

HETERODERA SCHACHTII SCHMIDT
THE SUGAR-BEET EELWORM

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Summary

The sugar-beet eelworm *Heterodera schachtii* Schmidt has been studied continuously in various parts of the world. Cultivation of the sugar-beet is very profitable in Iran and is often grown year after year in many places in the same land. It is worse in the vicinity of the sugar-beet mills. Continuous cultivation of the crop will result heavy losses called "Weariness".

Heterodera schachtii has been reported in some areas of Iran. In many parts sugar-beet is grown without any rotation or fallowing. Crop rotation being one of the best method of the nematode control should be encouraged to sugar-beet growers.

Nematode infestation appears in the field as small distinct areas which produce undersized and malformation beets. Small lemon-shaped white bodies of the female eelworm can be seen on hairy roots of the above mentioned beets. A 2-3% loss of sugar production can be easily noticed in the infested beets in Europe.

Temperature & humidity are two main factors which effect sugar-beet nematode population. The optimum degree of temperature is ranked between 20-24centigrade.

The effect of rotation, fallowing & some nematicides such as Temik has to be examined and evaluated in Iranian land conditions. A survey of host plants and wild weeds should be carried out to determine the necessary time for fallowing and rotation.

Soil sampling before sugar beet growing should be carried out to determine the degree of infestation. In heavy infestation areas inhibition of sugar beet cultivation is advisable.

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References

- DECKER, H., 1969: Phytonematologie (Biologie und Bekämpfung pflanzenparasitärer Nematoden) VEB Deutscher Landwirtschaftsverlag, Berlin.
- FRANKLIN, MARYT, 1951: The cyst-forming species of Heterodera.
- SOUTHEY, J.F., 1965: Plant Nematology, London.
- WEBSTER, M. John, 1972: Economic Nematology, Academic Press London New York.