### PAN-PACIFIC ENTOMOLOGIST July, 1979, Vol. 55, No. 3, pp. 239–240

### SCIENTIFIC NOTE

# SYMPATRIC ASSOCIATIONS OF SYSTROPUS SPP. (DIPTERA: BOMBYLIIDAE) AND AMMOPHILA SPP. (HYMENOPTERA: SPHECIDAE)

The bombyliid genus *Systropus* consists of flies resembling threadwaisted wasps of the family Sphecidae. Bezzi (1924, The Bombyliidae of the Ethiopian region. Brit. Mus. Nat. Hist., 390 pp.) considers the group one of the most primitive bombyliid genera. As they are relatively uncommon, few reports on the associations and habits of members of the genus can be found.

Cole and Schlinger (1969, The flies of western North America. Univ. Calif. Press, 693 pp.) reported the sympatric associations of the northern species *Systropus macer* Loew with an eastern species *Systropus angulatus angulatus* Karsch in Texas. Roberts (1928, Proc. Linn. Soc. N.S.W., 53: 90–144) proposed the sphecid *Sceliphron laetum* Smith as the model for *Systropus flavoornatus* Roberts.

On 22 August 1977, S. angulatus ammophiloides (Townsend) and Systropus arizonicus Banks were collected while alighting upon and hovering above the blossoms of Aloysia wrightii (Gray) (Verbenaceae) in Florida Cyn., Santa Rita Mts., Pima Co., Arizona. Two Ammophila spp. were captured in association with the flies, Ammophila aberti Haldeman and Ammophila breviceps Smith.

S. a. ammophiloides and A. breviceps approximate each other in size and coloration, as do the larger, more colorful S. arizonicus and A. aberti. In addition, the flies could be distinguished from the sphecids by several behavioral patterns. Both Systropus species demonstrated slower, more directed flight, often hovering near the blooms. Further, in flight the abdomens of the bombyliids droop, while the abdomens of the wasps are held aloft and arched.

The sympatric associations of S. a. ammophiloides and A. breviceps, and S. arizonicus and A. aberti have not been previously reported. However, the ranges of the species overlap. S. a. ammophiloides and S. arizonicus have been collected from the sw./U.S. deserts and n. Mexico (pers. obs.; Calif. Acad. Sci., U. C. Davis collections), while Bohart and Menke (1976, Sphecid wasps of the world. Univ. Calif. Press, 695 pp.) reported both Ammophila species from the w. U.S. and Mexico. During August, 1976, 1977, and 1978, the authors collected each species separately at various locations in s. Arizona. Of the bombyliids, S. a. ammophiloides were more abundant, and were often found on Baccharis glutinosa Pers. and various annuals in bloom along water courses.

The authors wish to thank A. S. Menke and R. O. Schuster for their

PAN-PACIFIC ENTOMOLOGIST

assistance. Specimens are deposited at the insect repository, Univ. of Calif., Davis.

F. G. Zalom, R. P. Meyer, and P. H. Mason, Dept. of Entomology, Univ. of California, Davis 95616.

### NOTICE

## SECOND INTERNATIONAL CONGRESS OF SYSTEMATIC AND EVOLUTIONARY BIOLOGY (ICSEB-II)

The Second International Congress of Systematic and Evolutionary Biology (ICSEB-II) will be held at The University of British Columbia, Vancouver, Canada, 17–24 July 1980.

The provisional list of symposia topics includes:

- 1. Arctic Refugia and the evolution of Arctic biota
- 2. Origins and evolution of the North Pacific marine biota
- 3. Evolution of reproductive strategies
- 4. Evolutionary epigenetics
- 5. Evolution of community structure
- 6. Green algae and land plant origins
- 7. Macromolecular mechanisms in evolution
- 8. Allozymes and evolution
- 9. Coevolution and foraging strategy
- 10. Evolution of colonizing species
- 11. Rare species and the maintenance of gene pools
- 12. Paleobiology of the Pacific rim

Additional symposia may be included.

Sessions for contributed papers and for papers in specialized fields, taxonomic as well as methodological will also be organized.

Those interested in receiving an information circular in the spring of 1979 should write to the following:

Dr. G. G. E. Scudder Department of Zoology The University of British Columbia 2075 Wesbrook Mall Vancouver, B.C. V6T 1W5 CANADA.



Zalom, Frank G., Meyer, R P, and Mason, P H. 1979. "Sympatric associations of Systropus spp. (Diptera: Bombyliidae) and Ammonophila spp. (Hymenoptera: Sphecidae)." *The Pan-Pacific entomologist* 55(3), 239–240.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/251751</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/267973</u>

Holding Institution Pacific Coast Entomological Society

Sponsored by IMLS LG-70-15-0138-15

**Copyright & Reuse** Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Pacific Coast Entomological Society License: <u>http://creativecommons.org/licenses/by-nc-sa/4.0/</u> Rights: <u>http://biodiversitylibrary.org/permissions</u>

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.