

COMPETITIVE INTERACTION BETWEEN *MELOIDOGYNE INCOGNITA*, *ROTYLENCHULUS RENIFORMIS* AND *TYLENCHORHYNCHUS BRASSICAE* ON CAULIFLOWER

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Abstract

The interaction between *Meloidogyne incognita*, *Rotylenchulus reniformis* and *Tylenchorhynchus brassicae* on cauliflower cv. Early snowball was investigated using varying inoculum levels and combinations. The parameters measured were reproduction factor and sex-ratio of nematodes and plant growth. In single species inoculations, *M. incognita* did not multiply; multiplication of *R. reniformis* was poor but *T. brassicae* multiplied vigorously. The rate of multiplication declined at higher inoculum levels but sex-ratio was not affected. In concomitant inoculations, no interaction was observed between *M. incognita* and *R. reniformis*. Interaction occurred between *M. incognita* and *T. brassicae* and between *R. reniformis* and *T. brassicae*. Interactive effects in general were inhibitory only for *M. incognita* or *R. reniformis*. Number of males of *M. incognita* and *R. reniformis* increased in comparison with single species inoculations. Sex-ratio of *T. brassicae*, remained unaltered. Reduction in plant growth in concomitant inoculations of *M. incognita* and *T. brassicae* or *R. reniformis* and *T. brassicae* was less than the sum total of reductions caused by the same inoculum levels in single species inoculations. This was not true when *M. incognita* and *R. reniformis* were concomitantly present. These findings emphasize the importance of host suitability in interactive effects of coinhabiting nematode species.