"In the field the moths were found in large numbers resting on the trunks of trees
They remained motionless until touched, and even then often flew only a shor
distance, taking a new position on the same trunk. As many as fifteen were counte
on the shady side of the trunk of a Kieffer pear tree. However, the insects did no
confine themselves to the trunks of the trees alone, but were occasionally found restin
upon near-by weeds or upon the branches and, in a few cases, upon the leaves.

" All attempts to feed the moths in captivity failed. They apparently refused t
taste the brown sugar syrup offered them. Nor were attempts to obtain eggs in con
finement more successful, as the insects would not oviposit under the unnatural con
ditions of the rearing cage."

THE LARVA.

" It is in the larval stage that *Recurvaria nanella* spends most of its life. I
Benton Harbour the eggs commenced hatching about July 15. The larvæ at thi
time are very small, measuring scarcely more than 1 mm. in length. They at one
bore through the epidermis of the leaf on the under side and commence the construc
tion of a most curiously shaped mine in the inner tissues of the leaf.

" The larva first eats its way in a small circle, then constructs a main burrov
which soon divides, the branches in turn again dividing, often after the manner o
the branches of a tree. The form of these mines, however, is by no means regular, bu
shows considerable diversity. The insect does not finish the construction of an
branch of the mine at once, but feeds at will in all parts, keeping the whole min
open and ejecting all excrement at the point of entrance. Thus, if the larva, whicl
can be seen through the epidermis, be disturbed, it will rapidly crawl to another par
of the mine; and if followed, will escape at the entrance hole.

" The larvæ show no preference as to the point of entrance, eating their way int
the leaf tissues at any point from the midrib to the edge.

" One or many mines may be constructed in a single leaf, according to the degre
of infestation. Where the insects are numerous, the mines form a networ. coverin
the leaf. It is evident that the adult female in depositing her eggs lays a number a
one time on adjacent leaves, as the mines usually appear in groups, several affecte
leaves occurring on the same twigs or on neighbouring twigs.

" Upon the arrival of the first cold days of fall, the larvæ begin leaving the mine
to construct the small silken hibernacula in which they pass the winter. The desertion
of the leaf mines commenced about September 12 (1913), the temperature showing
the first considerable drop of the season at that time. By September 17, practically
all the larvæ had disappeared from the mines. However, upon picking off small piece
of loosened bark. or lifting up old bud scales, the larvæ were discovered spinning th
minute cocoons which were to be their winter shelter.

" No preference was shown in the selection of a place for hibernation, the larva
taking possession of the first available protection. On large trees they confine them
selves to the twigs and smaller branches, but on small trees they may be found in
abundance on the large limbs and trunk. The hibernating larvæ on large trees, even
where the infestation is severe, are difficult of location, being very small and incon
spicuous. However, after a few days in the spring the larvæ begin to appear in great
numbers as if spontaneously.

" As the weather warms, and the buds on the fruit trees swell, one may discover
upon close observation, minute masses of reddish or greenish pellets upon the buds
This is the excrement which the larva within has deposited at the entrance to it
burrow.

" The first larvæ at Benton Harbour were observed working in the buds in con
siderable numbers on April 15, when the buds were just beginning to swell. The
probably began emerging in small numbers one or two days before.

" The insect appears to show little preference as to the point of its attack on th
bud. for it enters either at the side or at the tip. As a rule those entering at the side