

ROOTSTOCKS

Chemical Constituents of J. regia, J. hindsii, Paradox and Wingnut: G. C. Martin

Preliminary investigations indicate that the above 4 rootstocks can be identified on the basis of their phenolic patterns. If pursued, phenols specific to one selection would then be correlated to resistance of certain below-ground disorders. Once established, then crosses between 2 rootstocks could be accomplished. Following those crosses, selections should be made on the basis of the off-spring containing the critical phenolic pattern similar to both parents thus insuring resistance to more than one disorder.

Selection of Rootstock from Eureka Seedlings: G. C. Martin

Several farm advisors have supplied walnuts of Eureka seedlings in solid blocks and those as interplants. These will be lined out in the nursery in 1972 for evaluation as possible rootstocks and seed sources.

Rooting of Cuttings: G. C. Martin

This work is being discontinued for lack of financial support.

Rootstock Plantings: G. C. Martin, H. I. Forde and D. E. Ramos

Walnut rootstock trials were started at the Kearney Field Station in 1963 and the West Side Field Station in 1966. The rootstocks under test at Kearney are: J. hindsii seedling, Paradox seedling (Rawling), Boyce Paradox (cutting), J. regia seedling (Eureka), J. regia seedling (Manregian), Royal seedling, J. major seedling and J. rupestris seedling. The West Side trial includes: J. major, J. rupestris, Royal hybrid, J. nigra, Paradox hybrid (Rawling), J. regia (Manregian), and J. hindsii (Rawling). All of the rootstocks have been topworked to Serr. The trials consist of 8 trees of each rootstock arranged in a latin square.

A decision must be made on the type of data desired from these plots and the manner in which it is to be obtained. In addition, the trials have been turned over to extension, and we must now decide how the trees are to be maintained.