

## SUMMARY

### Identification of nematodes associated with the Gardenia culture (*Gardenia jasminoides* Ellis) in the Municipality of Fortín, Veracruz

*Gardenia* (*Gardenia jasminoides* Ellis) cultivation is susceptible to damage caused by nematodes, which affects flowers production. In order to identify the nematode genera, a quantification of nematode population in soils at the municipality of Fortín, Veracruz, was carried out. In addition, the incidence and the severity of the disease caused by them was determined. For this, a sampling of five points with the zig zag technique was carried out in two plantations with 15 and 47 years old plants. Using the centrifuged sieving method, the nematodes were extracted in 200 cm<sup>3</sup> of soil per sample. Also by dissection of roots, nematodes were extracted from sampled plants. Genes identification was carried out with the keys of Mai and Lyon, Perry and Moens, Shurtleff and Averre. Nematodes population quantification was done in 1 ml of sample, that was placed in a grid container and observed in a microscope. Incidence was evaluated as a percentage (%) of diseased plants and severity was evaluated on an arbitrary visual scale from 0 to 4, where 0 was a healthy plant and 4 a dry plant. Results showed the presence of eight genera of nematode identified as *Aorolaimus* sp., *Dorylaimus* sp., *Ditylenchus* sp., *Meloidogyne* sp., *Paratylenchus* sp., *Aphelenchus* sp., *Tylenchus* sp., *Helicotylenchus* sp. In both plantations, density of nematodes was 1380 and 1715 nematodes respectively per 1000 cm<sup>3</sup> of soil in the sum of five points sampled per plantation. The incidence of the disease was 47.25% and 52.5% respectively; the severity in plantation 1 was 1, 2 and 3, and in plantation 2 it was 2, 3 and 4.

Key words: Identification, nematode, incidence, severity, *Gardenia jasminoides*.