

ENTOMOLOGICAL NOTES.

JAMES C. NEAL, M. D.

It is very common to ridicule the efforts of practical entomologists, and belittle the results obtained by their methods of preventing or mitigating the ravages of insects, but the fact remains that at no distant date no farming will be a success without considerable knowledge of the habits of insect foes and the means devised to oppose them.

Already in many sections the agriculturist realizes that he may fertilize his soil, plant the best of seed, it may rain, the sun may shine, still his crops are at the mercy of his insect enemies, and he reaps a paying crop, or is ruined at the sweet will of despicable intruders who make up in numbers what they lack in strength. North of us, the cold gives some respite, but in Florida there is practically no such relief. Does the farmer plant an ordinary crop, from its germination to fruiting, it is assailed by bugs, worms and beetles. If fruits are the staple, half a hundred insects invade the grove, and what with scale, spider mites, borers, curculios, weevils, aphides, grasshoppers, bugs and beetles—the grove and orchard with their luscious fruits are in constant danger.

The enemies of the forest, grove, garden and field are legion—rarely a plant escaping, and especially does it seem, at times, that our best food plants are marked for destruction.

At the lowest calculation, the average loss of crops to the farmers of Florida is not less than 20 per cent., and often half or all of some staples—a direct and always collected tax paid by those least able to pay, and a loss of time, money and labor, of hopes and plans not to be estimated in the sordid way of dollars and cents.

When a cotton field is destroyed by the cotton-worm (*Aletia*), as if swept by fire, it means a whole year's toil is wasted; it means unpaid debts, foreclosed mortgages and the gaunt spectre of want just ahead. Nor is this all; many farmers could make enough corn to do from one crop to the next, were it not for the weevil and various insect pests that infest the corn crib, and it is almost impossible to secure cow-peas, at times, for seed, such is the destruction of this staple by beetles and weevil; even keeping them in the pods does not secure the crop.

The loss to farmers in this way, after all the trouble of making and harvesting, is a tax of at least 25 per cent.

To aid our farmers in evading this tremendous tax is the labor of love of practical entomologists, and I beg every farmer in Florida, into whose hands this Bulletin may fall, to read carefully, and then contribute his aid, in the future, in the investigation of the habits of these pests, for it is directly in the line of self-interest.