

**SESSION / SESSION / SITZUNG 2:  
OPEN SESSION – SESSION OUVERTE – OFFENE THEMEN**

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**CHARACTERISATION OF A NEW BACTERIAL DISEASE OF SUGAR  
BEET IN THE RED RIVER VALLEY PRODUCTION AREA OF  
NORTH DAKOTA AND MINNESOTA, USA**

**Caractéristiques d'une nouvelle maladie bactérienne des betteraves sucrières  
dans la région de culture du Red River Valley, dans le North Dakota et le  
Minnesota, Etats-Unis / Charakterisierung einer neuen bakteriellen Krankheit  
bei Zuckerrüben in der Anbauregion des Red River Valley in North Dakota und  
Minnesota, USA**

**ABSTRACT**

A previously uncharacterized disease of sugarbeet roots was observed late in the growing season in commercial fields reared in the Red River Valley of Minnesota and North Dakota during 2012 and 2013. The primary symptoms are a soft, watery decay of the interior of the root with limited exterior symptoms. Other notable symptoms include black coloration of interior rot margins, blackened petioles and areas of frothing on exposed crowns. The disease was observed in multiple fields with an incidence of 1-5% and was primarily observed in Syngenta varieties. The rot caused severe problems during long-term post-harvest storage and further complications during factory processing due to the accumulation of invert sugars and reduced sugarbeet quality. The preliminary cause of the disease has been identified as *Pectobacterium (Erwinia)* spp. The source and mechanism of infection and factors affecting disease development are not yet known and are part of ongoing research to further characterize this potentially serious disease.

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