XIX ROOT MAGGOT MONITORING TRIAL - *B. NAPUS*

Objective: To compare and rate root maggot damage on varieties entered in the variety trial.

Background: Root maggots have been identified as a major pest of ***B. rapa*** in the parkland area of Alberta. Work at the University of Alberta and the Alberta Environmental Centre has shown that root maggots can reduce canola yield by up to 50 %. Susceptibility to root maggot differs between ***B. rapa*** and ***B. napus*** types. However, there may also be different degrees of root maggot resistance within each species.

Methodology: The variety trials (***B. napus***) were used in the root maggot monitoring trial. Thirty representative plants were collected from each plot within two days of swathing. Root maggot ratings were made immediately after collection.

Ratings:
0 - no damage
1 - feeding channels <10 % root surface area
2 - feeding channels 11 - 25 %
3 - feeding channels 25 - 50 %
4 - feeding channels 51 - 75 %
5 - feeding channels 76 - 100 % or root is completely severed

Western Canadian Summary:

Root maggot infestations were generally low at most CPC locations this year. However, moderate to heavy root maggot damage was noticed at the North Battleford CPC. Ratings were conducted on varieties within the ***B. napus*** and systems comparison trials. Ratings were also conducted on the same varieties at the Vegreville CPC. Ratings from the two sites were compared to determine if there was any consistency in damage among the varieties between the sites. InVigor 2663 (2.7 for both sites) had the highest damage rating at both sites and AC Excel (1.1 for North Battleford and 1.8 for Vegreville) the lowest. Damage ratings were variable among the other varieties and differed in severity between the two sites. It was noticed that varieties with higher damage ratings had large roots while varieties with lower damage ratings had small roots. This is similar to results from other studies where root maggot damage tends to be more severe on large rooted canola plants.