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## NOTES ON PEMPHIGUS TESSELATA, FITCH.

BY HERBERT OSBORN, AMES, IOWA.

## SYNONOMY.

Chermes alni Kalm. Travels into North America, English translation, vol. 1, p. 154; p. 121, 2nd ed.

Eriosoma tesselata Fitch. 4th Report State Cab. Nat. Hist., N. Y.

Eriosoma tesselata Glover. Ag. Rept., 1876, p. 39.

Eriosoma tesselata (or imbricata) Glover, unpublished plates Homoptera iii., fig. 19.

Schizoneura tesselata Thomas, 8th Report Insects of Illinois, p. 139.

Apparently the first record of this insect is given by Kalm., as cited above, where he says under date of Oct. 3rd, 1748: "I saw to-day the Chermes of the Alder (Chermes alni) in great abundance on the branches of that tree, which for that reason looks quite white, and at a distance appears as it were covered with mold." This reference, in all probability, is to P. tesselata, and the reference to the European species, Chermes alni L, a mistake, since there are no later records of the European species being found here, and this one is specifically distinct from the one described by Linnæus.

Dr. Fitch describes the apterous female and states that he had searched in vain for winged individuals. His specimens were from Alnus rubra. Mr. Glover states that it was found upon Birch in Maryland. In his unpublished plates he figures the same, referring to it as tesselata or imbricata.

The newly-born larva is pale brown. The antennæ are 4-jointed, the first joint short, second one-half longer, third and terminal nearly equal and each equalling the first and second together. The dorsal portion of the body is covered with slight elevations which mark the position of the wax-secreting glands. They are arranged in rows, there being three rows on each side in the abdominal segments, except the terminal, which has