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## ARE NEMATODE TOLERANT SUGAR BEET VARIETIES RESISTANT OR SUSCEPTIBLE TO THE BEET CYST NEMATODE HETERODERA SCHACHTII?

## ABSTRACT

*Heterodera schachtii* is an important parasite compromising yield of sugar beet in many sugar beet growing areas of the world. To prevent reduction in yield next to standard nematode susceptible sugar beet varieties, there are resistant varieties, which can reduce initial infestation level but show no high yield potential. With the introduction of numerous so-called tolerant sugar beet varieties, there is now an option to earn high yield in nematode infested fields. Theoretically, this group of variety can react as susceptible or as resistant to nematodes. Therefore, in 15 locations of three years of field trials the nematode propagation factor pf/pi of five tolerant varieties was investigated. Our results demonstrate that the size of pf/pi of all tested tolerant varieties is between the nematode propagating susceptible reference variety and the nematode reducing resistant reference variety.

The varieties were classified as moderately or highly level susceptible (S1, S2, respectively) or as moderately or highly resistant (R1, R2, respectively). The triannual field trials show that tolerant varieties tend to respond moderately resistant rather than susceptible or highly resistant.