



Evaluation Of Some Stone Fruit Rootstocks Against Resistance to Root Knot Nematode

(*Meloidogyne incognita*)

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Abstract

Root nematodes have a very broad host range, causing economic losses in many plant species. The clonal rootstocks used in the grafted-stone fruit seedling production were tested for resistance to root knot nematode. The seedlings were transplanted into plastic pots (11 cm diameter, 500 cm³ volume) with 5 replications. Soil structure used in pots was 80% sand, 5% clay and 15% top soil, and disinfected by autoclaving prior to testing. The study was conducted under 25 ± 1 ° C temperature and $60 \pm 10\%$ relative humidity conditions. Nematod inoculation was carried out when the rootstocks reached about 15-25 cm in length. Approximately 1500 second-stage juvenile per plant were placed at 2cm soil depth near the root region. Two months after nematod inoculation, root galling index of rootstocks were determined. The results of galling index in the roots was determined as resistant (0-2) or susceptible (3-5 scale) plants. In this study, Patrones Arda, Garnem, Cadaman, Patrones Toro, Mariana GF 8-1, Myrobalan 29-C rootstocks were identified to be resistant to root knot nematode while Myrobalan B and GF677 rootstocks were detected as sensitive.

Keywords: Root knot nematode, fruit root stocks, resistant