Kamiac Butte, Whitman Co., Wash., A. L. Melander collection; all in U.S. Natl. Mus.; 7 ♂ 13 ♀ Silver Lake, Oceana Co., Mich., in C. W. Sabrosky collection. The latter specimens include females that are somewhat teneral, with the wing markings rather faint, seemingly indicating recent emergence. A pair in U.S. Natl. Museum, from Burns, Harney Co., Oregon have blackish parafrontals in nearly whole frontal length, but otherwise seem to belong here.

Otites snowi (Cresson)

As this species is very similar to poorly colored specimens of the foregoing species, I examined the postabdomen of a male of *O. snowi* for comparison with the others in this group. There are five strong but rather short teeth mesobasally on the surstylus, rather closely spaced, and the epiphallus consists of a pair of short, acutely triangular processes.

The type of *O. snowi* is from Hamilton County, Kansas. I have examined material from the following localities: Kansas (Clark Co.; Hamilton Co., metatopotype); Nebraska (Mitchell, Scotts Bluff Co.); Utah (Hanksville, Wayne Co.); New Mexico (Las Cruces, Dona Ana Co.); s.w. Santa Fe, Santa Fe Co.; Socorro, Socorro Co.); California (Needles, San Bernardino Co.).

Second Group

Otites erythrocephala (Hendel)

This is apparently a rare species in our area. I have seen only a topotype from Pine Lake (San Bernardino Co.), California, and several specimens collected by A. L. Melander "Up Sta. Ana River [San Bernardino Co.], Calif."

Otites erythroscelus, new species

Male. Length of wing 4.2 - 5.2 mm.

Head largely orange or reddish, only proboscis, ocellar triangle, large areas on upper occiput next to eyes, and sometimes antennal grooves blackish. Antenna with third segment sometimes weakly infuscated apically; third segment obovate to somewhat reniform (dorsal margin concave), 1.4 - 1.6 times as long as broad; arista three times as long as third segment.

Thorax black, only lower edge of humerus, propleuron, and small area above fore coxa reddish. Mesonotum shining, covered with rather long, nearly erect black hairs.

Legs reddish, only apical half of fore tibia, apical four segments of middle tarsus, and nearly all of other tarsi dark brown to blackish.

Wings yellowish hyaline, only marking consisting of brown antero-apical spot extending basad two-thirds of distance from wing tip to posterior crossvein (thereby well into tip of marginal cell), basal margin irregularly transverse, darkest anteriorly and fading out in middle of first posterior cell.

Abdomen shining black, sometimes a little brownish near base.

Female. Length of wing, 4.7 - 5.7 mm.; otherwise similar to male.

Types. Holotype ♂ and allotype ♀ in copula on one pin, two pairs of paratypes, Wells, Elko Co., Nevada, June 24, 1927 (J. M. Aldrich); 2♂ 1♀ same locality, July 12, 1911 (J. M. Aldrich); one pair in copula, Bridgeport, Mono Co., California, July 18, 1936 (G. E. and R. M. Bohart); no. 57888 in U.S. Natl. Mus.

The relationships of this species may be gleaned from the key.

Otites pyrrhocephala (Loew)

Although *O. pyrrhocephala* (Loew) was the first species described from North America in 1876 and has often been mistakenly identified with other species, the only specimens I have seen are one each from Blairsden, Plumas Co., Calif.; Jamesburg, Monterey Co., Calif.; 4 mi. west of Quincy, Plumas Co., Calif.; and Ormsby Co., Nevada. The type is from "California;" I have not seen it.

Otites stigma (Hendel)

Cotypes of this species are from "Colo." and Erwin, Kingsbury Co., South Dakota. I have seen material from the following localities: Nebraska (Sheridan Co.); Minnesota (Crookston, Polk Co.); North Dakota (Bismarck, Burleigh Co.; Beach, Golden Valley Co.; Edgeley, LaMoure Co.; Grafton, Walsh Co.; Lake Metigoshe, Turtle Mountains, Bottineau Co.; Tower City, Cass Co.); Colorado ("Colo."; Platte Canyon, Park Co.); Wyoming (Lander, Fremont Co.; Laramie, Albany Co.; Lyman, Uintah Co.; Sheridan, Sheridan Co.); Washington (Kamias Butte, Whitman Co.); Manitoba (Aweme; Deloraine; Douglas Lake; Treesbank;

Winnipeg); Alberta (Lethbridge; Medicine Hat; St. Paul); Saskatchewan (Abernethy; Bestville; Dundurn; Indian Head; Pheasant Creek; Radisson; Rutland).

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We note with regret that the Brooklyn Entomological Society has suspended publication of the *Bulletin* "indefinitely" after issuing the volumes for 1964-65 in June, 1966. The historic *Bulletin* has been a major force in American entomology for eighty-seven years, and all those interested in the history of our subject will lament its absence. We hope that the Society will soon resuscitate the *Bulletin*, and continue a tradition that should not be allowed to end.

R.S.W.