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Response of Cotton Cultivars to Two Brazilian Populations of *Pratylenchus brachyurus* (Godfrey) Filipjev & Sch. Stekh.

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Pratylenchus brachyurus (Godfrey) Filipjev & Sch. Stekh. is widespread in Brazilian cotton fields and is presumed to cause crop losses. Little information is available concerning its relationship with other crop species. Some economically important crops, such as soybean and maize, are known to be susceptible to *P. brachyurus*, and there is no resistance reported in these plant species to this nematode. Three greenhouse trials were conducted to assess the response of some of the most commonly cultivated and economically important cotton cultivars grown in Brazil to two populations of *P. brachyurus*. The initial population density (Pi) was 1,000 nematodes/plant. Final nematode population data (Pf) was obtained through extraction of nematodes from the growth medium and roots. Nematode reproduction factors (Rf) were determined by dividing the final population (Pf in substrate + Pf in roots) by Pi. All cultivars tested were susceptible or slightly resistant. Rf values varied greatly. These results demonstrate that management of *P. brachyurus* in cotton fields by cultivar selection is not feasible. In addition, the two populations of *P. brachyurus* tested were different in their aggressiveness to the cotton cultivars.