

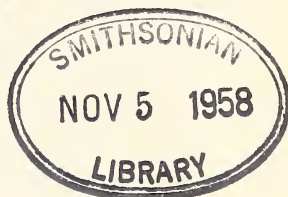
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A NEW PRIONONYX AND A KEY TO THE NORTH AMERICAN SPECIES (HYMENOPTERA: SPHECIDAE)

By R. M. BOHART, University of California, Davis

The genus *Priononyx* Dahlbom is sometimes treated as a subgenus of *Chlorion* Latreille but it appears to be sufficiently distinctive to warrant generic status. It differs from other Chlorionini in having the second submarginal cell of the forewing higher than broad (as in *Chlorion*) and in addition having three to six teeth on the inner margin of each tarsal claw.

The most useful publications dealing with our species of this genus are those of Fernald (1907) and Willink (1951). The latter is particularly valuable since it contains illustrations of male genitalia and other structural features. Five species have been recorded from America north of Mexico, one of which is the well-known black *P. atrata* (Lepeletier). A less common and undescribed species has been confused with it in collections. The holotype of the new species will be deposited in the California Academy of Sciences. Paratypes will go to the collections of the University of Kansas, University of California, Oregon State College, University of Arizona, Cornell University, U. S. National Museum, American Museum of Natural History, Academy of Natural Sciences at Philadelphia, and Museum of Comparative Zoology at Harvard, as well as the personal collection of R. R. Dreisbach.

***Priononyx subatrata*, n. sp.**

Male.—Black, mandible tip and claws partly reddish brown; wings dark brown and slightly violaceous. Pubescence of head and thorax thick, erect, black, and 2 to 4 times as long as mid-ocellus diameter; that of abdomen short, sparse, appressed, yellowish. Puncturation moderate and close on front of head and most of thorax, obscure toward vertex and on abdomen; punctures of scutum distinct and mostly one or more diameters apart, intervening spaces shiny; postscutellum shiny and distinctly punctured; legs sparsely punctured, finely shagreened, somewhat shiny; propodeum shagreened, indistinctly cross-striate above, more rough laterally. Antennal flagellum with basal 3 segments gradually increasing in length, II about as long as scape, III–V with complete, slender fossulae, VI with slender fossula on basal three-fifths (up to five-sixths on some paratypes); clypeus broadly excavated apically; least interocular distance about three-fourths distance at vertex. Scutellum distinctly two-humped. Sternites entire posteriorly;

aedeagus with an acute notch nearer apex than breadth of aedeagus at notch (farther from apex in *P. atrata*). Body length 16 mm., wing length 13 mm.

Female.—About as in male except as follows: flagellar segments without fossulae, I slender and 1.5 times as long as II, both together equal to interocular distance at posterior ocelli; puncturation and shagreening rather fine, median one-third of scutum shiny with scattered punctures. Fore-tarsal comb black, about as long as terminal tarsal segment. Body length 17–20 mm., wing length 15–17 mm.

Holotype male, Deep Springs, Inyo Co., California, July 17, 1953 (W. D. McClellan). *Paratypes*, 81 males, 26 females, June to September, from the following localities: CALIFORNIA: Deep Springs and 13 miles south of Olancho, Inyo Co. (W. D. McClellan, E. I. Schlinger, P. D. Hurd); Blythe, Mecca and Hopkins Well, Riverside Co. (J. C. Hall, M. Wasbauer, G. D. Marsh, P. D. Hurd); Imperial Co. (J. C. Bridwell); Borrego, San Diego Co. (P. D. Hurd); Gazelle, Siskiyou Co. (A. T. McClay). OREGON: Arlington (M. W. Sanderson). NEVADA: Pyramid Lake (R. H. Goodwin). ARIZONA: 8 miles south of Toltec (T. R. Haig), Florence (C. R. Biederman), 8 miles west of Eloy (T. R. Haig), Grand Canyon South Rim (M. A. Evans), Kaibab Forest (M. Wasbauer), Douglas (W. W. Jones, R. R. Dreisbach), San Simon and Willcox (R. R. Dreisbach). NEW MEXICO: Jemez Springs (J. Woodgate), Highrolls, 25 miles west of Tularosa (E. E. Kenaga), White Sands (R. H. Beamer), Las Cruces, Mesilla Park (C. N. Ainslee), Alamogordo, Luna Co. and Bernalillo Co. (R. R. Dreisbach), Friona and Rodeo (R. R. Dreisbach). UTAH: Salt Lake City (R. C. Shannon), Delta (G. F. Knowlton), Saltair (G. S. Lake). TEXAS: Valentine (L. A. Stephenson), Davis Mountains (L. D. Beamer), Cornudas (H. E. Evans), El Paso (J. C. Bradley), Marfa (Mitchell and Cushman), Brewster Co. (Mitchell and Cushman), Pecos, Big Bend National Park (B. J. Adelson). MEXICO: Chihuahua, Chih. (H. E. Evans); 13 miles south of Juarez (E. E. Gilbert, C. D. MacNeill).

