

I failed to determine whether the ♂'s had died a natural death, or had been butchered by their wives. I had not noticed this cannibalistic habit before, but this may account for the many fragments of this species always common towards the fall season. I have often noticed the cannibalistic habit of the larvæ of *Pyrameis cardui*, and other butterflies while feeding in captivity. I never knew them to kill each other, but if one got injured so that the bioplasm flowed out, the others seemed to relish it very much, and continued to feed on it until completely exhausted.

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NOTE ON AMBLYOPONE PALLIPES, HALD.

In 1885 among material sent to Abbé Provancher was a curious ant, of which two examples had been for some time in my collection, obtained apparently by moss-sifting. The Abbé expressed astonishment at the occurrence of such a species in Canada, stating that it belonged to the genus *Amblyopone*, and that it would be the type of a new species which he proposed to call *A. canadensis*. He subsequently (Add. Faun. Hym., p. 240) described it as the worker of *A. binodosus*, believing it to belong to the same species as a male formerly described by him (Nat. Can., XII., p. 205), as a braconid under the name *Arotropus binodosus*.* During subsequent seasons I searched carefully for this species without success, and almost despaired of determining its habitat. This season, however, I have been more fortunate, and on the 19th April was much pleased at finding one worker under a stone about two miles west of the city. A few days later—30th April—on the opposite side of the Ottawa, near Hull, I found in a rotten log a colony composed of several workers and about a dozen larvæ. Consigning four adults to my killing-bottle, I placed the larvæ and their remaining guardians in a box with a quantity of the damp, rotten wood in which they were found. A vigorous search in the vicinity resulted in the discovery of two similar colonies in another log, which were also taken. Should I not succeed in obtaining females and males from the larvæ then obtained, I will hope to do so by searching in June in the same locality. The ants are very slow in their movements, and walk with the quadrate flat head held horizontally, and with the long mandibles open, thus seeming much larger than killed specimens, in which the head is deflexed. The larvæ resemble those of *Myrmica*, but are not so pubescent as the only species, *M. levinodis*, Nyl., of which

* Cresson in his list refers *Arotropus binodosus* to the genus *Ponera*.

I had larvæ for comparison. An examination of my workers by Haldemann's description of *A. pallipes* convinces me that they belong to that species. Haldeman states that the species is found in stumps in June.

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BOOK NOTICES.

ANNUAL REPORT OF THE EXPERIMENTAL FARMS: Ottawa: pp. 314; 1891.

The Director of the Experimental Farms of the Dominion of Canada has recently issued his report for the past year, and a very interesting "blue book" it is. The record of experiments with two-rowed barley is particularly valuable and important at the present time, and concerns everyone who is interested in the welfare and prosperity of this province. The reports of the Agriculturist, who treats especially of Dairying, of the Horticulturist, Chemist and Poultry Manager, are all useful and instructive; but the one which especially interests us is, of course, that of the Entomologist and Botanist, Mr. James Fletcher. His share of the report occupies over fifty pages, and is illustrated with some wood cuts of noxious insects, and nine beautiful full-page plates of various useful grasses. The insects treated of are the American Frit Fly (*Oscinis variabilis*), the Cabbage Maggot (*Anthomyia brassicæ*), the Diamond-back Moth (*Plutella cruciferarum*), whose larvæ attack the leaves of cabbages, the Mediterranean Flour Moth (*Ephestia Kühniella*), the Pea Weevil (*Bruchus pisi*), the Strawberry Weevil (*Anthonomus musculus*), and the Vancouver Island Oak Looper (*Ellopiä somniaria*). In each instance Mr. Fletcher fully and carefully describes the mode of attack, and then gives the most satisfactory remedies. It is hardly necessary to tell our readers, who are familiar with Mr. Fletcher's work, that these articles are as complete and as accurate as is possible in a limited space. It is very cheering to find (p. 169) that the mill that was so badly infested with the *Ephestia* moth year before last (of which the writer was an eye-witness), has been completely cleared of the pest by scrupulously carrying out, though with no little labour and expense, the directions of the entomologist. In spite of this example, it is surprising to find that the proprietors of other mills and feed stores in the same city are too apathetic and careless to take any measures to exterminate this insect when it appears on their premises. They will soon find that such neglect means utter ruin to their business, unless they take warning in time. The remainder of