

SEVEN NEW SPECIES OF THE GENUS APHALARA
(HOMOPTERA: CHERMIDAE)

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Aphalara constricta n. sp.

Length to tip of forewing 3.-4. mm.; forewing 2.-3. mm.

Color: Greenish yellow.

Vertex two-thirds as broad as long, scarcely wider than pronotum; notch at end of median line slight, rounded. Foveal impressions very broad, shallow. Antennae as long as width of head.

Thorax robust, strongly arched. Forewing two and half times as long as broad. Veins yellow, conspicuously raised; membrane hyaline, coriaceous. Cu_1 scarcely arched.

Genitalia: Male genital plate much elongated. Proctiger shorter than forceps; lobes longer than plate, caudal two-thirds with margins subparallel in lateral aspect, apices rounded. Forceps long, slightly broader at apex than base; margins sinuate in lateral aspect; apices very broadly rounded. Oedeagus with anteriorly directed hook apically.

Female genitalia as long as rest of abdomen; both ventral and dorsal valves styliform for caudal half; dorsal valve more so than ventral. Dorsum of caudal half of dorsal valve finely serrate.

Male holotype, female allotype, and two female paratypes from Hereford, Ariz., July 28, 1907, with no collector label are in the H. Osborn collection, Ohio State University. One female paratype from American Falls, Ida., 6-25-30, and one female paratype from Murtauch, Ida., 6-21-30, both collected by D. M. DeLong are in the DeLong collection at Ohio State University.

Aphalara osborni n. sp.

Length to tip of forewing 2.75-3. mm.; forewing 2.-2.5 mm.

Color: Pale yellow to pale green; thorax marked with yellow.

Head usually strongly deflexed, a little over twice as broad as long. Vertex two-thirds as long as broad; foveal impressions small, shallow. Antennae longer than width of head.

General build much less robust than *constricta*. Thorax strongly arched, not unusually broad. Wings resembling *constricta* but differing as follows: more yellowish, less rugose; Cu_1 strongly arched, shorter.

Genitalia: Male genital plate very large. Proctiger as long as forceps; lobes as long as plate, widely attached at base; ventral margins narrowed from ventral hook to acute apices. Forceps broad at bases and apices; cephalic margins greatly concave midlength; caudal margins straight for basal half thence rounded cephalad to broad apices.

Female genital segment about as long as rest of abdomen. Dorsum of dorsal valve straight to within four-fifths of apex thence narrowed ventrally to a blunt apex. Ventral valve narrowed on dorsal margins for apical half.

Male holotype, female allotype, and two female paratypes collected by Dr. H. Osborn at Pueblo, Colo. date unknown, are in the H. Osborn collection. One male and two female paratypes collected by Dr. D. M. DeLong at Sardine Canyon, Ut., 7-22-33, are in the DeLong collection.

The writer takes great pleasure in naming this species in honor of Dr. Herbert Osborn who has made it possible for him to work on the chermids.

***Aphalara delongi* n. sp.**

Length to tip of forewing 3.-3.5 mm.; forewing 2.5-3 mm.

Color: Greenish yellow marked with straw yellow on thorax.

Head wider than pronotum, at least as wide as broadest part of thorax, two and a half times as broad as long. Vertex two-thirds as long as broad; notch at end of median line sharp, deep. Antennae one and a half times as long as width of head.

Thorax scarcely arched. Forewings two and a half times as long as broad, rugose, hyaline; veins yellow, raised; cell formed by long branch of cubitus, long, broad.

Genitalia: Male genital plate extremely large. Proctiger short; lobes shorter than plate, with acutely pointed apices. Forceps longer than proctiger, of equal width to apices; anterior-mesal process prominent, not concealed by forceps in lateral aspect.

Female genital segment shorter than rest of abdomen. Middle third of dorsal valve elevated. Ventral valve with caudal third of dorsal margins narrowed.

