

NEMATODES

Nematode Research with Walnuts in 1972 - B. F. Lownsbery

DuPont Vydate^(R) sprays of Juglans hindsii and J. regia seedlings growing in a field infested with the root lesion nematode Pratylenchus vulnus did not improve seedling growth. Preplanting soil fumigation with Dow Telone^(R) at the same location did improve seedling growth strikingly.

Both conventional, and high dosage-deep placement, preplanting soil fumigation has improved growth of J. hindsii replants in sandy soil infected with ring, root-lesion, and root-knot nematodes. There are no differences in growth between conventional and high dosage-deep placement after 2 seasons' growth.

We have recently shown that ring nematodes markedly accentuate water-logging injury in peaches. We wonder whether ring or root lesion nematodes may be procuding a similar effect in some situations on walnuts.

Preplant Fumigation of Interset Walnut Trees - G. S. Sibbett, J. E. Johnson

Influence of preplant fumigation with Methyl Bromide injected or tarped at 1 or 2 pounds, or Telone^(R) injected at 25 ml or 50 ml per interset tree site in a lesion nematode infested orchard on trunk caliper was measured for 2 years following planting. In 1971, average trunk caliper 8" above the soil, of trees planted at fumigated sites was greater than caliper of untreated trees. In 1972 differences between treated and untreated trees increased but were not significant.

Walnut Preplant Fumigation - L. C. Hendricks

After the end of two growing seasons, significant increases in cross-sectional area were recorded in one experiment where one pound of methyl bromide was injected at 1-1/2 feet. Significant increases were also received where 50 milliliters of Telone^(R) was injected. Increases in cross-sectional area as compared to check were also measured with 25 milliliters of Telone^(R) and 100 milliliters of Telone^(R) but these increases were not significant. In a second plot, average growth rates were greater in methyl bromide and Telone^(R) treated plots than in the check plots, however these results were not statistically significant due to the variation among plots within treatments.

Nematodes - W. Schreader and D. Johnson

Three trial preplant treatments using a backhoe were established. Materials used were various rates of MC-2, MC-33, Telone^(R), and Telone C^(R).

One orchardist planted in the spring; the other two will plant this year.