

SCREENING OF RESISTANCE TO *MELOIDOGYNE ARENARIA* IN WILD ACCESSIONS OF *ARACHIS* SPP.
FROM EMBRAPA RECURSOS GENÉTICOS E BIOTECNOLOGIA GERMPLASM BANK.

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Embrapa Recursos Genéticos e Biotecnologia holds a germplasm bank of more than a thousand accessions of *Arachis* spp. This genetic material can be a valuable source of resistance to *Arachis* pests in traditional breeding, and also be used to clone resistance genes for direct introduction into cultivars by genetic transformation. In this work, we searched for resistance sources to the plant parasitic nematode *Meloidogyne arenaria*. A bioassay was performed with *M. arenaria* race 2 collected in Gramado, RS. Five thousand eggs and 1200 second stage juveniles (J2) were used to inoculate accessions of *A. stenosperma*, *A. duranensis*, *A. cardenasii* and the cultivated *A. hypogea* cv. Tatu. Both resistant and susceptible responses were found in different accessions of *A. stenosperma* and *A. duranensis*. The single accession of *A. cardenasii* tested was resistant to this nematode species. The *A. hypogea* cv. Tatu showed low levels of infection. Since the species tested are from the section *Arachis* which is sexually compatible with *A. hypogea*, the resistant accessions could be used in traditional breeding programs. We intend to screen more accessions with different *Arachis* pests, and also, to create diploid populations which segregate for multiple resistances. These population will be used, together with a genetic approach to clone the resistance genes, which could be directly transferred into other cultivated species.

Key words: *Arachis*, resistance, *Meloidogyne arenaria*