Male holotype from Northeast, Pa., 6-17-19, collected by D. M. DeLong. Female allotype from Charter Oak, Pa., 7-11-17, collected by H. B. Kirk. Twenty-one male and female paratypes from Charter Oak, Speechville, Harrisburg, Conewago, and Foxburg, Pa., collected during June and July by J. G. Sanders, H. B. Kirk, and D. M. DeLong. All types are in the DeLong collection.

The writer takes great pleasure in naming this species in honor of his teacher and advisor, Dr. Dwight M. DeLong.

***Aphalara furcata* n. sp.**

Length to tip of forewing 2.5-3. mm.; forewing 2.-2.5 mm.

Color: Vertex yellow; thorax yellowish green; abdomen green.

Head over twice as broad as long, as wide as thorax. Vertex two-thirds as long as broad; notch at end of median line shallow. Foveal impressions rather large, deep. Eyes very prominent. Antennae one and a half times as long as width of head.

Thorax not broad, moderately arched. Forewings slightly over twice as long as broad; longer in female than male. Cu_1 scarcely arched forming almost triangular marginal cell.

Genitalia: Male genital plate as long as broad in lateral aspect. Lobes of proctiger longer than plate, narrow for full length; apices broadly rounded. Forceps longer than proctiger; basal half straight, narrow; apical half curved cephalad, enlarged on cephalic margin.

Female genital segment shorter than rest of abdomen. Ventral valve much shorter than dorsal, narrow; apex with shallow notch.

Holotype male from Northeast, Pa., 6-17-19, collected by D. M. DeLong. Allotype female collected by J. G. Sanders at Allenhurst, Pa., 6-20-19. Fifty male and female paratypes collected in June and July by D. M. DeLong, J. G. Sanders, and J. N. Knull, at North Bloomfield, Duncannon, Harrisburg, Pt. Royal, Charter Oak, Allenhurst, and Speechville, Pa., and Battle Pt., Va. These are in the DeLong collection. One female paratype is in the H. Osborn collection from Sault Ste. Marie, Ontario, 1904, no collector label present.

***Aphalara bifida* n. sp.**

Length to tip of forewing 2.5-2.75 mm.; forewing 2. mm.

Color: Vertex yellow; thorax and abdomen greenish yellow; thorax with four more or less distinct longitudinal green stripes.

Resembling *furcata* but differing as follows: Vertex proportionally shorter; notch at end of median line shallower; foveal impressions less distinct. General build less robust. Thorax less arched. Forewings very flaveous; cubital cell longer, narrower. Dorsal valve of female genital segment shorter, straighter. Ventral valve with deeper notch at apex. Whole genital segment more thickly beset with small setae.

Male unknown.

Female holotype and two female paratypes from Miami, Fla., 1-24-34, collected by the author are in his collection.

***Aphalara hebecephala* n. sp.**

Length to tip of forewing 3. mm.; forewing 2.5 mm.

Color: Appearing pale green; praescutum straw yellow.

Head three times as broad as long, much wider than pronotum. Vertex over one-third as long as broad, scarcely produced beyond cephalic margins of eyes; foveal impressions large, shallow. Eyes very prominent. The antennae are missing on all specimens.

Thorax scarcely arched. Forewings scarcely twice as long as broad; Cu₁ greatly arched.

Genitalia: Male genital plate small. Proctiger long; lobes large, much longer than plate. Forceps short, bifid; basal portion short, straight; caudal lobe long, acuminate; anterior lobe short, straight, directed dorsad. Oedeagus with abrupt knob-like apex; small hook apically on anterior margin.

Female genitalia with dorsal valve shorter than ventral; apex bifid.

Described from one male and two females collected by C. J. Drake, 6-5-17, Cranberry Lake, N. Y. Male holotype, female allotype, and female paratype are in the H. Osborn collection.

***Aphalara sinuata* n. sp.**

Length to tip of forewing 2.5 mm.; forewing 2. mm.

Color: Solid greenish yellow.

