

HOST RELATIONSHIPS OF SOME SAPYGID WASPS. (HYMENOPTERA, SAPYGIDAE).

BY E. GORTON LINSLEY, University of California,
Berkeley, Calif.

Most sapygid wasps appear to be parasitic in the nests of megachilid bees, although *Polochrum repandum* Spin. and *P. fallax* (Gerst.) are parasites of *Xylocopa violacea* (Linn.) and *X. augusti* Lep., respectively (Fries, 1923). In Europe, Fries (1923, 1926) has recorded *Sapyga quinquepunctata* (Fab.) as parasitic on *Osmia aurulenta* (Panzer) and *O. fulviventris* (Panzer) (= *O. ventralis* Panz.), *Sapyga similis* (Fab.) on *O. nigriventris* (Zetterstedt) (= *corticalis* Müller), *O. maritima* Fries, and *O. fuciformis* Latr., and *Sapyga clavicornis* (Linn.) on *Chelostoma florissomnis* (Linn.). In North America, hosts of sapygids have been recorded as follows:

Species	Host	Area	Authority
<i>Eusapyga aciculata</i> Cress.	<i>Hoplitis</i> sp.	Calif.	Hicks, 1934
<i>Eusapyga proxima</i> Cress.	<i>Dianthidium pudicum</i> (Cress.)*	Colo.	Hicks, 1927
<i>Eusapyga rubripes</i> Cress.	<i>Dianthidium pudicum</i> (Cress.)*	Colo.	Hicks, 1934
<i>Eusapyga verticalis</i> Cress.	<i>Dianthidium consimile</i> (Ashm.)	Calif.	Hicks, 1934
<i>Sapyga aculeata</i> Cress.	<i>Hoplitis productus</i> (Cress.)	Calif.	Davidson, 1896
<i>Sapyga emarginata</i> Cress.	<i>Osmia hesperella</i> Ckll.	Colo.	Hicks, 1934
	<i>O. lignaria propinqua</i> Cress.	Colo.	Hicks, 1934
<i>Sapyga minor</i> Roberts	<i>Dianthidium consimile</i> (Ashm.)	Calif.	Hicks, 1934
	<i>Osmia</i> sp.	Colo.	Hicks, 1934
<i>Sapyga</i> sp.	<i>Dianthidium pudicum</i> (Cress.)*	Colo.	Hicks, 1934

* Probably *D. pudicum* subsp. *decorum* Timberlake.

To these records the following may be added from California:

Sapyga fulvicornis Cresson. Reared by J. W. MacSwain and the writer, from nests of *Megachile angularum* Ckll. and *Osmia pikei* Ckll. collected in Mineral King, Tulare County, by G. E. Bohart. Also from nests of *Osmia atrocyanea* Ckll. from Miami Ranger Station, Mariposa Co. Emergence dates in the laboratory ranged from February to June.

Sapyga aculeata Cresson. Reared from nests of *Hoplitis* sp. nr. *productus* (Cresson) in elderberry twigs collected by G. E. Bohart at Mineral King, and by the writer at Miami Ranger Station, Mariposa County. The host bee differs from both *H. productus* (Cresson) and *H. sambuci* (Titus) and according to C. D. Michener is apparently undescribed.

Sapyga sp. An undetermined and possibly new species of *Sapyga* (R. M. Bohart, *in litt.*) was reared from nests of *Ashmeadiella* sp.

collected by J. W. MacSwain and the writer at Mt. Diablo, Contra Costa Co. Although neither the host nor the parasite can be specifically identified at this time, the record is submitted as the first from the genus *Ashmeadiella*.

It may thus be seen that the species of *Sapyga* parasitize megachilid bees of the genera *Osmia*, *Hoplitis*, *Chelostoma*, *Ashmeadiella*, *Megachile* and *Dianthidium*, and *Eusapyga*, *Dianthidium*, and *Hoplitis*. Probably both generic lists will be increased when the biologies of our species are more fully known.

LITERATURE CITED.

- Davidson, A.** 1896. *Alcidamea producta* Cress. and its parasites. Ent. News, 7: 216-218, fig.
- Friese, H.** 1923. Die europäischen Bienen. De Gruyter & Co., Berlin.
1926. Die Bienen, Wespen, Grab- und Goldwespen. in: Schröder, Die Insekten Mitteleuropas, Band I. Hymenoptera.
- Hicks, C. H.** 1927. Parasites and habits of *Dianthidium pudicum* Cresson. Psyche, 34: 193-198.
1934. Some reared insect parasites and their hosts. Univ. Colo. Studies, 21: 265-271, 1 pl., 1 fig.



Linsley, E Gorton. 1944. "Host relationships of some sapygid wasps (Hymenoptera, Sapy-gidae)." *Bulletin of the Brooklyn Entomological Society* 39, 54–55.

View This Item Online: <https://www.biodiversitylibrary.org/item/204847>

Permalink: <https://www.biodiversitylibrary.org/partpdf/177483>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

Rights Holder: New York Entomological Society

License: <http://creativecommons.org/licenses/by-nc/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.