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THE SERPHOID HYMENOPTERA OF THE FAMILY  
ROPRONIIDAE

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THE family Roproniidae (superfamily Serphoidea) contains only the genus *Ropronia*. In venation especially, *Ropronia* shows relationship with the genera *Helorus* and *Vanhornia*, placed in the families Heloridae and Vanhorniidae, respectively, but differs from these in several obvious characters of the head and abdomen which may justify its separation as a distinct family.

The general habitus is shown in figure 12, *a*. The specimen illustrated is a male. The female has a vomeriform subgenital plate and the ovipositor not exerted. The first abdominal segment forms a stalk for the remainder, which is compressed and projects upward from the stalk. This character, together with the 14-segmented antenna and the type of venation figured, easily distinguishes the Roproniidae from all other groups.

Specimens have been borrowed for study from all collections known to include members of the family. The location of individual specimens reported here is indicated in parentheses by the name of the owner for private collections, and the name of the city for institutional collections. All the types have been studied.

Genus **ROPRONIA** Provancher

*Ropronia* PROVANCHER, Additions et corrections à la faune hyménoptérologique de la Province de Québec, p. 154, 1886.

Type: *Ropronia pediculata* Provancher. Monobasic.

Three species of *Ropronia* are known from the Nearctic Region, and a fourth described below probably from China, but the origin of the specimens described is not known with any certainty.

KEY TO THE SPECIES OF ROPRONIA

- |   |                                     |
|---|-------------------------------------|
| 1. Head and thorax mostly or entirely ferruginous; postscutellum elevated as an acute pyramid; venation as in fig. 12, <i>b</i> ..... | 2. <i>californica</i> Ashmead       |
| Head and thorax black, sometimes marked with whitish; postscutellum convex, not conspicuously elevated.....                           | 2                                   |
| 2. Nervulus meeting medial vein basad of basal vein (fig. 12, <i>c</i> ); frons and top of head coarsely rugosopunctate.....          | 4. <i>pediculata</i> Provancher     |
| Nervulus meeting medial vein beyond basal vein (fig. 12, <i>a, d</i> ); frons and top of head with small punctures.....               | 3                                   |
| 3. Forewing with a large fuscous spot below stigma (fig. 12, <i>d</i> ).  | 3. <i>brevicornis</i> , new species |
| Forewing without a spot (fig. 12, <i>a</i> ).....   | 1. <i>garmani</i> Ashmead           |

I. ROPRONIA GARMANI Ashmead

FIGURE 12, *a*

*Ropronia* (!) *garmani* ASHMEAD, Proc. Ent. Soc. Washington, vol. 4, p. 132, 1899.

Type: ♂, Lexington, Ky. (Washington).

*Thorax black, sometimes marked with whitish; forewing without a dark spot; nervulus meeting the medial vein basad of the basal vein.*

Forewing about 5.4 mm. long; face with a median dorsal longitudinal tubercle; frons and top of head with rather close, sharp, medium-sized punctures; second flagellar segment about 2.2 as long as deep in the male, about 3.0 as long as deep in the female; mesoscutum with medium-sized punctures separated by about 1.0 their diameter; scutellum with a median semicircular raised area; venation as in figure 12, *a*; first tergite about 4.0 as long as deep; second tergite polished.

Color unusually variable. Darker specimens are as follows: Black. Male with the second abdominal segment ferruginous with its base and apex infuscate; female with the gaster ferruginous except that the subgenital plate and the base of the second segment are somewhat infuscate, or the gaster rarely colored as in the male. A common variation of this coloration is to have the forecoxa, apex of the fore femur, foretibia, basal part of middle tibia, and apices of middle and hind tibiae paler (light brown to whitish). Unusually pale specimens are as follows: Black or blackish. Head except above, mouth parts, antenna except above, margins of pronotum of varying widths, upper anterior part of mesopleurum, tegula, trochanters, front and middle coxae, tarsi, front and middle tibiae, front femur except basally, apical parts of middle and hind femora, and basal 0.3 and apical 0.1 of hind tibia whitish to pale brown; abdomen colored as in the darker forms. Paler specimens are usually females.

