

TABLE III.

Comparison of Effectiveness of Natural Cryolite and Synthetic Cryolite

Year	Per Cent Infested Fruit*	
	Natural Cryolite	Synthetic Cryolite
1940	9	13
1941	9	22
1942	4	1
1942	3	2
1942	5	5
1942	8	8
1942	2	2
1942	3	3
1942	12	7

* The first seven comparisons from the records of the Dominion Entomological Laboratory, Vernon; the last two, from unpublished records of B. Hoy, B.C. Dept. of Agriculture, Kelowna.

Nine direct comparisons are available from this work. With three exceptions, one of which favors one product, two the other, differences are slight to nil. Averaged infestations, i.e., 6.1 per cent wormy fruit for natural cryolite and 7.0

per cent for synthetic cryolite, support the opinion that there is no essential difference in the effectiveness of the two products. The probable reason for the much higher infestation of the synthetic cryolite plot in 1941 was the greater population in this plot resulting from the high infestation of the previous season, when other spray materials had been used.

Summary

(1) Extensive investigation in Washington and British Columbia under arid or semi-arid conditions, has indicated that cryolite and lead arsenate are for practical purposes, equally effective in codling moth control. This holds whether the two compounds have been used with oils or with casein-lime spreader.

(2) Natural cryolite and synthetic cryolite have proved equally satisfactory.

Literature Cited

- Marshall, J. K. Groves and H. Fallscheer. 1938. Cryolite in codling moth control and a new procedure for its application. Proc. Wash. State Hort. Assoc. 34:123-131.
- Newcomer, E. J. and R. H. Carter. 1930. Fluorine compounds as substitutes for lead arsenate in control of the codling moth. Proc. Wash. State Hort. Assoc. 26:73-76.
- Webster, R. L., J. Marshall, C. E. Miller and T. R. Hansberry. 1932. Fish oils, spreaders and non-arsenicals for codling moth control. Proc. Wash. State Hort. Assoc. 28:48-64.

Note on *Trachoma falciferella* Wlsh. (Lepidoptera: Plutellidae)

This insect was not uncommon on orchard trees some years ago but is comparatively scarce today, owing no doubt to the heavy applications of arsenicals used for codling moth control, which have had a repressive effect upon a number of orchard pests. Choke cherry (*Prunus demissa* Nutt.) is its native host. Larvae were taken at Vernon, B.C., in 1931, feeding upon the terminal growth of apple and pear. The leaves are partially skeletonized and drawn together with a few silken threads to form a frail nest, within which the caterpillars remain concealed until they are disturbed. They then become exceedingly active and move over the leaf surface in a series of rapid snake-like motions.

Mature larvae measure 11-12 mm. in length, and are strongly fusiform in out-

line. The general colour is pale green tinged with yellow. Head pale with no markings. Dorsum pale green, with the intersegmental areas yellowish. There is a well-defined, narrow, whitish line on each side of the dorsum; these lines commence on the second thoracic segment and continue to the anal segment. Thoracic feet pale brown; prolegs concolorous with venter; the anal prolegs are extended at a wide angle with the body when the larva is at rest.

Eleven larvae which pupated between May 16 and June 13, produced adults from July 9 to 19. The pupa is formed within a silken cocoon composed of two parts: an exterior web of filmy construction and open texture, within which is a smaller case containing the pupa. The pupa, which is pale green in its earlier stages, becomes pallid and transparent prior to the emergence of the adult. —E. P. Venables, Vernon, B.C.