

NEMATODES IN CARNATIONS

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Nematodes can be a serious problem in greenhouse and field flower plantings. In the field, preplant application of soil fumigants such as D-D^(R),

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Telone[®] , and methyl bromide effectively control this pest. Steam sterilization of potting soil, if properly done, takes care of nematodes. This is also true of steaming raised benches by the Thomas method (pipes placed on top of the bench and covered with a tarp). However, carnation growers who have used the Thomas method on ground beds have been surprised to find that serious nematode infestations have developed. This is because the soil is not sufficiently heated a few inches below the surface to kill the nematodes.

Recently we investigated the cause of poor growth at a carnation range in Half Moon Bay. The roots were in poor condition; plant vigor was reduced; and flower production decreased. Because the ground beds were steam sterilized before planting, we did not at first suspect that nematodes were involved. After eliminating fungus and bacterial diseases as a cause, we checked for nematodes and they were there. Many beds were loaded with *Rotylenchus robustus* and *Paratylenchus* spp.