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## **VERTICILLIUM, THE CAUSAL AGENT OF ‘YELLOW NECROSIS’ OF SUGAR BEET IN THE NETHERLANDS**

### **ABSTRACT**

‘Yellow necrosis’ occurs frequently in some parts of the Netherlands. Typical symptoms are interveinal yellowing (chlorosis) of the leaves, often on one side of the leaves, ending in necrosis. The disease is often associated with beet cyst nematodes (*Heterodera schachtii*). The disease can cause a reduction of sugar yield. From sugar beet samples with ‘yellow necrosis’ symptoms, many fungal species were isolated and tested for pathogenicity in a bio-assay in the climate chamber. The Dutch *Fusarium* spp. tested reproduced the symptoms inconsistently in our bio-assay. *Verticillium dahliae* (as revealed by sequence analysis), however, reproduced the observed symptoms in the field consistently in our bio-assay. In the bio-assay *V. dahliae* also causes a reduction of root weight and a vascular discoloration of the roots. The latter is seldomly observed in the field. Sugar beet varieties with resistance to *V. dahliae* are not known to date. However, some varieties seem less susceptible to *V. dahliae*. Breeding for resistance is the major management strategy.

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## **VERTICILLIUM, L’AGENT CAUSAL DE « NÉCROSES JAUNES » EN BETTERAVES SUCRIÈRES AUX PAYS-BAS**

### **RÉSUMÉ**

La version française n'est pas disponible.

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## **VERTICILLIUM ALS URSACHE “GELBER NEKROSEN” AN ZUCKERRÜBEN IN DEN NIEDERLANDEN**

### **KURZFASSUNG**

Deutsche Version nicht verfügbar.

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