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## BROOD XV. OF CICADA SEPTENDECIM IN OHIO.\*

BY F. M. WEBSTER, WOOSTER, OHIO.

Having had the opportunity of working out the distribution of broods V., VIII. and XXII. in Indiana, brood XV. in Ohio possessed a peculiar interest for me, as in studying it I was able to profit considerably by my acquaintance with the others. I perhaps ought to say a word in regard to the three other broods mentioned, as one of them (XXII.) is treated of at considerable length in the Report of the Entomologist of the United States Department of Agriculture for the year 1885, and it was while connected with the Department as one of its special agents that these three broads were studied. Brood XXII, covered the entire State of Indiana, except a narrow strip of land around the lower end of Lake Michigan, from ten or fifteen to twenty miles wide, which area was exactly covered by brood V. in 1888. The coloured map which accompanies the report mentioned is defective in that the two points extending southward, not indicated as being covered by this brood, were, as was afterwards learned, within the area covered by brood XXII. and not covered by brood V., the line of separation being about ten miles east of the lake on the line between Michigan and Indiana, and running nearly south-west to the east line of Porter county, the course then trending slightly more to the westward to the Illinois line; in no case, I believe, extending to the Kankakee River, thus making the line of separation much more uniform than the one indicated on the map cited above, on which the dividing line is quite irregular.

Brood VIII. occurred in southern Indiana, becoming excessively abundant only in Harrison county, but covering the area south of a line drawn from Vincennes to Greencastle, Franklin, and eastward to northern Dearborn county. Singularly enough, a single female was brought me at Lafayette, fully 60 miles north of Greencastle, which probably marked the northernmost point where the species could be said to occur in any numbers.

<sup>\*</sup> Read before Section "F," Zoology, of A. A. A. S., at Detroit, Michigan, August toth, 1897.