

especially near the body. The illustrations on page 83 of the Report of our Society for 1871, published by the Ontario Department of Agriculture, give an exact idea of the insect at this season. This change in colour has been noticed in England; indeed, before its progressiveness had been observed, an eminent entomologist there separated the spring and autumn broods into distinct species. I quote from a letter received in 1864 from my friend Dr. Jordan, of Birmingham:—

“You are probably aware that here in England we have two distinct broods of the insect, the first appearing in April, the second in July. The first almost wants the apical spot on the top wing in both sexes, and on the male the central spot is often also quite obliterated. To this the name of *P. metra* was given by Stephens, who then supposed it a distinct species. In the autumnal brood, or typical *P. rapæ*, we have a larger and darker insect, with the spots more marked, and the black patch at the apex of the fore wing very much darker.”

The yellow variety also shares in this progressive change of colour. The spring specimens are of a very delicate yellow, almost without spots, and are very handsome, while those appearing in the fall are of a sulphur yellow, and heavily marked.

Dr. Jordan speaks of there being two broods of the insect in England. I think that in Canada they are more numerous. It is impossible, however, to settle the number with certainty, as one brood encroaches on the next; and from the time when the butterflies begin to deposit their eggs on cabbage plants in the hot-beds, in April and May, until October, larvæ of all sizes and ages may be found feeding on the same plant. The short time required for the complete development of the insect also favours the idea of there being three or more broods in one season. Some caterpillars reared by me in June, 1864, grew from one-twelfth of an inch in length to their full size, in eleven days; they then became pupæ, and seven days afterwards, the perfect insects were produced. Allowing for the influence of temperature in accelerating or retarding their changes, thirty days would be a fair average to give as the duration of each brood, and this would be equal to four or five broods in the season in the latitude of Quebec. In fact, there is no other way of accounting for their surprising numbers in the latter part of summer.

I have not yet met with any parasite infesting this butterfly, though I have found pupæ which had apparently been destroyed by them; and a fellow-student here (Mr. Caulfield) informs me that he now has about twenty chrysalids containi~~ng~~g some insect enemy. The most powerful