

1982 ANNUAL REPORT - ALMOND RESEARCH PROJECTS

Project No. 82-V1 - Almond Diseases
Post Plant Treatment for Nematodes

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Objectives: Extend and expand the ongoing field research project on almonds in exploring alternative and more satisfactory controls for plant parasitic nematodes than were afforded by DBCP. The present research funded by the California Legislature under AB940, ended June 30, 1982.

Interpretive Summary: The most injurious nematode parasites of rootstocks used for almond have been the rootknot nematodes, Meloidogyne incognita and M. javanica, and the root lesion nematode, Pratylenchus vulnus. The development and use of Nemaguard peach rootstock has provided satisfactory control of rootknot nematodes, but this rootstock has no resistance to root lesion nematodes. This nematode is widely distributed in old orchard and vineyard soils and will restrict the growth and productivity of many of these crops, including almond.

A field trial was established in spring of 1982 in Merced County on furrow-irrigated eight year old Nonpareil and Carmel almonds growing in a sandy soil. Spring treatments, which for maximum effect should be applied at or just before bloom, were delayed until May 7 because of the unusual long cool wet weather. Certain fall treatments were applied October 29, 1981, when soils were still warm (60° F at 8") and ample pore space was available.

A single growing season following treatment showed no response as measured by tree growth and productivity.

Treatments being compared are:

Fall Treatments (applied 10/29/81).

1. Telone II. 10 and 20 gpa - both sides of tree rows.
2. DD. 10, 20, and 33 gpa.
3. EDB. 4 and 8 gpa.

Spring and Growing Season Treatments

4. GY 81 (Union). 50 and 100 gpa - injected in furrows.
5. Nemacur 3 (Mobay). 18 lbs/A - sprayed in furrows.
6. Furadan 4 EC (FMC). 10 lbs/A.
7. Advantage 4 EC (FMC). 10 lbs/A.
8. Vydate L (DuPont). 5 lbs/A (1 lb/A in each of 5 irrigations, beginning 5/7/82).

A Progress Report
Nematode Control on Almond

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