

THE PSYLLIDÆ OF THE UNITED STATES. By C. V. RILEY of Washington, D. C.

[ABSTRACT.]

THE Psyllidæ, or flea-lice, are rather small homopterous insects, that have remarkable jumping powers. Some of them injure cultivated plants. This is notably true of the *Psylla pyri*, which blights the buds of pear-trees; and *Phylloplecta tripunctata*, which crumbles the tips of the blackberry. The family has received little attention in the United States, and scarcely anything has been known of the life-history and development of the species. The paper enumerates seventeen described species, four of these being synonymes, and one of them (*Psylla pyri*) introduced from Europe. They fall into four subfamilies, and represent four genera already characterized, and three new genera,—*Brachylivia*, *Pachypsylla*, and *Phylloplecta*. The new species characterized are *Calophya vitreipennis*, from Arizona; *C. nigripennis*, on *Rhus copallina*; *C. flavida*, on *Rhus glabra*; *Pachypsylla celtidis-curcubita*, forming galls on leaves of *Celtis texana*, *P. c.-pubescens*, *P. c.-asteriscus*; *P. c.-umbilicus* and *P. c.-vesiculum*—all forming galls on leaves of *Celtis occidentalis*; *Blastophysa* (nov. gen.) *c.-gemma*, forming galls on the twigs of the same tree; *Ceropsylla* (nov. gen.) *sideroxyli*, a remarkable form developing in pits on the leaves of *Sideroxylon masticodendron*; *Trioza sanguinosa*, on *Pinus australis*; *T. sonchi*, on *Sonchus arvensis*; and *Rhinopsylla schwarzii*, from the cypress-swamps of Florida. The paper records discoveries as to the life-history of the species, and especially those affecting *Rhus* and *Celtis*; the latter forming a group peculiar to North America, and the most perfect gall-makers in the family.

The eggs of Psyllidæ are attached to leaves by a pedicel, are somewhat pointed at one end, and often terminate in a filament. The young are broad and flattened, with a fringed margin. They are generally pale, and more or less covered with a flocculent secretion. Those on sumach are dark, and without such flocculence. Those making galls on hackberry have stout spines at the end of the body, by the aid of which they are able to work out of their galls.

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