Specimens: Many males and females from the District of Columbia (Georgetown); Georgia (Yonah Mountain); Iowa (Floyd and Musca-

tine Counties); Maryland (Bowie and Takoma Park); New Hampshire (Durham); New York (Bemus Point, Farmingdale, Ithaca, and Poughkeepsie); Ohio (Put in Bay); Pennsylvania (High Spire, Mount

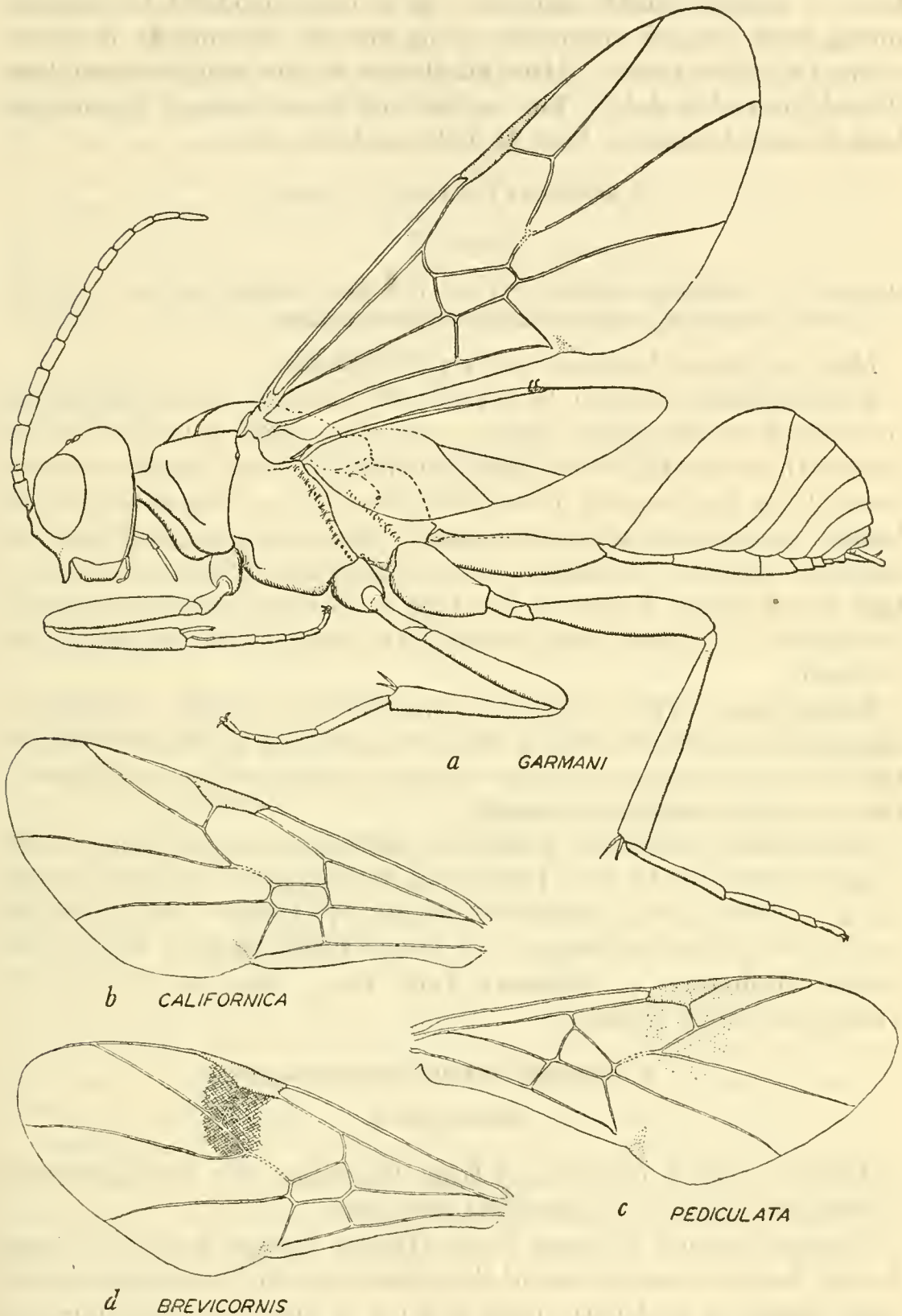


FIGURE 12.—*a*, *Ropronia garmani* Ashmead, male; *b*, venation in *Ropronia californica* Ashmead; *c*, venation in *Ropronia pediculata* Provancher; *d*, venation in *Ropronia brevicornis*, new species.

Holly Springs, Philadelphia, and West Chester); and Virginia (Falls Church, Great Falls, and Rosslyn).

This species appears confined to moist localities in the Transitional Zone of eastern North America. It is often moderately common among rank shaded vegetation along stream bottoms, as in places where *Impatiens* grows. Most adults are on the wing between June 20 and the end of July. The earliest and latest dates of capture are June 13 and August 31, both at Takoma Park, Md.

