

The Canadian Entomologist.

VOL. XXX.

LONDON, FEBRUARY, 1898.

No. 2.

ON THE HISTORY AND HABITS OF THE "WOOD ENGRAVER" AMBROSIA BEETLE—*XYLEBORUS XYLEBORUS* (SAY), *XYLEBORUS SAXESENSI* (RATZ.) —WITH BRIEF DESCRIPTIONS OF DIFFERENT STAGES.*

BY A. D. HOPKINS, ENTOMOLOGIST, W. VA. AGR. EXPT. STATION.

The Ambrosia beetles of the Scolytid genus *Xyleborus* present many features of interest to the student of systematic and economic entomology¹, and in *Xyleborus xylographus* we find a cosmopolitan species of unusual interest.

History.

It was described by Say in 1826² from specimens "sent to him by the younger Rev. J. F. Melsheimer from the Melsheimer collection, with the manuscript names and notes by the elder Rev. F. V. Melsheimer."³ Say's erroneous reference to the habits and galleries of the species, published with the description, was (as suggested by Schwarz) due to his use of Melsheimer's notes on a different species, probably a *Pityophthorus*, *Pityogenes* or *Tomicus* species. This was the cause of much confusion in subsequent literature on the species. The *Tomicus xylographus* referred to at length by Dr. Fitch⁴, and subsequently quoted by Packard⁵ under *Xyleborus xylographus*, was evidently *Tomicus cælatus*, although the galleries illustrated by Fitch resemble the work of a *Pityophthorus* more than they do that of *T. cælatus*.

Some years after the publication of Say's description, Ratzburg⁶ described the same thing under the name *Xyleborus saxeseni*, which,

*Read by title before the W. Va. Academy of Science, Arts and Letters, Dec. 7th, 1897.

1. Ambrosia Beetles of the United States; H. G. Hubbard; Bull. No. 7, new series, U. S. Department of Agriculture, Div. of Entomology, 1897, pp. 9-30; also Year Book, 1896, pp. 421-430.

2. *Bostrichus xylographus*, Jour. Acad. Nat. Sci., Phila., 1826, Vol. V., p. 256.

3. Catalogue of Insects of Pennsylvania, 1806.

Quotation from Schwarz in Proc. U. S. Nat. Museum, Vol. XVIII., p. 610.

4. *Tomicus xylographus*, Fitch, 4th Rep. Ins. of N. Y., 1858, p. 716.

5. Bull. 7, U. S. Ent. Com., Insects Injurious to Forest and Shade Trees.