

AN UNDESCRIBED AMERICAN CEPHENEMYIA

BY CHARLES H. T. TOWNSEND

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Cephenemyia jellisoni new species

Length, 14 mm. One male, Girds Point Lookout, Ravalli County, Montana, about 7700 feet, August, 1938 (William L. Jellison). Holotype in U.S.N.M.

Male vertex almost $\frac{1}{3}$ head width. Pile of head pale yellowish, with blackish on outer side of parafrontalia and on most of parafacialia. Same yellowish pile on thorax, with black band between wing bases and some black interspersed on mesopleura. Abdominal pile pale rufous, with short blackish on broad sides of second segment and long yellowish on sides and venter of first segment. Wings brown in 1R and on R6, less so in 2S, 3R and 6R, rest clear. Squamæ pale yellowish tinged. Femora with yellowish pile except broadly terminally.

This species has the black mesoscutal band of *pratti* and the wing infuscation of *phobifer*. Named in honor of the collector, who on April 28, 1933, also secured from *Odocoileus hemionus* in Ravalli county, Montana, the maggot III from which the following description has been made.

Maggot III—Length, 33 mm. Dorsal spines much larger than ventral, which are more numerous and more closely set. Fourteen segments including the pseudocephalon, which is bare. Antennæ each with pair of micro brownish circles on tip. Labial sclerites (mouthhooks) strongly curved back hook-like. Fourteenth segment much reduced and terminal ventrally, while the anal stigmata though pertaining thereto are set in the posterior face of the thirteenth and well above the body of the fourteenth. All spine tips are distinctly but only slightly reclinate with the sole exception of those on posterior margin of twelfth segment which are distinctly proclinate. The rows of spines are more or less irregular and are all in bands anteriorly on segments unless otherwise stated.

Upper or dorsal surface—Second segment, about 3 or 4 irregular rows of spines but the anterior row stouter by far than the rest; 3d, bare, midplate bearing some 3 dozen brown dots in 3 longitudinally disposed groups; 4th,

not the faintest sign of anterior spiracles, 2 to 3 irregular spine rows in doubly sinuate band with front row much stouter than others, a few micro dots behind spines each side and a few posteriorly on middle; 5th, 3 rows, hind row not so stout as others, more micro dots each side and some strung along middle on posterior edge, continuing thus to 12th segment; 6th, about 4 rows, hind row less stout; 7th, about 5 or 6 rows, 2 front rows occupying only middle $\frac{1}{3}$ with group at each end laterally, hind row or two less stout; 8th, about 5 rows and like preceding; 9th, nearly same as preceding but spines not quite so thickly placed; 10th, 3 or 4 irregular rows still less thickly placed; 11th, 2 or 3 rows still more irregular and scattered; 12th, a few widely scattered spines anteriorly but on posterior rim 1 to 3 rows of proclinate spines, intervening space extensively set with scattered brown dots; 13th, bare of spines but many brown dots, anal stigmata set in posterior face and with arcuate group of dots over them, plates characteristic and with 3 separated micro tubercles on outer upper margin of each; 14th, micro dotted on upper face, row of small spines posteriorly, below which is the swollen tip bearing about 4 rows of larger spines. Segments 6 to 10 show short transverse posterior row laterally joining posterior group of ventral side.

Under or ventral surface—Second segment, about 4 rows of very micro spines; 3d, bare; 4th, 2 rows on middle and increased to about 4 rows at sides, large spines only at lateral ends; 5th, about 4 rows increased laterally to 5 or 6 with large spines at ends; 6th, about 5 or 6 rows, band wider at ends and there bearing large spines; 7th, over front $\frac{1}{2}$ covered with about 7 rows of small spines, becoming large spines only at lateral ends; 8th to 10th, same in about 8 rows; 11th, same but spines more irregular; 12th, about 6 or 7 rows of scattered spines and many small dots; 13th, only 1 to 3 rows of scattered spines, rest all covered with dots; 14th, small and surmounted with spines as already described. Segments 7 to 12 show lateral groups of dots posteriorly, the number of dots becoming successively greater.

The ranges of the 3 nonpolar American species are as follows:

C. phobifer Clark—New York to northern Georgia and westward to the eastern half of the Dakotas (syns. *macrotis* Brauer on maggot III, *abdominalis* Aldrich on male fly). Somewhat over 5000 feet.

C. pratti Hunter—Western Texas to Durango and lowland California (syn. *mexicana* BB nomen nudum on maggot III). Ascending to about 7500 feet.

C. jellisoni TT—Western Montana to New Mexico, northern Arizona and highland California. About 8000 to over 12,000 feet, being lower altitudes in north and higher in south.

The writer was in error in 1917 (Jour. N. Y. Ent. Soc., XXV, 100, 102, 103) in extending the range of *pratti* to the Atlantic

seaboard. It now seems evident that the males sensed in swift flight by the writer on top of Elk Mountain in northern New Mexico in 1916 were *jellisoni*. Those sensed by him in 1892 on top of Humphreys Peak, Arizona, and in 1898 on top of Sierra Blanca, southern New Mexico, were probably the same species and not *pratti*.

These 3 species, now known in both fly and maggot III, may be separated in both by the following keys:

MALE FLIES

1. Black mesoscutal band absent, only the ends showing at wing bases; wings blackish near costal border *phobifer* C
- Black mesoscutal band entire 2
2. Wings black at extreme base only *pratti* Hntr
- Wings brown near costal border *jellisoni* TT

MAGGOTS III

1. Ventral spines somewhat larger than dorsal spines *phobifer* C
- Dorsal spines larger than ventral spines 2
2. Labial sclerites gently arcuate but not curved posteriorly *pratti* Hntr
- Labial sclerites strongly curved posteriorly and describing more than a semicircle *jellisoni* TT

NOTE: *C. jellisoni* was recorded by Jellison as *pratti* in 1935 (Pr. Helminth. Soc. Washington, II, 69).

The writer has not seen the maggot III of *phobifer*. But Brauer's *macrotis* maggot III can have been no other than *phobifer*, because of the respective ranges of the 3 species. Neither *pratti* nor *jellisoni* range as far east as the old Northwest Territory, which comprised Minnesota, the eastern Dakotas and western Iowa. Nor does *pratti* range that far north. *C. jellisoni* is the distinctively high altitude or Rocky Mountain species, while *pratti* is the lower southern or Sierra Madre species. The maggot III from wapiti determined by Brauer as *ulrichii* was probably *jellisoni*.



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