## THE CANADIAN ENTOMOLOGIST.

the root first occupied has died and become more or less decayed, and this point is sought for the pupal transformation; quite often the cell containing the chrysalis is formed among the fibrous rootlets. In no case can any exit arrangement be made, and it goes hard with those examples that have to reach daylight by passing through such a tangle. To this condition it seems possible to attribute the preponderance of rubbed specimens which are taken at light or other sources.

It may be remarked that Hydracia pupe do not attempt to reach the surface or outlet of their burrows by any process of wriggling when about to give up their imago, a circumstance frequently noted among borers in other families. So inquasita must reach freedom as best it may, and generally comes out the worse for wear; the only perfect examples to result from those bred were secured from those last to appear and which had been taken from their natural quarters and were placed on the surface of damp leaf mould. So long had this species been sought in its larval state, that the ease with which its whereabouts may be known and the flagrant evidence it leaves behind as it first enters the plant make it seem ludicrous that it could have been passed by for so long. One may drive along a country road or even board a trolley car and yet note this species by the wayside. This, however, only applies to a certain season, as later there is nothing to guide one, while a search for the pupæ would be time wasted. About the first of June the young larvæ (presumed to have hibernated in their first stage) enter the frond stem and begin active operations. In a few days the root is reached and henceforth remains the only portion inhabited; in fact, the delicate stem could not long accommodate the enlarging insect. Here the list of casualties begins, as that telltale secret of a hidden larva which appears in the foliage of the plant at this period is as conspicuous to the eyes of its parasitic foes as it can be to human optics. So, a fearful percentage suffer from this source, and many more attain a violent end. Onoclea, with true fernlike propensities, is fond of damp places, though less so than many others, and often grows in depressions that are for a time inundated after heavy rains or showers. If we then visit an infested locality which has a low situation, the number of drowned individuals will quite appal us and our hopes of a rich harvest will receive a serious jar.

When first detected, the larva had certainly passed through at least one moult, though it was noted almost as soon as work was begun. At this period it is very delicate and slender, translucent except on the first

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