

INSECTS AFFECTING THE CABBAGE.

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| 1. The Rape Butterfly (<i>Pieris rapæ</i> , Linn). | 4. The Zebra Caterpillar (<i>Mamestra picta</i> , Harris). |
| 2. The Potherb Butterfly (<i>Pieris oleracea</i> , Harris). | 5. The Cabbage Plusia (<i>Plusia brassicæ</i> , Riley). |
| 3. The Southern Cabbage Butterfly (<i>Pieris protodice</i> , Boisd). | 6. The Harlequin Cabbage-bug (<i>Strachia histrionica</i> , Hahn). |

1. THE RAPE BUTTERFLY (*Pieris rapæ*, Linn.).

LEPIDOPTERA—PIERIDÆ.

Though a considerable number of insects have long been known to affect the cabbage in this country, and have at times proved destructive in their ravages, yet it is only during the last few years that much alarm has been felt respecting their attacks, or that general attention has been directed towards them. This recent change in the amount of regard paid to cabbage insects has been occasioned by the arrival upon our shores of a European butterfly, whose ravages have long been a source of loss and annoyance to the gardeners of the mother land.

This new pest—the Rape Butterfly (*Pieris rapæ*)—was first observed by Mr. W. Couper at Quebec, in the year 1859; it had then, probably, been two or three years in the country. In 1863 Mr. G. J. Bowles, of Quebec, captured large numbers of specimens in the neighbourhood of that city, and the following year published an account of the occurrence of the insect in the *Canadian Naturalist and Geologist* (vol. i, new series, Aug. 1864, p. 258). Since then the new comer has increased and multiplied to a marvellous extent, spreading throughout the whole of the Province of Quebec, invading the eastern portion of Ontario, and extending into the neighbouring States and Provinces as far south as New Jersey. Everywhere it has proved excessively destructive to the cabbage crops, especially where they are cultivated in large quantities by market-gardeners, in the neighbourhood of cities and towns. So great, indeed, have been its ravages, that the Abbé Provancher, editor of *Le Naturaliste Canadien*,—an excellent magazine of natural history, published at Quebec,—has stated that it annually destroys more than \$240,000 worth of cabbages in and about that city. This is probably an over-estimate; yet even a fourth of the amount would be a very serious tax upon the gardening community of a single neighbourhood.

How this insect made its way across the Atlantic in safety, no one can positively say; but it may be reasonably conjectured that its eggs or larvæ were in some refuse cabbages or turnips thrown from an ocean steamship upon her arrival at Quebec, and that a supply of food chanced to be at hand for their sustenance. Once established, the species would soon spread, as it is very prolific, and its food is almost everywhere to be had in abundance. It feeds upon not only the leaves of different kinds of cabbages and cauliflower, but also upon those of turnips, nasturtium, mignonette, stocks, &c.



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