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SENEGAL

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Presence of the sugar-beet nematode at Dakar

During a survey to determine nematode infection of vegetable crops in the Cap-Vert area, Senegal, the sugar-beet nematode, *Heterodera schachtii* Schmidt, was found in a vegetable garden within the city of Dakar.

According to measurements and observations, this strain of *H. schachtii*, despite the relatively small size of the infective larvae (390-447 µm; average 423 µm) exactly fits its recent redescriptions [2, 3] and corresponds to the material examined for comparison, notably because of the distinctive characters of the cysts (large size and peculiar form of the bullae, the position and appearance of the underbridge, etc.).

The crops infested were cabbage, beet roots and beet tops. In laboratory infestation experiments, positive results were obtained with several varieties of these crops, as well as with radish and turnip, thus confirming the identity of the pest.

In fact, *H. schachtii* attacks essentially the Cruciferae and the Chenopodiaceae. This species is considered one of the principal nematode pests in countries where sugar-beets are grown. Its distribution more or less follows that of this crop.

In Senegal the situation appears to be quite different. Even though, according to what the vegetable growers recall, the garden where *H. schachtii* was discovered was already under cultivation before 1918, this pest has not been detected on any other samplings of susceptible vegetables of the Cap-Vert district. It seems probable that *H. schachtii* was introduced along with rooted plants and has since failed to spread due to the isolation of this garden.

However, its occurrence here seemed worth reporting for two reasons. Firstly, because *H. schachtii* has not previously been reported in the intertropical zone (exact latitude reading of the sampling: 14° 40′ 39″). In Africa *H. schachtii* has long been known in Tunisia [4] and Morocco, [5] and, more recently, Algeria [6] and South Africa [7] near the Cape — all countries with a Mediterranean-type climate. Secondly, because, following the discovery of the first typically tropical species of *Heterodera* [8] in Africa over ten years ago, the presence of *H. schachtii* in the intertropical zone poses a new threat to the crops of these regions. There is, in fact, the possibility of adaptation to the hot climate of a species of *Heterodera* previously found only in the temperate zone.

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