

The recovery of entomopathogenic nematodes from selected areas within Peninsular Malaysia

ABSTRACT

Soil sampling was conducted within Peninsular Malaysia with the aim of recovering entomopathogenic nematodes (Steinernematidae and Heterorhabditidae). Extensive sampling was performed in the Cameron Highlands, which are climatically distinct from the lowlands, and characterized by lower temperature and humidity. The major areas sampled in the lowlands were at the campus of Universiti Pertanian Malaysia (orchards and plantations), Puchong (secondary rainforest) and along the east coast of the country. Entomopathogenic nematodes were recovered using the *Galleria mellonella* baiting method. Nematodes were recovered from 10% of the 425 samples assayed. Identifications, using a PCR method, revealed that the 21 identified steinernematids belonged to two different genetic types and that four out of the five heterorhabditids were *Heterorhabditis indicus*, the remaining heterorhabditid being a new species. The nematodes are currently being screened to evaluate their biocontrol potential for use in Malaysia against foliage-feeding lepidopteran pests of crucifers.

Keyword: Entomopathogenic nematodes; Soil sampling