THE CANADIAN ENTOMOLOGIST.

Papaipema (Gortyna) eupatorii, Lyman --- This newly-described species was encountered in the larval state in the New Brighton section, establishing the fact, that, like most other species, it is widely disseminated. It is quite distinctive in both moth and larva, being easy of recognition, especially as the food plant does not seem to be popular with many other species, and it is certainly one of the nice things recently exploited. The larva has the happy trait of pupating in the food-plant, thus offering an extended period for securing it. Were parasites less destructive it would be easiest to let them thus remain and simply gather the pupe. But Eupatorium is an ungainly plant to transport, and if left to mature afield but a very small percentage remain unaffected, hence it is not so easy to get it in numbers as some other species. An exit aperture, similar to the work of imperturbata, is made, for the stem rarely falls so as to be broken off, and the larva is careful to plug the great hollow stalk with dried bits above, so the moth must use the door, and not make the mistake of crawling up the interior.

The following will sufficiently characterize the larva, which has not been described : Head 2 mm. wide. rather sm ill for the stage and size of larva; yellow and shining, as is the shield. Mouth-parts and ocelli only are black. Body tapers both anteriorly and posteriorly slightly; colour pale dull sienna. Lines are wide, pale cream colour, indistinct for the stage, none seem to cross the first four abdominal segments. An earlier stage might prove the dorsal to be continuous, but there is so little contrast at present it cannot be made out. Tubercles are very weak and concolorous, though III and IV can be made out, except on joint ten, where III, directly above the spiracle, is a minute dot. On this joint IV is transparent and normal; there is no accessory IVa above it. Spiracles very small, the merest dots, but are black, as is usual. Anal plates small. Length, 35 mm.

Mature larva: As before, except that the shade is a creamy-white. The body is very perceptibly thickened centrally. No change in plates. A primitive larva that one would hardly think belonged to this genus at first glance. Length, 37 mm.

The pupal change occu-s in the first days of August, and the pupa is more cylindrical and less tapering than its close allies. On the front is a very slight ridge, though this is not toothed as in *necopina*. One specimen only had the very faintest spur. The anal extremity is comparatively blunt. Moths emerge September 20th to 28th. The male structures

312