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Weeds can be alternative hosts for root lesion nematode

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Among the main problem that affects the agricultural production in Brazilian Savanna, cited the weeds and nematodes, which compromises the yield of several crops. One of the indirect effects performed by the weeds in the interference over crops is the potential to host disease causative agents. The lesion root nematodes (*Pratylenchus brachyurus*) have been causing a series of damages in several crops in Brazil. For the management of this plant parasitic, the cultivation of different species of *Crotalaria* have been used due to the suppressive effect over nematodes populations that this plant genus owns. The objective of this study was to evaluate the host status of weeds to the *P. brachyurus*, as well as the suppressive effect on this plant parasitic by the different species of *Crotalaria* genus. An experiment was installed over greenhouse conditions in completely randomized design, in factorial arrangement (2x17), with six repetitions. The first factor consisted in the presence or absence of the nematode inoculation. The second compromised seventeen plant species, where eleven were weeds; four were crotalaria species (*C. breviflora*, *C. juncea*, *C. ochroleuca* and *C spectabilis*); and two soybean varieties, which were used as checks (hosts of *P. brachyurus*). The inoculation of the lesion nematodes does not influenced the plant height and aboveground dry mass of the different species evaluated. *Portulaca oleracea*, *Amaranthus viridis* and *Sida rhombifolia* consisted in the species with higher number of nematodes by root system, and only *S. rhombifolia* showed similar behavior to the check (soybean variety BMX Potência RR®). In relation to the number of nematodes by gram of root, the higher values were observed for *A. viridis*, followed by *P. oleracea*. Excluding *C. juncea*, all the other species of *Crotalaria* genus consisted as good options for the management in areas infested by *P. brachyurus*.

Palavras-chave: *Indirect weed interference, phytonematodes, Pratylenchus brachyurus*

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