

Post-Anhydrobiotic Viability of *Pratylenchus thornei* and *Merlinius brevidens*

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After natural desiccation in the field, anhydrobiotic populations of *Pratylenchus thornei* Sher & Allen and *Merlinius brevidens* (Allen) Sidiqqi were treated in three different ways: some were kept dry to maintain nematodes in the anhydrobiotic stage; some were rehydrated and then allowed to dry again to induce a new desiccation cycle; and some were rehydrated and maintained as such, to reactivate and keep nematodes active. *P. thornei* populations from the dry treatment had a greater survival rate than the two other treatments. Culturing of the nematodes under wheat revealed that the three treatments did not alter the ability of *P. thornei* to penetrate the roots, but nematodes given two cycles of desiccation had a greater rate of reproduction than those exposed to one desiccation cycle and kept in dry soil for a longer period (dry treatment). Survival of *M. brevidens* rehydrated and retained in the active state was lower than that of nematodes undergoing the two other treatments.

KEY WORDS: Anhydrobiosis; *Pratylenchus thornei*; *Merlinius brevidens*; root lesion nematode; survival; viability.

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