Article XVI.—FOOD-HABITS OF NORTH AMERICAN SESIIDÆ.

By WILLIAM BEUTENMÜLLER.

As will be seen from the following list, comparatively little is known about the food-habits of our Clear-winged Moths, and for this reason I have thought it advisable to bring together all the known information on the subject, in the hope that it may stimulate others to undertake to raise the species and to give us some additional information of this interesting family of Moths.

The larvæ, as is well known, are internal feeders, living in the roots, stems or pith of plants, or under the bark, solid wood or roots of trees. Some species are inquilinous in the galleries made by other species of insects, or in other words they prefer to breed in wounded places made by insects or through other causes. The species are all, as far as I am aware, single brooded, hibernating in their larval stages. The larvæ are fleshy, white, with testaceous or chestnut-brown corneous heads and cervical shields. They are not difficult to raise, if the plant in which they feed is kept moist and in a box well ventilated, so as to prevent the attack of fungus.

Melittia satyriniformis Hübner.

Lives in the roots and lower parts of the stems of squash vines, and probably other allied plants.

Melittia gloriosa Hy. Edw.

Has been bred from the roots of sumac, *Rhus laurina* (Proc. Ent. Soc. Wash., I, p. 85), and it also feeds in the herbaceous climbing stems of *Megarrhiza*.

Alcathoë caudatum (Harr.).

Feeds in the roots of virgin's-bower (Clematis virginiana).

Sannina uroceriformis Walker.

The larva lives in the roots of the persimmon.

Trochilium pacificum Hy. Edw.

Bores in the cottonwood, and very likely also in the willow.

Trochilium tibiale Harris.

The larva inhabits the trunks of poplar and willow.

Trochilium apiforme (Linn.).

This well-known European species breeds in the roots and lower parts of the trunks of poplar and willow.

Bembecia marginata (Harris).

Lives in the roots of the blackberry and raspberry.

Vespamima sequoiæ (Hy. Edw.).

Breeds in the California redwood (Sequoia sempervirens) and pines (Pinus lambertiana and P. ponderosa). It produces thick excresences on the branches and trunks.

Sciapteron tricincta (Harr.).

Lives in the canes and trunks of low swamp willows, infested with *Cryptorhynchus lapathi* and *Saperda concolor*. It also inhabits the poplar.

Sciapteron denotata (Hy. Edw.).

The habits are probably the same as those of the preceding species.

Sciapteron robiniæ Hy. Edw.

This is destructive to the locust (*Robinia pseudacacia*), and is also recorded as infesting the poplar.

Sciapteron simulans Grote.

Lives in the solid wood of the trunks of red oak.

Sciapteron dollii Neumægen.

Breeds in the solid wood of poplar, and possibly also in willow.

Sciapteron polistiformis (Harris).

The larva burrows in the bark and sap-wood of the roots of both wild and cultivated grape-vines.

Tarsa denudata (Harr.).

Lives in the roots and lower parts of the trunk of alder and ash.

Parharmonia pini (Kellicott).

The larva lives under the bark of pine.

Podosesia syringæ (Harris).

Affects the trunks of lilac, ash and mountain ash (Pyrus americana).

Podosesia fraxini (Lugger).

The larva inhabits the trunks of the ash, and it is very likely that it also lives in lilac.

Sanninoidea exitiosa (Say).

Lives under the bark of the peach and cherry, both wild and cultivated, at the base of the tree and very often beneath the surface of the ground.

Sanninoidea opalescens (Hy. Edw.).

Feeds like the preceding species, in the trunks of the peach and apricot, and without doubt also affects the cherry.

Sesia rutilans (Hy. Edw.).

Breeds in the roots of the strawberry, blackberry and raspberry.

Sesia bassiformis (Walker).

Bores in the stalks of Eupatorium.

Sesia rubrofascia (Hy. Edw.).

Inhabits the trunks and canes of willow infested with Cryptorhynchus lapathi and Saperda concolor.

Sesia albicornis (Hy. Edw.).

The habits are the same as those of Sesia rubrofascia.

Sesia culiciformis var. americana Beut.

Lives in the trunks and stems of the alder in Nevada.

Sesia acerni Clemens.

Bores under the bark of the maple, especially the silver maple (Acer dasycarpum).

Sesia corni (Hy. Edw.).

Breeds under the bark of maple.

Sesia tipuliformis (Linn.).

Bores in the stems of the cultivated currant, and in Europe it also lives in the young shoots of hazel.

Sesia pyri (Harris).

Lives in the trunks of pear and apple, between the outer bark and sap-wood.

Sesia scitula (Harris).

Lives under the bark of chestnut, oak and dogwood, also in the oak-galls Andricus cornigerus, and in galls on willow and hickory.

Sesia rubristigma (Kellicott).

Has been bred from the oak-gall, Andricus cornigerus.

Sesia sigmoidea Beut.

A specimen in the Museum Collection is labeled "from willow."

Sesia querci (Hy. Edw.).

Has been bred from galls found on live-oak in Arizona.

Sesia prosopis (Hy. Edw.).

Has been raised from galls found on mesquite in Arizona.

Sesia pictipes $(G. \Leftrightarrow R.)$.

Lives under the bark of plum, cherry, beach plum, chestnut, and juneberry (Amelanchier canadensis). Usually bores under the bark some distance up from the base. It also feeds in the black knot fungus.

Pyrrhotænia floridensis Grote.

Specimens of the moths have been taken on scrub-oak by Mrs. Slosson, and it is possible that the larvæ may in some way feed on this tree.