ARMILLARIA ROOT ROT

R. Raabe and George C. Martin

Seedlings of *J. regia* and *J. hindsii* were planted in 1974 and *J. regia*, *J. hindsii* and Paradox in 1976 at Winters in the oak root fungus site. Isolates No. 1 and 33 were planted on each side of the seedling at the time of planting. Inspection for susceptibility is made each summer. To date, no single case of oak root fungus has been noted.

EFFECT OF RING NEMATODES ON JUGLANS HINDSII AND J. REGIA

B. F. Lownsbury and T. M. Burlando

Seedlings of *J. hindsii* and two varieties of *J. regia* (Serr and Eureka) were inoculated around their roots with 10,000 *Macroposthonia xenoplax* (synonym Criconemoides xenoplax), or left uninoculated, when they were transplanted to 3-gallon cans of a sandy soil in July, 1975. Each variety x treatment combination was replicated eight times, and experimental units were arranged so that nematode-infested cans were grouped in one-half of the experimental design, and nematode-free cans were grouped in the other half. Plants were measured and symptoms examined after 2 years. *M. xenoplax* limited growth of *J. hindsii* and the two *J. regia* cultivars. In terms of growth reduction and lesion formation, effects of *M. xenoplax* on *J. hindsii* appeared more severe than effects on the two *J. regia* cultivars. This was an expression of tolerance rather than resistance. The two cultivars of *J. regia* were better hosts than *J. hindsii* for *M. xenoplax*. We doubt that the degree of tolerance shown would be helpful. The soil we provided was sandier than that in most walnut orchards. The effects of this nematode would probably be less in a finer textured soil in which the nematode would reproduce more slowly. *M. xenoplax* is common in walnut orchards and we expect that it limits walnut growth in proportion to its population level, often adding to disease caused by root-lesion nematodes.