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e at high ohnson of ared to be y infested with bud-moth was secured from Mr. S. B. Chute, of Berwick, for experimental purposes, and the additional tests were also made in a demonstration orchard on the property of Mr. Geo. Hoyt, of Annapolis, and in the orchard of Mr. A. FitzRandolph of Bridgetown.

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In the S. B. Chute experiment, the orehard consisted mostly of Wagners and Early Williams, both very susceptible varieties of apples. The trees were about 20 years old, planted 20 feet apart, and in a somewhat sheltered location. Two rows of trees were used in each of the seven plots, the first three plots being sprayed twice before the blossoms opened; once when the leaf was the size of a ten cent piece, and again imme-



Fig. 10.-Egg of the eye-spotted bud-moth on the underside of the leaf soon after deposition (Original.)

diately before the blossoms opened; and twice after the blossoms fell. Lead arsenate at the rate of 5 pounds to 100 gallons was used in each spray. The second set of plots 4, 5 and 6, were sprayed once before the blossoms, about half way between the two early sprays applied to plots 1, 2, and 3, and twice after the blossoms fell, the solution by 'g the same as that used in plots 1, 2 and 3. The plots were divided crosswise and a mist nozzle used on the west half and a drive nozzle on the east half. Plot 7, two rows, was left unsprayed as a check. Two hundred pounds pressure was used in all plots where sprays were used.

Table No. 2 compares the drive with the mist nozzle and also two applications of spray before the blossoms, as compared with one. In this fable the best results are shown from the use of two sprays before the blossoms, and the drive nozzle which gives from 63.5 to 75.5 per cent reduction in injury to the picked fruit by bud-moth. The next best results are from the drive nozzle used once about four days before the blossoms open, giving from 60.6 to 74.8 per cent reduction in bud-moth injury to the picked fruit. It would also appear from this table that one spray applied with a drive nozzle four days before the blossoms, is about equal to two sprays before the blossoms with a mist nozzle. This is borne out by examining table No. 3 of the same experiment.

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