Comparison of phosetyl-Al, phosphorous acid and metalaxyl for the long-term control of Phytophthora root rot of avocado

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Abstract

Avocado trees affected by root rot caused by Phytophthora cinnamomi Rands recovered rapidly when given injections into the trunk of phosetyl-A1 or phosphorous acid. Injected trees had greater yields(47.9-67.5 v. 4.3 kg fruit per tree) and lower leaf chloride levels (0.8-2.4 v. 4.2%, w/w) than controls in the third season after starting treatment. Phosphorous acid residues (21-83 mg kg-1) were detected in fruit from injected trees. Metalaxyl applied to the soil twice each growing season successfully controlled root rot for the first 2 seasons, but there was a significant resurgence of decline symptoms after the third consecutive season of use.

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