Monacrosporium lysipagum Infecting Egg Masses of Meloidogyne acrita

R. P. Esser

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Examination of the soil around Passiflora alata Dryand. roots revealed bacteriophagous nematodes infected with Catenaria sp., Harposporium anguillulae Lohde, and Monacrosporium cianopagum (Drechs.) Cooke and Dicken. The P. alata roots were infected with Meloidogyne acrita (Chitwood, 1949) Esser, Perry, and Taylor 1976. Squash mounts were made of several gelatinous egg masses from roots, and a fungus identified as Monacrosporium lysipagum (Drechs.) Subram. was noted parasitizing larvae of M. acrita. The hypha produced globose mucilaginous knobs which attached to larvae emerging from eggs (Fig. 1A, C) and to eggs (Fig. 1D). A number of spores was noted among the eggs (Fig. 1B). Non-constricting rings were not observed. Assimilative hyphae in parasitized larvae were rather coarse (Fig. 1C), whereas hyphae inside parasitized eggs were fine by contrast.

This is the third occurrence of nematophagous fungi detected in root-knot nematode eggs. Godoy et al. (2) found eight species of fungi parasitizing eggs of Meloidogyne arenaria (Neal, 1889) Chitwood, 1949, Stirling and Mankau (4,5) described Dactylella oviparasitica Stirling and Mankau infecting eggs of Meloidogyne arenaria, M. hapla Chitwood, 1949, M. incognita (Kofoid and White, 1919) Chitwood, 1949, and M. javanica (Treub, 1885) Chitwood, 1949. Kerry and Crump (3) listed three kinds of fungi parasitizing eggs of Heterodera avenae Woll.

Monacrosporium lysipagum (Drechs.) Subram. was first detected in 1937 on leaf mold from Beltsville, Maryland, and from Arlington, Virginia (1). This fungus was observed by Drechsler capturing and devouring bacteriophagous nematodes (Rhabditis sp. and Plectus sp.).

LITERATURE CITED


Fig. 1. Monacrosporium lysipagum infecting Meloidogyne acrita. A) Knob (K) attached to a M. acrita larva. Mucilaginous exudate (M). B) Spores of M. lysipagum in an egg mass. C) Knob (K) attached to an M. acrita larva filled with assimilative hypha. D) Egg with knobs (K) attached.

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Nematologist, Florida Department of Agriculture & Consumer Services, P.O. Box 1269, Gainesville, FL 32602.