

## KARYOTYPE OF *AUGOCHLORA PURA* (HYMENOPTERA: HALICTIDAE)<sup>1,2</sup>

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**ABSTRACT:** The halictid bee *Augochlora pura* was determined to have  $n = 11$  chromosomes (2 large submetacentrics, 9 smaller metacentrics).

Ramberg, Kukuk and Brown (1984) reviewed earlier findings and reported karyotypes for 3 species of Halictidae (in *Dialictus* and *Agapostemon*), bringing the karyotype descriptions then known up to 5 genera and 7 species representing the family. We here add information on the sixth genus (*Augochlora*) and eighth species, *A. pura* (Say). The material studied consisted of two different small nests (cell clusters) collected from rotten wood during late June and early July in the vicinity of Etna (Ithaca), New York by Roberta Gibson.

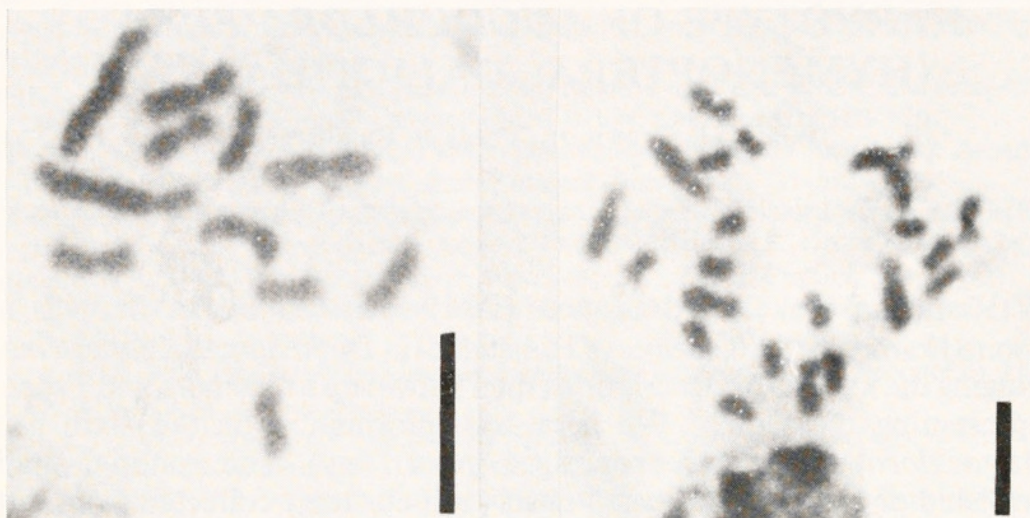
Brain preparations were made from prepupae and stained by the acetic acid dissociation, air-drying techniques of Imai, Crozier, and Taylor (1977), and photographed with the same equipment and conditions as described in Ramberg *et al.* (1984). Countable spreads were obtained from only two specimens, one from each nest. The first specimen yielded 6 countable spreads of 11 chromosomes each (Fig. 1), comprising 2 large submetacentrics (arm ratio 2.5-3:1) and 9 smaller metacentrics, ranging in size from about 1/3 to 2/3 the length of the large ones. Several additional spreads on this slide were not precisely countable, but seemed to have about 11 chromosomes. The second specimen yielded 2 spreads having clear counts of 22 chromosomes each, plus several additional spreads with indistinctly countable numbers at or near 22 (Fig. 2). The relative sizes and shapes of the chromosomes are in accord with an interpretation of the two specimens as haploid (male)  $n = 11$  and diploid (female)  $2n = 22$ , respectively.

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Figs. 1 and 2. Representative chromosome spreads from *Augochlora pura* prepupal brains. Fig. 1 (left) male. Fig. 2 (right) female. Scale bars equal 5 micra.

#### ACKNOWLEDGMENTS

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#### LITERATURE CITED

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### Dr. Charles Hodge IV, 1900 - 1985

Dr. Charles Hodge IV, a long-time member of the American Entomological Society, died at the age of 85, on February 7, 1985, after a short illness. Dr. Hodge was a direct descendant of Benjamin Franklin and at the time of his death was an emeritus Professor of Entomology at Temple University.

He received his BA degree in 1922 and his PhD in 1932 from the University of Pennsylvania in the field of entomology. In 1931 he started his teaching career at Temple University and remained there until his retirement in 1965. He believed that teaching was the most important duty of a college professor and he was greatly admired by his students.

Dr. Hodge was a research associate of the Entomological Department of the Academy of Natural Sciences of Philadelphia and participated in several expeditions including the Academy's 1947 expedition to Mexico. He was interested in grasshoppers and published an anatomy and histology. He was a member of the American Entomological Society since 1928. In addition, he was a fellow of the American Association for the Advancement of Science, Sigma Xi and other professional and social organizations.

He is survived by his wife, Ruth Patrick Hodge and son, Charles Hodge V, MD.

Selwyn S. Roback



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