4.20 CHRISTIAN SCHLATTER¹, CLIFF WATRIN², ANDRE OLIVEIRA³ ¹Syngenta Crop Protection AG, Schwarzwaldallee 215, CH – 4002 Basel ²Syngenta Crop Protection LLC, 11055 Wayzata Boulevard, Minnetonka, USA – MN 55305 ³Syngenta Crop Protection LLC, 12085 Research Drive - Suite 185, Alachua, USA – FL 32615

DEVELOPING AN INTEGRATED APPROACH TO THE CONTROL OF BEET CYST NEMATODE IN SUGAR BEET

Elaboration d'une stratégie intégrée en vue de contrôler les nématodes chez la betterave sucrière / Entwicklung eines integrierten Ansatzes zur Kontrolle von Nematoden bei Zuckerrüben

ABSTRACT

Beet cyst nematode (*Heterodera schachtii*) has become a widespread pest in significant part of the European sugar beet growing area and in some parts of the USA. Currently, genetic control (based on partial resistance or tolerance) is the most common way of safeguarding yield in commercial crops and all the main seed companies are producing high-yielding nematode-tolerant varieties for these markets.

However, the widespread use of these varieties is increasing the nematode population in the soil. Consequently, Syngenta is now developing integrated solutions to secure high crop yields consistently through the sustainable long-term control of beet cyst nematode in sugar beet. This integrated approach based upon genetics, seed treatments and foliar-applied crop protection products will improve the reliability and durability of nematode control under a broad range of field conditions.

Recent trial results have confirmed the benefits of combining a tolerant hybrid with a new seed treatment product Clariva[™]. Clariva[™] technology is based on Pasteuria – a natural enemy and obligate parasite of nematodes with scientifically proven activity against several nematode species. We will show that the combination of tolerant hybrids with Clariva[™] seed treatment results in increased sugar yield coupled with a reduction in the nematode population.