

same condition occurs this year as was noted last, and a large number of insects of various kinds have been observed feeding on the leaves, none of those I found were common enough, at any one time, to indicate that they were to blame for the trouble.

I am inclined to think now that it is the work of some nocturnal insect, possibly a Scarabæid.

*Xyleborus celsus* in Hickory.—On Dec. 1st, 1895, I discovered a number of colonies of a Scolytid in a hickory stump, which revealed numerous males of the species, as well as some good examples of the galleries. The interesting features of the discovery were presented to the W. Va. Academy of Science in a paper read at a meeting held on Dec. 3rd. Attention was called to the rarity of the male, and that this was probably the first time it had been found in company with the female. But one male was found in each colony of 40 to 50 females, and it was usually located at the farther end of one of the galleries, where it was imprisoned by the females, which were closely crowded in the galleries in Indian file, with their heads towards the inner end. One female guarded the single entrance to the suite of galleries from all intruding enemies by stationing herself just within the entrance and presenting her armoured elytral declivity as an impenetrable barrier to the would-be intruders. This habit and method of guarding the entrance to the brood-galleries is common with most Scolytidæ, and possibly serves in part to explain the object of the peculiar form of the elytral declivity in *Platypus*, *Xyleborus*, *Tomicus*, *Scolytus*, and other genera.

Some of the females of the bark-infesting species, after they have fulfilled their mission of forming the egg-galleries and depositing eggs, station themselves at the entrance, where they die at their maternal post of duty, their dead bodies forming as effectual a barrier against the entrance of certain enemies as if living.

The male *Xyleborus celsus* is evidently identical with Leconte's *X. biographus*, as was thought probable by Eichoff.

*The Willow Leaf Beetle, Lina lapponica*, was exceedingly common during the early part of the season, completely defoliating all kinds of willows in some sections of the State, and often doing serious damage to the foliage of certain cultivated poplars. Spraying with Paris green was recommended for the protection of cultivated willows and poplars.