

Management of Root-knot Nematode

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The objective of this project is to evaluate new products for management of root-knot nematode on carrots. Root-knot nematodes (*Meloidogyne* sp.) are widely distributed throughout California and are the most important nematode pest of carrot. Current control methodology relies on the use of Metam sodium and Telone II.

The potential for loss of the standard chemical nematicides due to various environmental concerns is great enough to warrant a continued search for alternatives. Each year, a number of “promising” candidates are promoted by various sources. These include chemical nematicides, and what are termed natural or novel products or soil amendments. Even though many of these may not prove to be efficacious, demonstrating this by comparison to a standard nematicide treatment provides valuable justification for maintaining current registrations. Such a process succeeds in sorting out those that do truly have potential for nematode management.

A trial with 18 treatments, including an untreated control and Telone II as a standard, is currently in progress to evaluate new products from Syntech, Valent, and Stoller, plus Quillaja 35% (an extract of the Soap Bark tree), Ditera DF, calcium cyanamid, N-Max, and various combinations of these products.

The majority of the carrots grown in California are grown in Kern County and the Shafter station provides climatic and cultural conditions similar to those in local grower fields.