

WORKING GROUP 2

DECLINE OF PLUM TREES CAUSED BY *PSEUDOMONAS SYRINGAE* PASTHOVARs: A SERIOUS THREAT FOR PLUM PRODUCTION IN THE NETHERLANDS

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In the Netherlands, bacterial canker in plum trees (*Prunus domestica*) is a serious and recent problem in plum production. It is caused by *Pseudomonas syringae* pathovars *syringae* and *morsprunorum*. The trunks of the affected plum trees are girdled by bacterial cankers resulting in sudden death of infected trees. A rapid death was observed in several orchards 3-4 years after planting. Disease incidences can be very high, and sometimes complete orchards have to be removed.

Recently, plum cultivation in the Netherlands has changed from a relatively extensive into an intensive cultivation. This was realized by the use of weak rootstocks (e.g. VVA-1 and St-Julien A). Also, some new plum varieties have been developed (e.g. 'Lazoet'). However, due to the risks of losses of trees due to bacterial canker, growers are reluctant to plant new plum orchards. Although several control measures are advised in the Netherlands, e.g. cultivation measures at the planting site, careful pruning with disinfection of pruning tools, and removal of heavily infected trees, in practice no control measures are taken. In general nurseries and fruit growers are not familiar with bacterial diseases and lack knowledge in order to prevent infections. Therefore, control strategies to manage plum decline have to be developed. In 2010 a project is started to study the epidemiology and possible control of plum decline. The project will focus on plum decline in commercial plum orchards and plum nurseries. Factors such as root stocks and cultural practices will be evaluated.