

## A DIMORPHIC SPECIES OF CEPHALONOMIA FROM TRINIDAD.

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***Cephalonomia urichi* sp. nov.**

Winged ♂. Length 1.6 mm. Pale honey-yellow; flagellum of antennæ piceous; tips of mandibles black, a rounded spot at base of first abdominal segment piceous, second segment near the middle with a transverse piceous band which is narrowed laterally and emarginate medially, third and fourth segment each with a similar band nearer the base, fifth segment with band narrowly indicated at the sides. Head one-third longer than wide, minutely scabrous, eyes one-third as long as the head, exclusive of mandibles; ocelli very distinct, in an equilateral triangle; head between antennæ with a short carina; antennæ 12-jointed, scape as long as the eye, pedicel one-half as long as the scape and nearly three times as long as thick, basal joints of flagellum quadrate-moniliform, apical ones longer, the penultimate joint one-third longer than thick, last joint twice as long as thick. Pro- and mesothorax and scutellum shining, faintly scabrous. Prothorax one-half longer than the mesonotum, narrowed anteriorly; mesonotum transverse, nearly twice as wide as long, without parapsidal furrows, but with a broad impressed longitudinal groove on each side next to tegulæ; scutellum large and distinct, oval and but slightly elevated, separated from the mesonotum by a narrow impressed line; at each side of the scutellum is a rounded impression which extends to the tegulæ which are large. Wings hyaline to almost the middle, distinctly infuscated beyond. Subcostal vein one-third the length of the wing ending in a large, pale brown stigma. Base of propodeum very minutely roughened, middle portion with coarser, but less deeply impressed reticulations, apically almost smooth; the lateral margins are weakly carinate and the posterior edge forms a sharply rounded edge, but there are no discal carinæ. Abdomen smooth, rather shining, about as long as the thorax. Legs rather stout, especially the anterior femora; the tibiæ not spinous, tarsal claws slender, simple.

Wingless ♂. This form seems to be identical, except that the

wings are not developed. The front wings are minute button-shaped discs smaller than the tegulæ, while the vestiges of the hind ones are whitish, elongate and longer than the diameter of the tegulæ. Some specimens, however, show no trace at all of wings.

♀ (Wingless.) Length 2 mm. Pale brownish-yellow, the last six antennal joints, the extreme base of the first abdominal segment and the tubular last segment of the abdomen, dark fuscous sometimes the sides of the abdomen are infuscated. Head fully one-half longer than wide, its sides parallel, hind angles rounded and the hind margin slightly excavated medially. Eyes one-fifth as long as the side of the head; ocelli indicated but imperfectly formed, the posterior ones only one-half as far from one another as from the anterior ones. Antennæ about as long as the head, 12-jointed; scape half as long as the width of the head; pedicel as long as the width of the eye, twice as long as thick; flagellum increasing in thickness from the base; the first four joints short, particularly the second and third which are strongly transverse; fifth and following, except the last, quadrate-moniliform, increasing in size. Thorax one-fourth longer than the head, slightly constricted at the hind angles of the prothorax and base of the propodeum, the latter widened at apex, with rectangular, slightly rounded angle, mesonotum not attaining the sides of the thorax, nearly twice as wide as long. Abdomen one-half longer than the thorax, broadest near the base and gradually tapering beyond the apex; last segment narrow, tubular, nearly three times as long as wide. Legs stout, but none of the tibiæ spinous.

Port of Spain, Trinidad, B. W. I.

Described from numerous specimens reared from a Psocid by F. W. Urich, and sent to me several years ago for identification.

This is a most remarkable species on account of the dimorphic males; in fact, so far as I am aware, it is the first time that such a condition has been found to exist in this or allied families. I took the wingless males at first for females, but from fresh material mounted in balsam, find that some of the apterous individuals are males with the thoracic structure antennæ and genital armature of the winged males. The remainder are females with the reduced thorax characteristic of the females of this genus.

Although the apterous males possess nothing but the most mi-

nute vestiges of wings, the structure of the thorax is not affected, suggesting that the loss of wings is not due to parasitism of any kind, but that it is a normal condition, and that the male sex of the species is truly dimorphic.

I have referred this species to the genus *Cephalonomia*, although the female is without wings and has large ocelli. Kieffer<sup>1</sup> refers all wingless females with ocelli, 12-jointed antennæ and non-spinous tibiæ to *Bethylus* (= *Perisemus*). In the present species, however, the portions of the thorax are fully developed as in the winged forms of *Cephalonomia*, which have ocelli, and the tarsal claws are simple as in *Cephalonomia*, not bifid as in *Bethylus*.

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### THE FEMALE OF *GLUTOPS SINGULARIS* BURGESS.

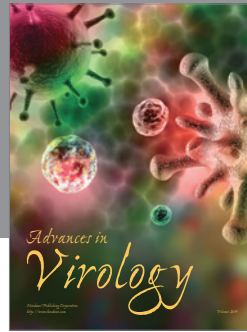
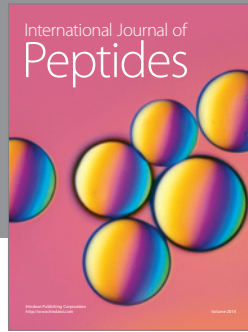
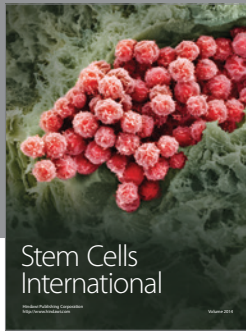
BY CHARLES W. JOHNSON,

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A female of this rare fly was taken by the writer along the "Red Cross Trail," on Mt. Monadnock, N. H., June 10, 1920, at an elevation of about 1,800 feet. It has not been described, and as it differs considerably from the male, seems to warrant a description.

The bluish-gray coloring of the entire insect is noticeably lighter and the hairs of the face, thorax and abdomen about one-third the length of those of the male, antennæ yellow, the hairs on the first and second joints about one-third the length of those on the male, outer half of the annuli black, and the hairs on the palpi much shorter. Front slightly wider than the width of each eye, flat, with numerous short, black hairs, except at the lower angles and above the base of the antennæ, ocelligerous tubercle prominent, ocelli shining black, occiput more protruding than in the male, and the hairs about one-third as long. The vertical angle is obsolete and the area below is not depressed as in the male, but protruding, with narrow depressions on each side extending toward the margin below the inner corners of the eyes. The rounded facial prominences are not as "conical" as in the male, and are separated by the width of the base of the antennæ. On each side of the antennæ extend deep furrows diverging towards the mouth, forming a rounded, elevated epistoma, with a narrow contracted area above

<sup>1</sup> Gen. Ins., fasc. 76, p. 16 (1908).



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