

*Some notes on Olene vagans B. and McD. in Nova Scotia.* By W. H. Brittain and H. G. Payne. Pp. 62-68. Gives a full description of the life-history of this little-known tussock moth, with tables giving duration of stages. These are well illustrated on plate 4, from a photograph.

*Some miscellaneous observations on the origin and present use of some insecticides and fungicides.* By G. E. Sanders and A. Kelsall. Pp. 69-75. A useful article dealing with the properties and uses of the more important insecticides and fungicides, with particular reference to Nova Scotian practices.

*Notes on Lygus campestris Linn. in Nova Scotia.* By W. H. Brittain. Pp. 76-81. Discusses the distribution, host plants, injurious habits, life-history and control of this Mirid. The stages are illustrated on plate 5.

*Life-History and immature stages of Abbottana clemataria, Smith and Abbott.* By H. G. Payne. Pp. 82-85. The various stages are shown on plate 6, from a photograph.

*Key for determining the Crambinae of Nova Scotia.* By E. Chesley Allen. Pp. 86-88. The key is based chiefly on the colour-pattern, and the 20 species listed are all illustrated on plate 7 by life-sized figures.

*A treehopper new to our list.* By W. H. Brittain. P. 89. Gives notes on *Enchenopa binotata* Say, recorded from Nova Scotia for the first time.

THE APPLE BUD-MOTHS AND THEIR CONTROL IN NOVA SCOTIA. By G. E. Sanders and A. G. Dustan. Bull. 16, (Technical Series), Entomological Branch, Dept. of Agriculture. March 1, 1919. 39 pp., 14 figs. in text.

This is a very thorough account of the habits and methods of control of the four commonest and most injurious species of Bud-moths found in the apple orchards of Nova Scotia, viz., the Eye-spotted Bud-moth (*Tmetocera ocellana*), the Oblique-banded Leaf-roller (*Cacoecia rosaceana*), the Lesser Bud-moth (*Recurvaria nanella*) and the Green Bud-moth (*Argyroplote consanguinana*).

The bud-moths are the most serious orchard insects in Nova Scotia, probably causing more injury to apple orchards than all the other insect enemies combined. "It is estimated that in unsprayed or poorly sprayed orchards in Nova Scotia they reduce the crop about 30 per cent. About 75 per cent. of the bud-moths can be destroyed and the crops increased about 22.5 per cent. by two thorough applications of poisoned spray applied before the blossoms open, with a nozzle throwing a coarse driving spray."

"Open planting and thorough pruning help in the control of the bud-moths by allowing the wind to blow away and destroy many of the adults when they are on the wing in June and July."

The Eye-spotted Bud-moth is by far the most important of the four species, over 90 per cent. of the larvæ infesting buds being usually of this species.

Considerable difference exists in the susceptibility of different varieties of apple to bud-moth injury, the varieties having wrinkled twigs being almost invariably more heavily infested than those with smooth twigs, owing to the better hibernating quarters offered by the former to the half-grown larvæ.

Accurate data are given on the injuries to the buds and set of fruit, e. g., the exact reduction in the set as determined by counts of infested blossom clusters in the same variety of apple in the same orchard; the comparative size of the