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✓ COOPERATIVE ECONOMIC INSECT REPORT

Vol. 1

Special Report No. 1

October 26, 1951

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TOBACCO ATTACKED BY A SPECIES OF HETERODERA  
IN CONNECTICUT

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Mature Heterodera females have been found attached to roots of regular shade tobacco received September 7, 1951 from a Hazardville, Connecticut grower. Soil samples from the infested field were found to contain up to fifty cysts per two ounces of soil. Although no morphological differences have been found between this Heterodera and H. rostochiensis (2) the two nematodes appear to differ in their host ranges. Tobacco varieties have been tested for susceptibility to Heterodera rostochiensis in England (1 and 6), Germany (5), Holland (4) and the United States (3) with negative results.

Reaction of potato and other Solanaceae to the Connecticut Heterodera is being studied. Some of the same regular shade seed which was planted at Hazardville, Conn. has been sent to Long Island for testing against H. rostochiensis from potato. Until H. rostochiensis from potato on Long Island has been found to reproduce on Connecticut regular shade tobacco it is doubtful that the nematodes found in the two states are identical, and doubtful that they are equally pathogenic to potato.

The Bureau of Entomology and Plant Quarantine, U. S. D. A. is making a detailed survey of tobacco and potato fields in the Hazardville, Connecticut area in cooperation with the Connecticut Agricultural Experiment Station. The number of infestations found and degree of infestation on tobacco may give a clue to pathogenicity of the Con-

necticut Heterodera to these crops as well as its distribution. The Bureau of Entomology and Plant Quarantine has conducted limited yearly inspections of Connecticut potato growing areas and grading centers only from 1948 through 1950 and has found no H. rostochiensis present.

The survey and experiments now being conducted should place us in a better position to evaluate the Heterodera on tobacco in Connecticut.

#### LITERATURE CITED

1. Jones, F. G. W.  
1950. Observations on the beet eelworms and other cyst-forming species of Heterodera. *Annals of Appl. Biol.* 37:3. 407-440.
2. Lownsbery, B. F.  
1951. A species of Heterodera found on tobacco in Connecticut. *Plant Disease Courier* (in press).
3. Mai, W. F. and Lownsbery, B. F.  
1948. Studies on the host range of the golden nematode of potatoes Heterodera rostochiensis Wollenweber. *Amer. Pot. Jour.* 25:8. 290-294.
4. Oostenbrink, M.  
1950. Het aardappelaaltje (Heterodera rostochiensis Wollenweber) Een Gevaarlijke Parasiet voor de Eenzijdige Aardappelcultuur. H. Veenman and Zoonen. Wageningen.
5. Reinmuth, E.  
1929. Der Kartoffelnematode. *Beitrage zur Biologie und Bekämpfung. Zeit. Pflanzenkrankheiten.* 39: 241-276.
6. Triffitt, M. J.  
1929. On the occurrence and significance of Heterodera schachtii infesting certain weeds. *Jour. Helminth.* 7: 215-222.

Unusual Grass Scale Reported from the South

During the past summer specimens of coccids which "were feeding on and killing centipede grass in the Pensacola, Florida area," were submitted to the Division of Insect Identification by W. C. Rhoades, North Florida Experiment Station, Quincy, Florida. This collection of scales, together with material submitted from Barranco National Cemetery about 6 miles from Pensacola was identified as Eumargarodes laingi Jakubski, of the ground pearl group. It was the first time this species had been identified from the United States. However, specimens collected in 1937 and 1938 in the Pensacola area have since been identified as this species. The insect has caused considerable injury to lawn grasses during the past season particularly centipede and St. Augustine.

Damage seems to be closely associated with drought conditions since the years in which damage has been reported, 1937, '38 and '51, have been deficient in moisture. Specimens now have been collected in several localities in northwestern Florida and southern Alabama.

The only other area from which this pest has been reported is Australia where specimens were collected from roots of sugarcane.

The following additional entry has been made to the program for the Session on Insect Pest Surveys to be held at the Cincinnati meetings, December 13:

The Use of Survey Information in Effectuating Insect Control.

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