

INSECT PESTS LEAFLETS.

No. 8.—LEAF-EATING LADYBIRD BEETLE.

BOTH the adult insect and the larva of this beetle (*Epilachna 28-punctata*) feed upon the upper surface of the leaves of its host plants, causing them to wither and dry up. These ladybird beetles are chiefly found upon the different species of the genus *Solanum*, such as tomatoes and potatoes, but within the last few years they have attacked melons, pumpkins, and other cucurbitaceous plants, and at times do as much damage as the true pumpkin beetle.



The 28-spotted Ladybird (*Epilachna 28-punctata*).



Portion of a Pumpkin Leaf, showing ravages of *Epilachna 28-punctata*.

The pale yellow, spindle-shaped eggs are deposited in patches upon the upper surface of the leaves, and the stout, dull yellow larvæ, marked with light brown, are easily identified from all other grubs on account of the whole of the dorsal surface being covered with spiny black tubercles. When full fed the larvæ congregate in masses on the foliage of their food plant, and attach themselves side by side and pupate. The adult beetle is of a uniform orange-yellow tint, closely spotted with circular black dots, twenty-eight in number. It is a true ladybird beetle, belonging to the plant-eating genus *Epilachna*, and must not be confused with the somewhat similarly coloured and spotted carnivorous ladybird beetle (*Leis conformis*), which is one of our most useful aphid-eating ladybird beetles, and which is a more active beetle, distinguished from the leaf-eating species by being more hemispherical in form, a slightly brighter yellow, and possessing from sixteen to twenty (usually eighteen) black blotches or spots.

Control.—Dust plants with 1 lb. lead arsenate or calcium arsenate, mixed thoroughly with 9 lb. hydrated lime dust, or spray with arsenate of lead powder, 1 lb. to 40 gallons water, to which it is best to add a little casein and lime or other sticker.

When the plants are attacked soon after appearing above the ground they can be protected by dusting with equal parts of lime and tobacco dust until such time as the plants are well grown enough to dust or spray as above.

DEPARTMENT OF AGRICULTURE, N.S.W.

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- No. 1. Slugs, Snails, and Slaters.
,, 2. Peach-tip Moth.
,, 3. Sheep-maggot Flies.
,, 4. Indian White Wax Scale.
,, 5. Tomato and Bean Bug.
,, 6. Rutherglen Bug.
,, 7. White Louse.
,, 8. Leaf-eating Ladybird Beetle.
,, 9. Codling Moth.
,, 10. Woolly Aphis.
,, 11. Fruit-flies.
,, 12. Banded Pumpkin Beetle.
,, 13. Brown Vegetable Weevil.
,, 14. Sheep "Tick."
,, 15. Biting Louse of Sheep.
,, 16. Green Peach Aphis.
,, 17. White Ants (Termites).
,, 18. Red Mite.
,, 19. Black Peach Aphis.
,, 20. Brown Scale.
,, 21. Wood Borers.
,, 22. Red Scale.
,, 23. Cabbage Grub or Moth.
,, 24. Fig-leaf Beetle.
,, 25. French Bean Fly.
,, 26. Maize and Tomato Caterpillar.
,, 27. San José Scale.
,, 28. Potato Moth.
,, 29. Wheat Root Grub.
,, 30. Grasshoppers.
,, 31. Cutworms.
,, 32. Yellow Monolepta Beetle.

Such of the above as are useful for a grower's own particular purpose are available Free, on application to—

**THE UNDER SECRETARY,
DEPARTMENT OF AGRICULTURE,
SYDNEY.**