

COMUNICAÇÃO CIENTÍFICA

OCCURRENCE OF *PRATYLENCHUS VULNUS* ON ROSE
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ABSTRACT

The occurrence of *Pratylenchus vulnus* is reported on roses growing in greenhouses in Itapeva, Minas Gerais State, Brazil. The infested plants exhibited poor root and shoot growth, and chlorotic leaves. This is the first report of *P. vulnus* infesting roses in the Brazil.

KEY WORDS: Plant parasitic nematode, *Pratylenchus vulnus*, *Rosa* spp., occurrence.

RESUMO

OCORRÊNCIA DE *PRATYLENCHUS VULNUS* EM ROSA NO ESTADO DE MINAS GERAIS. É relatada a ocorrência de *Pratylenchus vulnus* em roseiras (*Rosa* spp.) cultivadas em casas de vegetação no município de Itapeva, Estado de Minas Gerais, Brasil. Amostras de plantas com reduzido desenvolvimento e clorose nas folhas, submetidas a análise nematológica, apresentaram 544 espécimes do nematóide (juvenis, fêmeas e machos) por grama de raízes e 476 por 250cm³ de solo da rizosfera. Este é o primeiro relato da ocorrência desse nematóide em roseiras no Brasil.

PALAVRAS-CHAVE: Nematóide, *Pratylenchus vulnus*, *Rosa* spp., ocorrência.

The rose (*Rosa* spp.) is the most popular garden plant, and the most cultivated cut flower in greenhouses. Plant parasitic nematodes are major rose pest in the United States of America, England, Denmark, Japan, and India (HORST, 1983).

Rose cv. Veronica plants grafted on *Rosa multiflora*, in greenhouses previously cultivated with raspberry in Itapeva (altitude of 989m), Minas Gerais State, Brazil, showed poor root development and chlorotic leaves, and did not respond to fertilization. Samples of roots and rhizosphere soil of those plants were processed for nematode using a blender-centrifugal-flotation technique (COOLEN & D'HERDE, 1972) and a centrifugal-flotation technique

(JENKINS, 1964), respectively. The exam showed the occurrence of *Pratylenchus vulnus* ALLEN & JENSEN, 1951 (544 motile stages per gram of roots and 476 per 250cm³ of soil). Specimens were mounted in temporary slides and morphological characters were measured, there being obtained the following values, in micrometers: Females (n = 5): L = 733.5 (597.9 – 809.3); a = 31.9 (28.5 – 36.7); b' = 6.7 (4.4 – 11.3); c = 23.7 (19.9 – 30.3); c' = 2.3 (2.1 – 2.5); V % = 79.1 (76.1 – 81.0); St = 15.5 (14.0 – 17.1); and PUS = 48.1 (31.1 – 69.4). Males (n = 3): L = 656.4 (567.0 – 799.0); a = 39.1 (33.2 – 46.7); b' = 5.2 (4.2 – 6.4); c = 21.5 (12.9 – 29.7); c' = 2.4 (2.3 – 2.4); St = 14.2 (13.0 – 15.5); gub. = 5.7 (5.2 – 6.2); and spic = 17.1 (15.5 –

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18.7). The nematodes showed heads with 3 or 4 annules, and termini bluntly pointed to narrowly rounded. Females with spermatheca filled with sperm, PUS long and differentiated. These results are in accordance with ALLEN & JENSEN (1951) and ROMÁN & HIRSCHMANN (1969).

In Brazil, this nematode was already found in peaches (LORDELLO, 1973a), strawberries (LORDELLO, 1973b) and raspberries (MONTEIRO & LORDELLO, 1976). *Pratylenchus vulnus* is parasitic to more than 80 botanical species, mainly perennial plants (CORBETT, 1974). This is the first report of this nematode species attacking roses in the Brazil.

Pratylenchus vulnus reduces growth, decreases the flower production, and causes severe decline of roses: 45 *P. vulnus* per liter of soil damage to the roses (plants are stunted and chlorotic) (LEHMAN, 1982; SHER, 1957).

In Brazil already exist reports of the occurrence of *Aphelenchoides* sp., *Basiria* sp., *Criconebella onensis*, *Ditylenchus* sp., *Pratylenchus* sp., and *Helicotylenchus* sp., in Minas Gerais State (FERRZ, 1980), *Meloidogyne* sp. (FREIRE & PONTE, 1976), *Tylenchus* sp., and *Helicotylenchus dihystra* (SHARMA, 1977) in Bahia State and *M. arenaria*, *M. hapla*, *M. javanica*, and *Paratrichodorus* sp. in São Paulo State (SILVEIRA et al., 1986) associated to *Rosa* spp.

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