

5.2 CHRISTIAN SCHLATTER

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A NEW BROAD-SPECTRUM FUNGICIDE SUGAR BEET SEED TREATMENT

ABSTRACT

Soil-borne diseases such as *Rhizoctonia solani* and *Pythium ultimum*, and seed/air-borne diseases such as *Phoma betae*, are widespread in sugar beet growing areas worldwide, and are known to have a severe negative impact on sugar beet plant establishment, ground coverage and, ultimately, sugar yield.

The new sugar beet seed treatment solution combines three active ingredients with different modes of actions, and provides broad-spectrum disease control targeting most key seed/soil-borne diseases in sugar beet. It contains a new active ingredient from the succinate-dehydrogenase inhibitor (SDHI) fungicide class that has been developed exclusively for seed treatment use.

The new solution was developed specifically for sugar beet seed treatment, and contains 15 g/l Sedaxane, 22.5 g/l Fludioxonil, 15 g/l Metalaxyl-m. Laboratory, greenhouse and field data demonstrate that the combination of the three active ingredients delivers broad spectrum of activity, with superior control of *Rhizoctonia*, *Pythium* and *Phoma* compared to the existing solutions.

A particular benefit of this highly effective protection are the stronger and healthier roots in the early crop stages, ensuring vigorous sugar beet development and hence better performance under a broad range of conditions. A specific methodology was developed to measure and demonstrate enhanced sugar beet root development. More quality roots, particularly unhindered growth of tap and side roots, are the foundations for high yield. Data and conclusions from an extensive field programme conducted in 2015 in Europe and USA will also be provided.
