

amongst themselves, lights of different wave lengths did not show any significant difference in their effects on extraction efficiency. Exposures of light for 4 hours and 24 hours significantly influenced the extraction efficiency.

**INTER RELATIONSHIPS OF INFECTIVITY BETWEEN THE BURROWING AND ROOT KNOT NEMATODES IN BLACK PEPPER, PIPER NIGRUM L: M. S. Sheela and T. S. Venkitesan\*** Department of Entomology, College of Agriculture, Kerala Agricultural University, Vellayani - 695 522.

In Kerala serious damage to black pepper crop is caused due to infestation by the burrowing nematode, *Radopholus similis* and the root-knot nematode, *Meloidogyne incognita*. These species have been observed to infest the vines jointly as well as separately. A pot culture experiment was conducted to study the relative infectivity of these nematodes under the above situations. One thousand nematodes/1.51L. of soil as initial inoculum separately, jointly or in succession was tested under six treatments.

The treatments involving nematodes either in combinations or otherwise suppressed the growth of vines. Simultaneous inoculation of both nematodes suppressed plant growth to the maximum extent. Inoculation of *R. similis* and *M. incognita* in succession led to the reduction in leaf area, internode length, top and root development. The population build up of the nematodes was found to be accelerated when the two species were inoculated separately and there was decline in the population under combined inoculations. The root gall development was suppressed in plants inoculated with *M. incognita* and *R. similis* in succession.

**HOST RANGE OF THE SPIRAL NEMATODE *HELICOTYLENCHUS ABUNAAMAI*: N. N. Padhi and S. N. Das,** Department of Nematology, Orissa University of Agriculture and Technology, Bhubaneswar-751003.

Of the 61 plant types, belonging to 21 families, tested in replicated pot culture experiment as possible hosts of *Helicotylenchus abunaamai*, 38 botanical species were found to be susceptible and favourable hosts taking into consideration of multiplication of the initial level of nematode inoculum. The highest nematode

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\* Present Address : College of Horticulture, Kerala Agricultural University, Vellanikkara-680 654, Trichur, Kerala.