

1959

EC59-1826 Plant Diseases : Bacterial Wilt of Cucumber, Cantelope and Watermelon

John L. Weihing

Follow this and additional works at: <http://digitalcommons.unl.edu/extensionhist>

Weihing, John L., "EC59-1826 Plant Diseases : Bacterial Wilt of Cucumber, Cantelope and Watermelon" (1959). *Historical Materials from University of Nebraska-Lincoln Extension*. 3498.
<http://digitalcommons.unl.edu/extensionhist/3498>

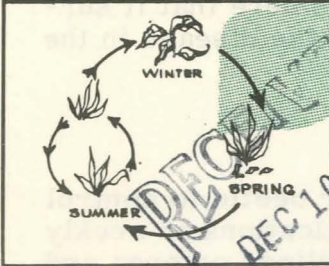
This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

PLANT DISEASES

JOHN L. WEIHING

Extension Plant Pathologist

Bacterial Wilt of Cucumber, Cantelopo and Watermelon



SYMPTOMS

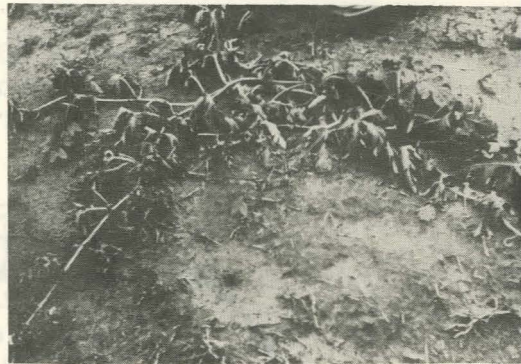
At first usually one vine will wilt and die. Within a few days the other vines of the plants wilt and die. The juice in the affected vines becomes sticky and stringy so that when the vine is cut across, the juice may be drawn out like a string when the finger is pressed to the cut surface and slowly withdrawn.

CAUSE

This wilt disease is caused by a bacterial organism. It infects the tissues of the plant which transport the moisture and nutrients.

Although the bacterial organism is extremely small (250,000 lined up end to end will measure an inch)

it can, within a few days, multiply into billions. This tremendous number causes plugging of the conducting system and stops the movement of moisture and nutrients. The plant soon wilts and dies since the foliage cannot obtain adequate moisture.



EXTENSION SERVICE
UNIVERSITY OF NEBRASKA COLLEGE OF AGRICULTURE
AND U. S. DEPARTMENT OF AGRICULTURE
COOPERATING

W. V. LAMBERT, DIRECTOR

E. W. JANIKE, ASSOC. DIRECTOR

The bacterial organism is transmitted from plant to plant during the feeding of the striped cucumber beetle or the spotted cucumber beetle (adult form of the southern corn root worm). The bacterium is able to live inside the body of these beetles and it is here that it survives the winter. The only source of the disease in the spring is from the beetles.

CONTROL

You have to control the cucumber beetle to control bacterial wilt. Make insecticide applications at weekly intervals starting as soon as the seedlings emerge and continue throughout the growing season.

Recommended dusts: (do not apply when dew is on vines)

- 4% malathion
- 10% methoxchlor
- 1% rotenone

Recommended sprays:

Two teaspoons of 50% malathion emulsion concentrate per gallon of water. Three tablespoons of 50% methoxychlor wettable powder per gallon of water.

