

Fungal Species Colonizing Meloidogyne Spp. On Soybean In Four Villages In West Java

Abdulmuinadrian Rusmilahsuseno Sittisutarmitjitrosoma Soetrisnohadi Abdurraufambe
Sidartowardojo

Fakultas Pertanian, Institut Pertanian Bogor Bogor, Indonesia Fakultas Pertanian, Institut
Pertanian Bogor Bogor, Indonesia Fakultas Matematika dan Ilmu Pengetahuan Alam Institut
Pertanian Bogor, Bogor, Indonesia Fakultas Kehutanan, Institut Pertanian Bogor Bogor,
Indonesia Fakultas Matematika dan Ilmu Pengetahuan Alam Institut Pertanian Bogor, Bogor,
Indonesia Pusat Penelitian Perkebunan Bogor Bogor, Indonesia.

Abstract

Inventory of fungal species colonizing root knot nematode (*Meloidogyne* spp.) infecting soybean roots at four villages in West Java, was made. The infected roots were washed thoroughly by using autoclaved water, then soaked and shaken in 0.5% NaOCI for 30 seconds, and immediately rinsed with autoclaved water. The adult female nematodes were extracted from the root tissues and subsequently rinsed with autoclaved water and then aseptically placed on water agar in Petri dishes. Five nematodes were placed in each Petri dish and subsequently incubated at room temperature for 2-3 days or longer to allow the development of the fungi colonizing nematodes. The fungal species developing from the individual nematode were transferred to Potato Dextrose Agar for identification. Out of the 265 nematodes collected, 40 individuals were colonized by different fungal species, of which 16 came from Wanajaya samples, 10 from Cipanas samples, 6 from Darmaga samples, and 8 from Sindangbarang samples. Among the isolates obtained, the fungal species that could be identified were *Paecilomyces fumosoroseus*, *P. javanicus*, *Trichoderma viride*, *T. harzianum* *Aspergillus niger*, *A. parasiticus*, *A. flavus*, *Gliocladium roseum*, *G. catenulatum* and *Fusarium flociferum*. Some of them are suspected to be potential for controlling *Meloidogyne* spp. on soybean.