

Comparative pathogenicity of *Meloidogyne hapla* populations on *Rosa corymbifera* 'Laxa'

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Among plant-parasitic nematode, the root-knot nematodes *Meloidogyne hapla* is the most damaging species on cut roses throughout the world. In this study, the effects of two *Meloidogyne hapla* populations from Ethiopia and Germany on *Rosa corymbifera* Laxa growth and status of nematode reproduction were investigated. One month old seedlings transplanted into a 2 l capacity pots, were infected separately with either of the two populations at initial population densities of 0, 3.1, 6.3, 9.4, 12.5, 15.6, 18.8, and 21.9 second-stage infective juveniles (J2) per gram of dry soils and allowed to grow for ten months under greenhouse conditions. Both nematode populations signifi-

cantly reduced the relative root fresh weight at all *M. hapla* initial densities. Comparatively, the population from Ethiopia affected growth of the plant root than the German population and was more severe with increasing nematode density. On the other hand, root gall severity increased until an initial density of 15.6 J2 per g dry soil was reached in both populations. Higher nematode reproduction was obtained at the lowest initial densities of the Germany population (69.3 J2/g soil) than the Ethiopian (38.4 J2/g soil). Regardless of the higher final nematode population of the German population, the Ethiopian population demonstrated to be more damaging to *R. corymbifera*.