

tibiae dark yellowish brown, the tarsi darker, almost black. Ovipositor moderately stout, as long as the body; terminal lobes broad, the length thrice the width and thickly setose. Other characters practically as in the male. Type Cecid a2520.

LEAF GALLS. The primary infestation, as we have shown elsewhere, frequently begins in the bud. Deformations belonging in this class are not very important, though *Thecodiplosis liriodendri* O. S. is responsible for serious disfiguration, and probably some weakening of tulip leaves, particularly in the latitude of North Carolina. The recently established box leaf miner, *Monarthropalpus buxi* Lab. of Europe, appears to be a serious pest of the highly prized ornamental Box. The young leaves of the Black Locust, *Robinia*, may be seriously deformed by the larvae of *Dasyneura pseudacaciae* Fitch, or the margins rolled by those of *Obolodiplosis robiniae* Hald. *Contarinia canadensis* Felt, the probable producer of the midrib gall on ash, is so abundant locally in the Hudson valley as to seriously affect the foliage of saplings. The extent to which leaf infestation may go is shown by the fact that some 22 species of gall midges are known to infest the leaves of hickory and about 20 those of oak. Most of these, as well as numerous other leaf-inhabiting forms, are of comparatively little importance.

STEM GALLS. Irregular, subcortical galls are produced in living tissues by species of *Rhabdophaga* and *Lasioptera*, the former being confined mostly to willow. The European *Rhabdophaga salicis* Schr. has become established in some localities where basket willows are grown and causes considerable loss by ruining the shoots for both basket work and the binding of bundles of nursery trees. Willow twigs are attacked by 21 American species of gall midges. *Lasioptera querciperda* Felt lives in the subcortical tissues of white oak twigs, producing gnarly areas and, presumably, defects in the wood. Several species of *Itonida*, *I. resinicola* O. S. and *I. resinicoloides* Wlms. attack the inner bark of young pines, and in some instances considerable pitch exudes and rather serious injury may result in the case of individual trees. *Itonida inopis* O. S. is a subcortical form, the larvae producing a swollen, gouty condition of the twigs and a marked lowering in the vigor of badly infested trees.

Root galls are known in only a very few cases, probably because of the difficulty of discovering them, and, so far as forest trees are concerned, none of importance have been recorded.

A general survey of the gall midges known to infest forest trees, shows that the hickories, the oaks and the willows, and to a less extent the poplars, all representing genera with a number