

bark or chips, spin a thin cocoon and transform into red-brown chrysalides. In ten days they appear as perfect moths. There are no doubt three broods in Florida, the last not leaving the cocoons till February ensuing.

They should be treated as recommended for the flea beetle.

PIERIS RAPÆ.

I regret to be obliged to announce the arrival of a distinguished foreigner, one who comes to cause cabbage growers all the trouble possible, for this year sees the "imported cabbage butterfly" in North Florida. This, the *Pieris Rapæ*, probably was imported from Europe in 1856 into North Canada, and has spread in every direction since. I have not seen it in Florida till this spring. The fore wings are white, with black tips and one or two black spots; hind wings, yellowish white; body, black; expands nearly two inches. The worms are pale green, with fine black dots; when full grown, one and a quarter inches long. It is not content with eating the outside leaves of the cabbage, but bores to the center of the head, and in the future, when this pest is established, as it will be, cabbage eaters may well warn their cooks of the danger of mixing meat and vegetables unawares. There are several broods a year in the North. What they will accomplish here remains to be seen.

Owing to the fact that this worm lives on and in a plant used for food, one cannot use most of the insecticides that are of value in other cases. Pyrethrum or salt, in powder or solution, seems most available over large areas; hand-picking is often the only remedy. Poisoned sweets will attract many of the butterflies, though not to be recommended if bees are around, and a smart boy, with a net, can capture most of the butterflies very early, and thus prevent the deposit of eggs; and farmers should uproot and burn all old and worthless plants of cabbages, collards, cauliflower and mustard, to prevent them acting as breeding grounds, not only for this new pest, but the *Plusia*, *Mamestra*, root-knot worm and the calico bug.

ORANGE SCALE INSECTS.

A large number of scale insects are found in our State, and, at times, they are very troublesome. The waxy scale (*Ceroplastis*), long scale, purple scale (*Mytilaspis sp.*), fig scale, white or oleander scale (*Aspidiotus sp.*), chaff scale (*Purlatoria*), brown scale (*Chionaspis*), broad scale and round scale (*Lecanium sp.*), and mealy bugs (*Dactylopius sp.*) have been reported to me as occurring in groves. All these insects are easily destroyed by spraying with some emulsion containing arsenic, kerosene, carbolic acid, etc. See formulas. They have so many insect enemies that, in many cases, it is enough to give but one or two sprayings in July or October, just after the appearance of new broods, when the insects are least protected.

It having been reported that the "fluted scale" (*Icerya*) had been found in the State led me to investigate. I found it was the