



ASII.6 J.M. Cunha-Castro: Evaluation of tolerance of *Psidium* species to the *Meloidogyne mayaguensis* nematode

**Evaluation of tolerance of *Psidium* species to the *Meloidogyne mayaguensis* nematode**

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The nematode *Meloidogyne mayaguensis* is the major pest disease of guava (*Psidium guajava* L.) and has destroyed more than 60% of commercial production in Northeast Brazil. The use of resistant rootstock to guava is an efficient and fast practice to solve this problem. Ninety-four *Psidium* spp. accessions from different Brazilian ecogeographic regions were evaluated for tolerance to *Meloidogyne mayaguensis* under greenhouse conditions. Plants with 15-20 cm were inoculated with 10.000 eggs/plant and evaluated according to an incomplete randomized block experimental design, with 5-10 replications. Five months after inoculation the plants were evaluated according to the scale: 0 = no galls or egg masses, 2 = 3-10, 3 = 11-30, 4 = 31-100, and 5 = over 100 galls or egg masses. A reproduction factor (RF) was estimated and accessions were classified as resistant or susceptible. All *P. guajava* were susceptible. Among the *Psidium* spp. accessions, known in Brazil as 'araçazeiros', one from Sergipe State (RF < 1.0), one from Bahia (RF = 0) and nine from Rio Grande do Sul (RF = 0) were resistant or immune. Studies to evaluate the best grafting method, adaptation of the accessions to the Northeast conditions, and compatibility with commercial guava cultivars (with these immune or resistant araçazeiros) have been established.