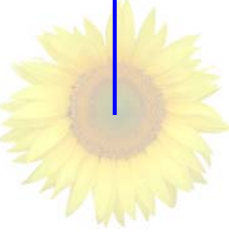


Sunflower CROP REPORT



“The economical stage of sunflower rust has not yet been seen. With optimal environmental conditions being experienced, it is a matter of time before the cinnamon brown pustules appear.”

Manitoba Sunflower Crop Report 5

Crop Stage

V-4 to R-1. Sunflowers further progressed in the *Western* region. Soil temperatures cooler this week in the 14-18°C range. Significant rainfall limited progress in *South Central* and *Eastern* regions with crop loss observed.

Weeds

Spraying/in crop tillage being wrapped up in most fields. Early season control is essential- once crop develops a shade canopy, most weeds will not be able to compete.

Insects

Grasshopper defoliation is evident in many fields (up to 20% defoliation on some leaves). Spraying of headlands at time of herbicide application has taken place in some fields.

Diseases

The heaviest early stage rust infections have been observed in the southern most extremes of the Western and Central regions. Notably, the R.M's of *Rhineland, Pembina, Winchester, Brenda, Edward and Albert*. An emergency use application for *Headline®* has been submitted and approval is pending. Upon registration, data shows that a low threshold of 0-1% infection on the upper four leaves is appropriate at the bud stage (R-1) for *Headline®*. (see attached diagrams to determine percentage of infection) Time is of the essence, keep monitoring!

Downy Mildew has been found at low levels in the *Western* region, mostly along ravines and headlands. A lime green/yellow chlorosis and distinct white fungal growth on back of the leaf are key features.

Current Crop Limiting Factors

Disease and Excess Moisture.

Scouting Images



Early bud stage (R-1) - look for a star like appearance on the immature bracts.

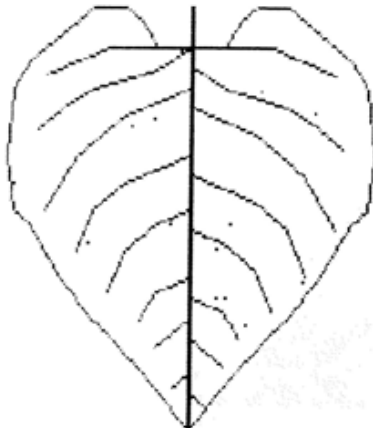


Downy Mildew - (L) Lime green chlorosis (R) White fungal growth

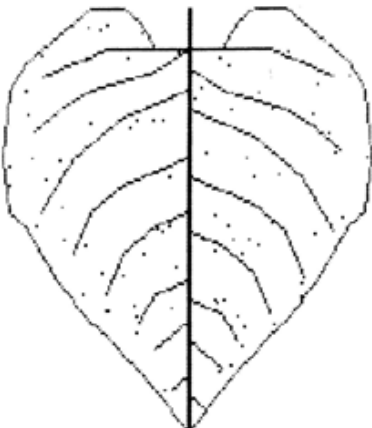


Rust infection on cotyledons which produce the troubling reddish brown pustules.

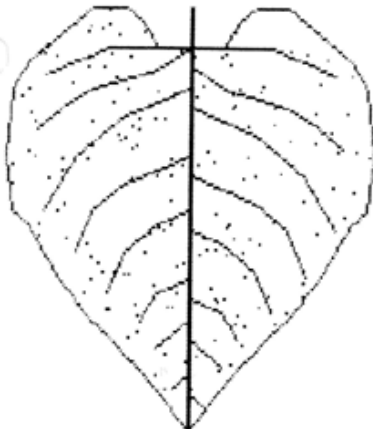
ASSESSING % INFECTION for Disease



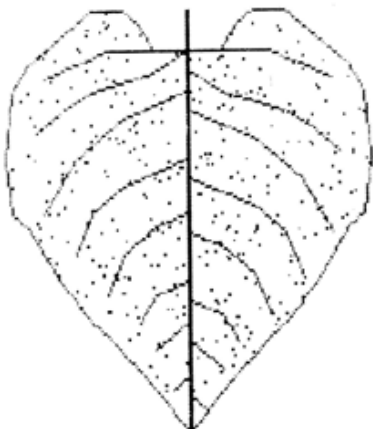
Leaf Area Affected .1%



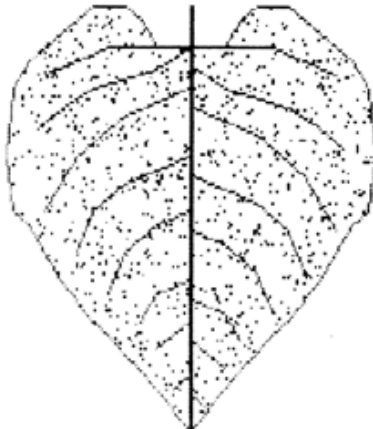
Leaf Area Affected .5%



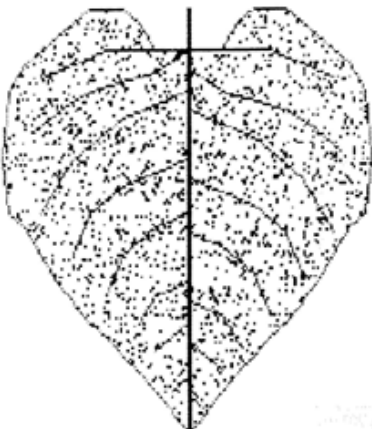
Leaf Area Affected 1%



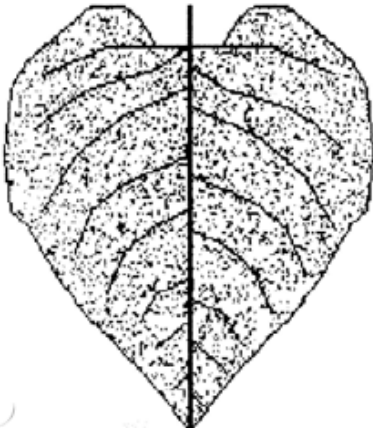
Leaf Area Affected 2%



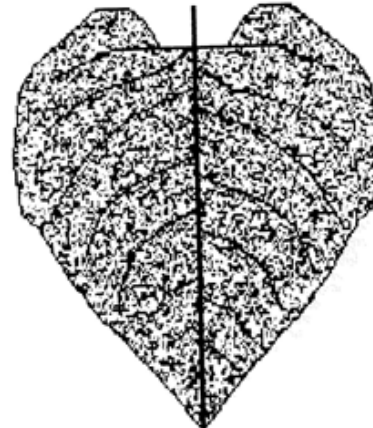
Leaf Area Affected 5%



Leaf Area Affected 10%



Leaf Area Affected 20%



Leaf Area Affected 40%

ASSESSING % DEFOLIATION for Insects

