

black ; the thighs are very flat and wide, inclining to ovate ; tibiae armed with long black bristles.

This I believe is the largest flea known, but I have not been able to ascertain upon what animal it was captured.

(Concluded.)

ON TWO NEW CHALCID FLIES FROM FLORIDA, PARASITIC UPON THE LARVÆ OF SYRPHUS FLIES.

BY WM. H. ASHMEAD, JACKSONVILLE, FLA.

Having continued my investigations on Orange Insects, I have made many other discoveries. Among these probably the most interesting is the breeding of two species of *Chalcids* from the larvæ of *Syrphus* flies.

Now, as a general rule, the *Chalcididae* must be considered beneficial, the majority of them preying upon other insects injurious to the agriculturist, the species belonging to the *Eurytomide* genus *Isosoma*, being, I believe, the only vegetable feeders known among them.

In my recent pamphlet on "Orange Insects," I described and figured several bred from Aphides, Coccides, etc.; besides, I have since bred hundreds from other sources, and all may be considered beneficial.

Nevertheless, there are exceptions to all rules, and those now under consideration must come under that head and be classed as injurious, because they prey upon the larvæ of flies which destroy our orange aphides—pests particularly troublesome to the orange grower in spring and fall. Another strange fact about these *Chalcids*, and which needs a thorough investigation, is this: How do so many manage to live in and subsist upon the *Syrphus* without destroying it at once? For it is not until the larva has transformed into a puparium, that these little parasites themselves transform—first into pupæ, and afterwards into perfect flies, which escape by eating a hole through the head of the puparium. From a single puparium I had 18 *Chalcids* (5 males and 13 females). On carefully opening another, I found it closely packed with *Chalcid* pupæ, like "sardines in a box." Undoubtedly all of these lived as minute worms in the larva of the *Syrphus* fly, feeding day after day on the fatty substance, but