

Reaction of potato cultivars to *Pratylenchus brachyurus*

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Pratylenchus is the second most important genera of phytoparasitic nematodes to the potato crop in Brazil. Potato plants with roots and tubers heavily infected with this pathogen exhibit necrotic lesions, which may become infected by other microorganisms associated to tuber rot and plant wilt. Although the use of genetic resistance is one of the most desirable management strategies, selection for resistance to *Pratylenchus* spp. has not been reported in Brazil. Therefore, the aim of this study was to evaluate the reaction of the potato cultivars Cristina, Eliza, Ana, Catucha, Cota, Clara, and Bel from Brazilian breeding programs besides Asterix and Agata to *Pratylenchus brachyurus*. The experiment was planted in a randomized completed design, with six replications in greenhouse, at Embrapa Clima Temperado. Plants grown in 5 L pots filled with sterilized soil, were inoculated with 800 individuals of *P. brachyurus* and '5067' sorghum plants were used as a control. Sixty-five days after inoculation, nematodes were extracted from the roots and counted to determine the reproduction factor ($RF = \text{Final population}/\text{Initial population}$) of *P. brachyurus*/plant in the different genotypes. Clara, Cristina, Bel, and Eliza cultivars showed immune reaction to *P. brachyurus*; Ana, Agata, Cota, and Catucha, resistance; and Asterix, moderate resistance compared to the control ($FR=6,8$).