The new species is obviously related to *atrata* but the male of *subatrata* has the fossula of flagellar segment VI slender and incomplete distally, and the aedeagus is notched nearer the apex. Both sexes have the scutum and raised scutellum somewhat polished and distinctly punctured. The female lacks the pale appressed facial pubescence of *atrata*.

These differences are incorporated in the following key. It

should be noted that the females of *pubidorsum* Costa and *thomae* (Fabricius) are very similar in appearance and have not been distinguished previously. The slightly different structure of the clypeus seems to be a separating character for material at hand.

KEY TO THE GENUS PRIONONYX IN AMERICA NORTH OF MEXICO

1. Antenna 13-segmented, some of the flagellar segments with conspicuous flattened areas (fossulae); abdomen without sting (males) 2
 Antenna 12-segmented, no flagellar segments with fossulae; abdomen with a sting ordinarily visible (females) 7
2. Abdomen black or brownish-black 3
 Abdomen variously marked with reddish 4
3. Flagellar segment VI with broad fossula extending entire length of segment; scutum dull, individual punctures obscured by shagreening; scutellum slightly raised but dull *atrata* (Lep.)
 Flagellar segment VI with narrow fossula not reaching distal end of segment; scutum partly polished, many individual punctures distinct; scutellum strongly raised, summit shiny *subatrata* Bohart
4. First flagellar segment much longer than third; scutum shiny in part and with numerous distinct punctures; free clypeal edge convex medially *ferruginea* (Fox)
 First flagellar segment shorter than third; scutum completely shagreened or striate; free clypeal edge concave medially 5
5. Sternite VI with a broadly U-shaped median emargination *pubidorsum* (Costa)
 Sternite VI entire medially 6
6. Scutellum low; wings lightly brown-stained .. *thomae* (Fab.)
 Scutellum gibbous; wings dark brown, violaceous *striata* Smith
7. Wings lightly brown-stained, at most; abdomen usually bright red 8
 Wings dark brown, violaceous; abdomen black or dark red 10
8. Clypeal free edge entire medially; leg bristles pale; wings water-clear *ferruginea* (Fox)
 Clypeal free edge notched medially; leg bristles black; wings somewhat stained. 9
9. Smooth dimpled area preceding clypeal notch much larger than median ocellus *pubidorsum* (Costa)

- Smooth dimpled area preceding clypeal notch smaller than median ocellus *thomae* (Fab.)
10. Clypeal bristles partly pale; scutum covered with strong longitudinal striae *striata* Smith
- Clypeal bristles black; scutum not strongly striate 11
11. Clypeus with silvery to golden appressed pubescence; scutum completely shagreened, dull; scutellum not especially raised nor shiny *atrata* (Lep.)
- Clypeus with black appressed pubescence; scutum somewhat smooth and distinctly punctured toward middle; scutellum gibbous, shiny *subatrata* Bohart

LITERATURE CITED

- Fernald, H. T.** 1907. The digger wasps of North America and the West Indies belonging to the subfamily Chlorioninae. Proc. U. S. Nat. Mus. 31: 291-423.
- Willink, A.** 1951. Las especies Argentinas y Chilenas de "Chlorionini." Acta Zool. Lilloana 11: 53-225.

Dolichopodidae Fly Notes: On July 26, 1957, I found flies of this family to be extremely abundant among the grasses and sedges bordering a small stream in Allen Canyon, Rich County, Utah. A pill box of specimens was sent to F. C. Harmston, who identifies them as follows: 38 *Hydrophorus magdalenae* Whlr. (which was presented by the thousands), 17 *H. sodalis* Whlr., 4 *Hercostomus unicolor* Lw., 3 *Sympycnus cuprinus* Whlr., 1 *Dolichopus adaequatus* Van. D., and 1 *Raphium effilatum* Whlr.

A small catch taken near Woodruff, also in Rich County, August 23, 1957, proved to be 3 *Scelus monstrosus* (O.S.), 1 *Dolichopus plumipes* (Scop.), and 1 *D. amnicola* M. and M., Mr. Harmston reported.—GEORGE F. KNOWLTON, Logan, Utah.