Head less than twice as broad as long, as wide as thorax. Vertex flat; notch at end of median line shallow, rounded. Antennae missing.

Thorax strongly arched, not broad. Forewing over two and a half times as long as broad, transparent. Cell formed by long branch of cubitus broad.

Genitalia: Male genital plate very large, much longer than broad in lateral aspect. Proctiger short; lobes shorter than genital plate, margins sinuate, apical third gently narrowed. Forceps with basal two-thirds bulging caudad, thence constricted with apical third bulging again roundedly to caudal apical point; cephalic margins gently concave, rounded apically to the caudal apical point in lateral aspect.

Female unknown.

Described from one male collected by G. I. Reeve at Tower City, N. Dakota. Male holotype is in the H. Osborn collection.

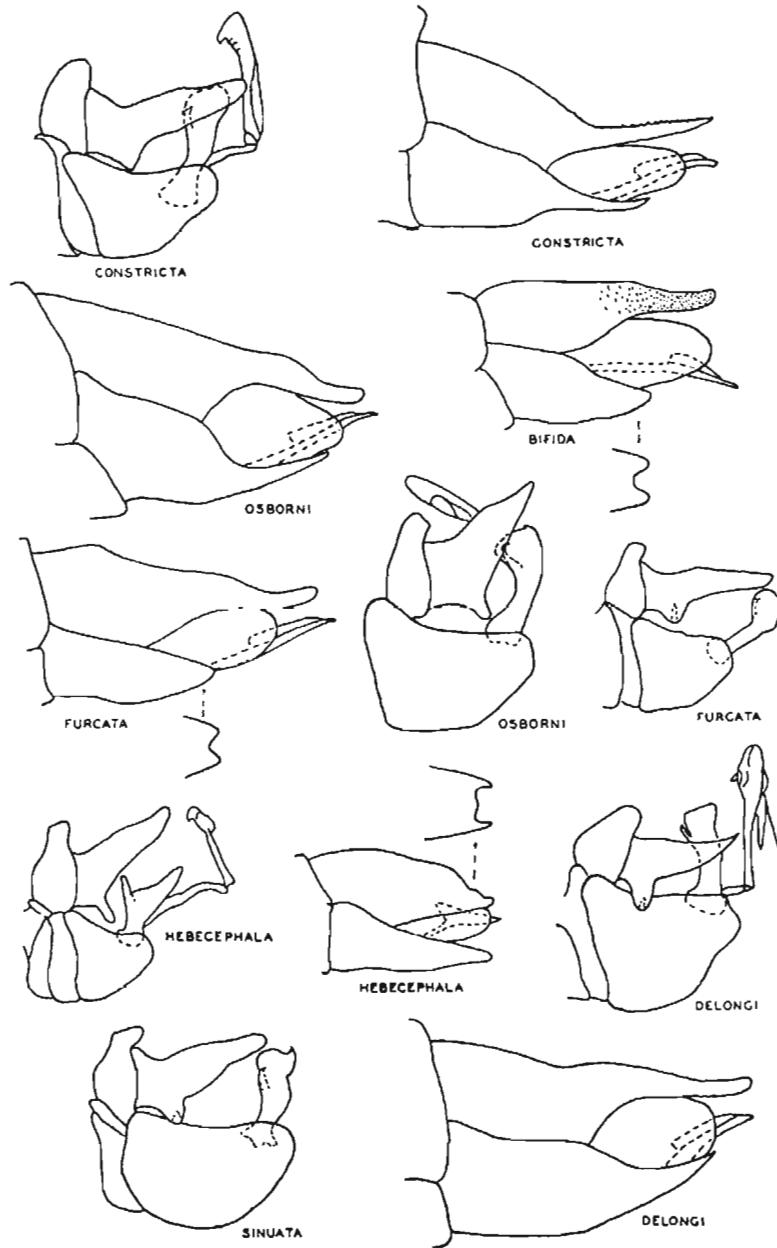


FIG. 1. Lateral View of Male and Female Genitalia.