A NEW ORCHARD PEST—THE FRINGED-WING APPLE-BUD MOTH (NOTHRIS? MALIGEMMELLA, n. sp.).

BY J. M. STEDMAN, PROFESSOR OF ENTOMOLOGY, UNIVERSITY OF MISSOURI.

GENERAL REMARKS.

While experimenting two years ago with the Leaf Crumpler and the Leaf Folder, a gentleman asked me to visit his apple orchard, some two miles distant, and to observe the destructive work of what he supposed was the Leaf Folder. The orchard had been in bearing for several years and covered sixty acres. The apple trees had at that time just shed their blooms (petals) and the adjacent orchards appeared green, while the infested one was very conspicuous, appearing as if a fire had swept through it.

On entering the orchard it was seen at a glance the injury was not caused by the Leaf Folder, but by a bud moth, which I at once concluded must be the Eastern Bud Moth (Tmetocera ocellana). However, as soon as I saw the larvæ that were doing the work, I observed that we had to deal with an entirely different species of insect, one which I had not observed or read of, and yet one that was doing a vast amount of damage, for the entire orchard was not only losing its prospective heavy crop of fruit, but also a large per cent. of the developing leaves and shoots, and as a consequence, the prospects for next year's fruit buds.

THE DISTRIBUTION OF THIS INSECT.

From inquiry, it seems this pest first made its appearance in one corner of the apple orchard two years previously, and since that time had multiplied to such an extent as to not only cover this orchard, but had spread into the edge of two adjacent apple orchards, but not into an adjacent pear orchard. The moth had its own way in this orchard, however, since the party owning it did not up to that time believe in spraying, and this enabled nature to take her course; while in most commercial orchards the pest might not have multiplied so rapidly owing to the sprayings applied for other insects.

Thus far we have seen this moth only in the apple orchards in Jackson County, although several fruit-growers have lately reported its presence in their apple orchards in other western counties of this State, but they have not as yet sent specimens for identification.*

^{*}Since the above was written I have been reliably informed that this insect has been doing considerable damage in Kansas for the past three years.