

Mode of seed infestation and influence of seed borne fungus on prosomillet favoring development of *Aphelenchoides besseyi* (Christie, 1942)

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ABSTRACT : Foliar nematode, *Aphelenchoides besseyi* is of great concern for profitable cultivation of proso millet (*Panicum miliaceum*). The genus *Aphelenchoides* is mainly feeder, as well as some species are parasites of insects and plants. *Aphelenchoides* has a very wide host range compared to other plant parasitic nematodes. Present experiment was conducted with four year (2009, 2010, 2011 and 2012) germplasms of prosomillet to find out Mode of seed infestation and influence of seed borne fungus on prosomillet favoring development of *Aphelenchoides besseyi*. The experimental result revealed long duration survival of *Aphelenchoides besseyi*, which suggested more survival of this nematode than rice white tip nematode. Highest incidence from apparent healthy seeds and maximum population of nematode was observed in TNAU-194 (174). Fungi and *Aphelenchoides besseyi* associated with seeds of Prosomillet showed positive relationship. Infected seeds with *A. alternata* and *Curvularia* spp. proved a good source for *Aphelenchoides besseyi* development and reproduction. Extent of survival of *Aphelenchoides besseyi* in Prosomillet is more than *Aphelenchoides besseyi* in rice. *Aphelenchoides besseyi* feeds on *Alternaria alternata* and *Curvularia* spp. The germplasm of Prosomillet should be exposed even for longer period to find out the *Aphelenchoides besseyi* survival. Nematode biology should be worked out in presence of *A. alternata* and *Curvularia* spp.

Key Words: *Alternaria*, *Curvularia*, *Aphelenchoides besseyi*, prosomillet, infestation, seed viability.