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A NEW SPECIES OF ALEYRODIDAE FOUND ON AZALEA. (HOM.)

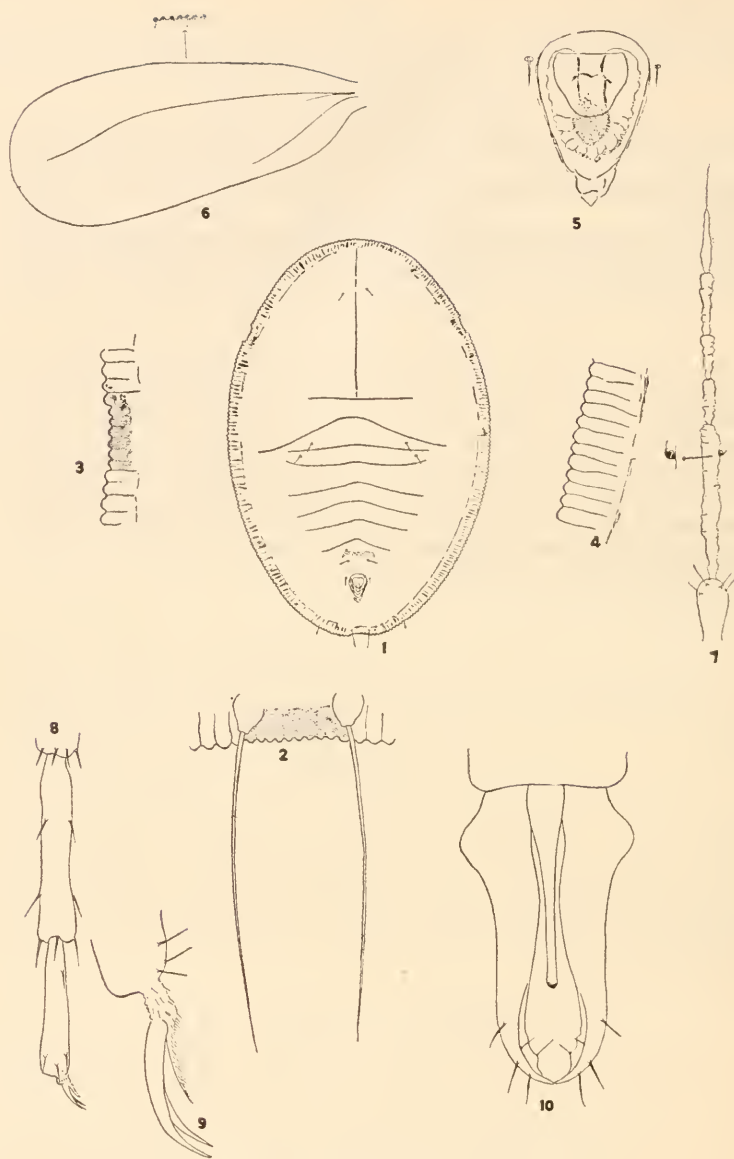
BY A. C. BAKER AND M. L. MOLES, *Bureau of Entomology.*

During the past ten years, plant quarantine inspectors have frequently found this species of *Aleyrodes* on foreign shipments of azalea. Plants from Belgium and Holland have been the only ones affected up until last year, but in November, 1919, the same species was found on plants shipped in from Japan. Though the species appears to be common in these countries it apparently has been left undescribed, and because of its frequency on imported plants it was thought best to describe and figure it here. The insect is not abundant on the host, only four or five pupa cases being found to a leaf, nor does it seem to be injurious at this time.

