

TSCHOEP, HENDRIK*¹, JUAN VEGAS¹, BRITT-LOUISE LENNEFORS¹, and TYLER RING², ¹United Beet Seeds, Industriepark 15, 3300 Tienen, Belgium, ²United Beet Seeds, 1020 Sugar Mill Road, Longmont, CO 80501, USA.

Breeding for genetic tolerances against leaf diseases based on a unique, combined gene pool.

Cercospora beticola is known as the most severe leaf disease in sugar beets, but during recent years *Alternaria* leaf spot caused by *Alternaria spp*, in several growing regions has triggered additional production challenges. Resistance to fungicides is identified among both *C. beticola* and *Alternaria spp* isolates and therefore sugar beet varieties with broad tolerances are becoming increasingly important. The breeding company United Beet Seed (UBS) has unique access to diverse gene pools from two companies, and combined in a complementary way, different sources of tolerances which provide growers with high-yielding, sustainable sugar beet varieties. Different genetic loci were stacked to achieve a high-level of tolerance against a wide range of isolates, leading to durable tolerance for future sugar beet varieties.