### 2. *ROPRONIA CALIFORNICA* Ashmead

#### FIGURE 12, b

*Ropronia* (!) *californica* ASHMEAD, Proc. Ent. Soc. Washington, vol. 4, p. 133, 1899. Type: ♂, southern California (Philadelphia).

*Head and thorax largely or entirely ferruginous.*

Forewing about 5.3 mm. long; face with a median dorsal longitudinal tubercle; frons irregularly rugose, with close small punctures; top of head with moderately close small punctures; second flagellar segment about 2.3 as long as deep in the male, about 3.0 as long as deep in the female; mesoscutum with rather small punctures separated by about 2.0 their diameter; scutellum with its median section elevated as a high pyramid that is about 1.2 as high as its basal diameter; venation as in figure 12, b; first tergite about 3.2 as long as deep; second tergite polished.

Ferruginous. Part or all of the thoracic sterna black. Sometimes, especially in males, the black thoracic markings are more extensive, the first tergite is entirely or partly black, and there is a black spot on the frons and enclosing the ocelli.

Specimens: ♀, Carrville, 2,400 to 2,500 feet, Trinity County, Calif., May 17, 1934, E. C. Van Dyke (San Francisco). ♂, Davis, Calif., April 6, 1936, R. M. Bohart (Townes). ♀, Davis, Calif., April 23, 1936, R. M. Bohart (Townes). ♀, Davis, Calif., May 1, 1936, R. M. Bohart (Bohart). ♂, Klamath Falls, Oreg., June 16, 1922, E. C. Van Dyke (San Francisco).

### 3. *ROPRONIA BREVICORNIS*, new species

#### FIGURE 12, d

*Forewing with a fuscous spot below the stigma (fig. 12, d); nervulus meeting the medial vein beyond the basal vein.*

Forewing about 3.9 mm. long; clypeus shorter and with larger foveae than in other species of the genus; face with a median vertical ridge extending its length; frons and top of head with medium-sized, rather close punctures, behind the ocelli with small, rather distant punctures; second flagellar segment of male about 1.6 as long as deep,

of female about 1.8 as long as deep; mesoscutum with medium sized punctures separated by about 0.8 their diameter; scutellum with a median semicircular raised area; venation as in figure 12, *d*; first tergite about 3.1 as long as deep; second tergite polished.

Black. Tarsi, front tibia, and apical part of front femur stramineous, the apex of the hind basitarsus and the second and following segments of the hind tarsus more or less infuscate; middle and hind tibiae often with an incomplete subbasal whitish band; forewing with a fuscous spot as indicated in figure 12, *d*; second and following tergites piceous.

Type: ♂, part of a series received by C. P. Clausen, October 1937, from C. R. Kellogg, Foochow, China (Washington, U. S. N. M. No. 18324). With the *Ropronia* was an adult and several cocoons of a *Perichlita* (Tenthredinidae) indicating that the *Ropronia* may have been reared from this as the host.

Paratypes: 9 ♂, 6 ♀ from the same source as the type (Washington and Townes).

#### 4. ROPRONIA PEDICULATA Provancher

FIGURE 12, *c*

*Ropronia pediculata* PROVANCHER, Additions et corrections à la faune hyménoptérologique de la Province de Québec, p. 154, 1886. Type: ♀, Ottawa, Ontario (Québec).

*Ropronia ashmeadii* Bradley, Ent. News, vol. 16, p. 117, 1905. Type: ♀, Larch Meadow, near Ithaca, N. Y. (Ithaca). New synonymy.

*Nervulus meeting the medial vein basad of the basal vein (fig. 12, c).*

Forewing about 5.0 mm. long; face with a median dorsal longitudinal tubercle; frons and top of head rugose, not distinctly punctate; second flagellar segment of female about 2.8 as long as deep; mesoscutum irregularly punctate with large punctures, anteromedially with an area of close fine punctures; scutellum with a median semicircular raised area (somewhat deformed in the type of *R. ashmeadii*); venation as in figure 12, *c*; first tergite about 2.9 as long as deep; second tergite weakly mat.

Black. Mandible except basally, front tibia, and front femur except basally dark ferruginous; fore wing with a large faintly infuscate spot as indicated in figure 12, *c*; second and following tergites ferruginous except that the basal part of the second is blackish.

Specimens: ♀, near Ithaca, N. Y., July 9, 1904 (Ithaca, type of *R. ashmeadii*). ♀, Point Pelee, Ontario, July 20 to 30, R. C. Osburn (Columbus). These specimens agree with notes made in 1941 on the venation and the sculpture of the head and thorax of the type of *R. pediculata*.