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NOTES OF THE SEASON FROM CONNECTICUT

By W. E. BRITTON, *Agricultural Experiment Station, New Haven, Conn.*

During the year some interesting and rather important investigations have been conducted by this department. In Connecticut the walnut weevil, *Conotrachelus juglandis* Lec., has been so destructive that for several years it has been nearly impossible to obtain fruit of the various imported and cultivated walnuts belonging to the genus *Juglans*.

In nearly all of the scanty literature this weevil is said to breed in the nuts, but in Connecticut, the larvæ do much greater damage by tunneling in the new shoots, causing them to wither and die before they can produce fruit. My assistant, Mr. H. B. Kirk, has worked out the life history of *C. juglandis* the past summer. Very little has heretofore been known regarding it. A bud moth, *Acrobasis* sp., also attacks and injures the new growth and Mr. Kirk has studied this insect, finding three generations each season.

Though these studies represent only one season's work, the results indicate that both the weevil and the bud moth can be controlled by spraying the foliage and shoots with lead arsenate. A complete account of the work mentioned above, including bibliography, and distribution of the walnut weevil in the United States will appear during the winter in the next report of the Station (12th Report of the State Entomologist of Connecticut).

For three years Mr. B. H. Walden has been making observations upon a sawfly found defoliating cultivated blackberries in a field near New Haven. A knowledge of its life history is now complete and the insect being a new species of the genus *Pamphilius* was described by Prof. A. D. MacGillivray in *Canadian Entomologist*, Vol. XLIV, October,

1912, page 297, as *P. dentatus*. The work of this insect, which will be described in the report mentioned above, resembles that of the peach sawfly, *P. persicum* MacG., studied five years ago by Mr. Walden, and which is still doing sufficient damage in some Connecticut orchards, to warrant the spraying with lead arsenate of several thousand trees in 1912.

Studies are also in progress upon the white pine weevil, *Pissodes strobi* Peck., and other insects attacking the pine trees in Connecticut.

The cold wet spring seemed favorable for the increase of aphids of nearly all kinds. The rosy apple aphid, *A. sorbi* Kalt., was more abundant and caused more injury than since 1909, and the green apple aphid, *A. pomi* DeG. was also common.

White grubs, *Lachnosterna*, did more damage than I have seen in the state during a residence of eighteen years. Not only were grass fields injured, but the roots of corn and strawberries were eaten, and in some cases the potato crop was nearly destroyed by them. In one forest nursery nearly 25 per cent. of the seedling pines, spruce and deciduous trees were eaten off under ground.

The fall army worm, *Laphygma frugiperda* S. & A., was received from Stonington, Groton and from two different localities in New Haven in September. In three places it was devastating lawns, and in the other case it was feeding upon a field of millet.

The flight of the cotton moth, *Alabama argillacea* Hubn., was much less noticeable than in 1911, and occurred more than two weeks later in the season. Around New Haven the moths were not nearly so abundant as last year, but were most numerous on October 11 and 12. In 1911 the date of their greatest abundance was September 26.

Good progress has been made in the control of the gypsy moth, *Porthetria dispar* Linn. At Stonington no caterpillars have been found since 1910, and it is regarded as wholly exterminated there. At Wallingford, 26 caterpillars were found last summer where 1,551 were taken in 1911 and 8,936 in 1910. Both localities will be watched for some time and in a few weeks, both state and federal scouts will examine them for egg masses.

The brown-tail moth, *Euproctis chrysorrhæa* Linn., has spread southward slightly since last year, involving portions of the towns of Brooklyn, Plainfield and Sterling. An isolated colony was discovered during the summer at Norwich several miles southward and a single winter nest was found at Stafford Springs several miles west of the previously infested area near the northern border of the state.

The birch leaf skeletonizer, *Bucculatrix canadensisella* Chamb., though much less abundant in the eastern portion of the state than in 1910, was found over the entire state as in 1911, and was particularly

noticeable on the yellow birches in Litchfield County in September. It was also received at this office on cut-leaf and other ornamental birches from various localities.

In addition to the insects mentioned, the usual pests such as the San José scale, *Aspidiotus perniciosus* Comst., the tulip tree scale, *Toumeyella liriodendri* Gmel., the pine bark aphid, *Chermes pinicorticis* Fitch., the spruce gall louse, *Chermes abietis* Linn., the woolly maple leaf scale, *Phenacoccus acericola* King., various aphids, the spiny elm caterpillar, *Euvanessa antiopa* Linn., the elm leaf beetle, *Galerucella luteola* Müll., the red humped caterpillar, *Schizura cinnina* S. & A., the white marked tussock moth, *Hemerocampa leucostigma* S. & A., the fall canker worm, *Alsophila pometaria* Harr., the bumble flower beetle, *Euphoria inda* Linn., the rose chafer, *Macrodactylus subspinosus* Fabr., and the various species of cutworms have all been in evidence.

Increased interest in the control of the house fly and mosquito nuisance has been manifested in various parts of the state, by the demand for illustrated lectures and for information regarding these insects. Mosquito control work has been taken up in a number of shore towns and nearly 3,000 acres of salt marsh have been drained the past season.

NOTES FROM KENTUCKY

By H. GARMAN, Lexington, Ky.

The San José scale has shown a disposition to extend its distribution in Kentucky with very great rapidity during the past two years. Our recent examinations of the Kentucky nurseries have shown that a larger proportion became infested during 1912 than in any previous year of my experience as state entomologist. Just what this rapid spread is due to would be difficult to explain. I have sometimes suspected that nurseries of other states were sending in infested stuff that was not properly fumigated and perhaps not inspected. A rapid growth of interest in fruit growing has accompanied this increase in the prevalence of the scale. Perhaps the two are associated.

Several other insects have attracted special attention during the past season. One is the chinch-bug, ordinarily not a troublesome insect pest in Kentucky and only appearing locally and occasionally in numbers sufficient to call for treatment. We have had a number of demands for the white fungus with which to destroy chinch-bugs doing mischief in some of our counties along the Ohio River this year.