

THE SUSCEPTIBILITY OF THE EGGS OF *APHIS POMI* AND *APHIS AVENÆ* TO HYDROCYANIC ACID GAS FORMATION.BY WILLIAM A. ROSS, DOMINION ENTOMOLOGICAL LABORATORY,
VINELAND STATION, ONTARIO.

It is of economic interest to note that the fumigation of young apple trees with hydrocyanic acid gas just before or shortly after the buds commence to swell not only controls the San José scale, but it also destroys the eggs of aphides.

In the spring of 1914, we procured from a local nursery seven apple trees well stocked with the eggs of *Aphis pomi* and *Aphis avenæ*. Three of the trees were fumigated for forty-five minutes with hydrocyanic acid gas (1 oz. KCN to 100 cubic feet, 1:1:3 formula), and the others were used as checks. None of the eggs on the fumigated nursery stock hatched, whereas large numbers hatched on the check trees.

This spring the foregoing experiment was duplicated, and the same highly satisfactory results were obtained—100 per cent of the aphid eggs were destroyed.

In the 1914 experiment the nursery stock was fumigated eight days, and in the 1916 experiment six days before the eggs on the check trees commenced to hatch.

A CHANGE OF SYNONYMY IN *XYLOMIGES* (LEPID.).

BY F. H. WOLLEY DOD.

The species described by Smith as *Xylomiges pallidior* is identical with *simplex* Walk. Harvey's *crucialis*, hitherto misidentified as *simplex*, is distinct. Even after seeing Smith's type and possessing specimens of both forms, it was some years before I was at all sure that the species really existed, as the difference appeared to be merely varietal. But, as time went on and I saw and acquired more material, their distinctness became apparent. Having become satisfied as to the existence of two species, judged by superficial characters alone, I got Mr. Tams to make several mounts of the genitalia of each, including Vancouver Island specimens of both forms. These were found to differ in such a way as to make their separation quite easy. Being at present separated from my specimens and mounts by several thousand miles, I am unable to state concisely just what these differences are, but hope to make it clear some day.

November, 1916.