

Improving Grape Rootstock Resistance to Root-Knot Nematodes (*Meloidogyne* species)



Root-knot nematodes are the key root pest on more area of US vineyards than any other root pest (including phylloxera). Resistant rootstocks provide sustainable management of nematodes. Above, a susceptible grape root infected with root-knot nematodes; masses (with up to 2000 eggs each) stained red with eosin-Y.



Seedlings from controlled crosses are inoculated when they show two true leaves, about four weeks after planting, with 1500 infectious juvenile nematodes each.

Root systems are scored for presence of galls and egg masses and quantity of egg masses. Seedlings are culled from the breeding program if they show even one egg mass.

