CONTENTS

DAG

| Summary | | 5 |
|--|-------|----|
| Introduction | • • • | 5 |
| Life-histories-General account | ••••• | 7 |
| Relative number and importance of species | •••• | 8 |
| Susceptibility of varieties of apple to bud-moth injury. | • •• | 8 |
| Average infestation | • • • | 10 |
| Injuries caused by bud-moths | | 10 |
| Injury to buds and set of fruit | • • • | 10 |
| Injury to the set of fmit by bud-moths in spring | | 12 |
| Fall injury to the fruit by the newly hatched larvæ | | 12 |
| Relation between fall and spring injury | | 12 |
| The Control of Bud-moths | | 14 |
| Spraying Experiments | | 14 |
| Former spraying recommendations | | 20 |
| Control measures recommended | | 21 |
| Natural Control | | 23 |
| Insect Parasites | | 23 |
| Other Natural Enemies | | 24 |
| Birds | | 24 |
| Descriptions of the Common Bud-moths | | 25 |
| The Eye-spotted Bud-moth Trucloccra occilana D. & S | | 25 |
| The Oblique-banded leaf-roller Cacoccia rosaciana Harris | | 30 |
| The Lesser Bud-moth Receivaria nanella, Hb | | 33 |
| The Green Bud-Worm Argyrophoce consangainana Wism. | | 36 |
| Acknowledgements | | 39 |
| | | |

ILLUSTRATIONS

Fig. 1.—Apple buds showing stage at which bud-moths enter then: in greatest numbers. Arrow indicates webbing from hibernaculum to bud, occasionally found.

Fig. 2.—Apple blosson cluster attacked by bud-moth, torn open to show (a) larva in the act of feeding, (b) pupa.

Fig. 3.—Apple blossom cluster; arrow shows opening blossoms damaged by larva. Fig. 4.—Apple leaf shoot; arrow indicates where bud-moth larva bored through base. Fig. 5.—Young apple injured by bud-moth larva soon after setting.

Fig. 6.-Apple injured by bud-moth larva soon after setting, after the injury had healed

over.

Fig. 7.-Apple showing leaf tied to it by bud-moth larva.

Fig. 8.-Apples from which leaf has been removed showing fall injury by the larvæ.

Fig. 9.—Buds from Ribston apple tree, 100 per cent infested by the larvæ of the Eyespotted bud-moth, and the blossoms borne on a similar twig from the same tree.

Fig. 10.—Eggs of the Eye-spotted bud-moth on the underside of the leaf, soon after deposition.

Fig. 11.—Cluster of eggs of the Eye-spotted bud-moth deposited in confinement, showing larvæ almost ready to emerge.

Fig. 12.—Apple leaf showing fall feeding of the newly hatched bud-moth larva. Fig. 13.—Two apple leaves ticd together by bud-moth larva. Larva feeding between the

two, off the surface of each. Fig. t4.—Adults of (a) Eye-spotted bud-moth; (b) Oblique banded leaf-roller and (c) Green bud-worm.