

Detailed information of these conditions during the summer is lacking. Therefore an experiment was done with potted trees in the summer. To investigate a possible difference in susceptibility, two types of wounds were made, a pruning wound and a leaf scar. Trees received different length of wet periods at 20°C after inoculation with *N. galligena* spores. It was found that no wet period was needed to get a successful infection in the summer. Also no relation between the duration of the wet period and the amount of canker formation was found. Finally, it was found that pruning wounds were more susceptible than leaf scars in summer.

Warning system, Nectria galligena, Apple, Fruit

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Detection of latent infections of fruit tree canker (*Nectria galligena*) in planting material of apple

Marcel Wenneker, Nina Joosten

Applied Plant Research, Wageningen University & Research Centre, P.O. Box 200, 6670 AE Zetten, the Netherlands

Fruit tree canker (*Nectria galligena*) is a serious problem in (organic) apple production. Infections cause direct loss of yield by damage to productive shoots and branches, often leading to tree death. Control measures are applied to protect infection sites, notably leaf scars from external inocula. Young apple trees can be infected symptomlessly during propagation (latent infections). A test was developed for screening young apple trees from tree nurseries for latent infection by fruit tree canker caused by *Nectria galligena*, prior to planting in the orchard. Under specific conditions (high temperature and relative humidity) it was possible to induce symptoms in infected planting material within 8 weeks. Tests were performed with artificial inoculations to determine the sensitivity of the test. Screening of commercial planting lots with the newly developed method revealed infection incidences that were higher than recorded after planting in the orchard. The developed method is suitable for screening apple planting material for fruit tree canker infections before planting. The method also detects infections that initially stay latent under field conditions. The method seems valid to screen organically and conventional apple trees. However, the method is destructive; therefore an adequate sampling strategy needs to be developed.

Apple canker, Propagation material, Disease control, Screening method