The species was first intercepted in this country by Inspector Francis Wendle in Philadelphia, October 15, 1910, and in November of the same year it was found on imported plants in Washington, D. C. In the year 1913, it was found on foreign shipments by B. H. Walden near New Haven, Conn., and again at Cromwell, Conn., by Q. S. Lowry, and in October, 1913, it was found by W. P. Flint at Beardstown, Ill. C. E. Temple found it on foreign stock February, 1915, at Baltimore, Md., and in 1916 it was found in Gainesville, Florida by E. W. Berger. The collections for the year 1916 were all from plants which had been inspected by Federal workers here in Washington, and the latest finding of this species on foreign plants was by Dr. S. I. Kuwana at San Francisco.

Aleyrodes azaleae, n. sp. Baker and Moles.

The first plants which were infested with this species were received October 15, 1910 from Ghent, Belgium; other plants were sent from Boskoop, Holland, Nov. 12, 1910; Ghent, Belgium, Oct. 24 and 30, 1914; Lokeren, Belgium, Feb. 10, 1915; Melle, Belgium, Nov. 7, 1916, and again from Ghent, Belgium, Dec. 15, 1916; Boskoop, Holland, March 15, 1920, and Shiznoke, Japan, Nov. 1919. The pupa cases are light in color and without wax secretion of any sort.



BAKER AND MOLES—ALEYRODES AZALEAE.

Pupa case.—Broadly elliptical in shape; size 0.84 mm. long, 0.54 mm. in width; color varies from a very light yellow to an orange yellow. The darker color is always found where the body contents show through; submarginal area lighter in color than the rest of the dorsum. Margin finely crenulate and evenly rounded at the apex, with sutures extending mesad from each tooth 0.016 mm. The thoracic tracheal comb consists of six small teeth, the caudal comb of nine teeth. Both the caudal and tracheal combs are made up of unchitinized and uncolored teeth and appear as indented portions of the margin with very small marginal teeth. Dorsum unmarked, with two small setae on the thorax; abdominal segments distinct. Vasiform orifice elongate, cordate in shape, the caudal floor of the orifice crossed with folds of the orifice membrane; operculum sub-cordate, filling one-half of the orifice, caudal margin blunt and rounded, cephalic margin straight; lingula, projecting beyond the operculum, setose, bi-lobed and with one pair of setae arising at the margin of the caudal lobe; cephalad and laterad of the orifice are found two small setae. A pair of setae, 0.64 mm. in length, is found caudad of the vasiform orifice and on either side of the caudal tracheal comb.

Adult female.—Color of body light yellow with legs and antennae lighter in color, wings immaculate, eyes dark brown. Length of body from vertex to tip of genitalia 0.99 mm.; length of fore-wing 1.12 mm., width 0.40 mm. Antennae seven jointed, Seg. III, 0.089 mm. with a fringed sensorium and a setae near the distal portion of the segment, Seg. IV, 0.026 mm.; Seg. V, 0.028 mm.; Seg. VI, 0.039 mm.; Seg. VII, 0.033 mm. in length and with a slender distal setae. The venation of the wings is usual for Aleyrodes, the remnant of the media in the fore-wing is very faintly shown.

Adult male.—The coloring of the male is the same as in the female. Length of body from vertex to tip of genitalia 0.92 mm.; wing measurements the same as in the female; genitalia long and slender, claspers upcurved, 0.10 mm. long, with two small and one large teeth on the inner margin near the tip. Only three or four spines present on the claspers; penis slender, upcurved, three-fourths as long as the claspers. Antennae seven jointed, Seg. III, 0.07 mm. long, with a sensorium and setae; Seg. IV, 0.02 mm.; Seg. V, 0.028 mm.; Seg. VI, 0.086 mm.; Seg. VII, 0.038 mm. in length, and with a distal slender setae.

Type.—Cat. No. 22962 U. S. N. M.

EXPLANATION OF PLATE.

Fig. 1—Adult pupa case. 2—Caudal tracheal comb of teeth. 3—Thoracic tracheal comb of teeth. 4—Margin of pupa case. 5—Vasiform orifice. 6—Forewing of adult female. 7—Antennae of adult female. 8—Tarsus of adult. 9—Adult claw. 10—Male genitalia.