Management of San Jose scale on apple with soybean-oil dormant sprays
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Abstract:
The objective of this study was to examine efficacy of soybean oil dormant sprays to manage San Jose scale (Quadraspidiotus perniciosus Comstock) on apple (Malus xdomestica Borkh,). On 14 Feb, 1994 and again on 20 Feb. 1995, 'Bounty' apple trees were: 1) left unsprayed (control) or sprayed to runoff with: 2) 3% (v/v) or 3) 6% degummed soybean oil with 0.6% (v/v) Latron B-1956 sticker spreader, or 4) 3% 6E Volck Supreme Spray petroleum oil. Crawler emergence occurred 17 May-28 June, 7 July-30 Aug., and 7 Sept.-24 Oct. 1994, First-generation crawler emergence had started by 8 May in 1995, Both 3% petroleum oil and 6% soybean oil sprays reduced the numbers of first- and second-generation crawlers by 93% in 1994 and first-generation crawlers by 98% in 1995, The 3% soybean oil treatment reduced first- and second-generation crawlers by 60% in 1994 and first-generation crawlers by 83% in 1995, In 1995, apple fruit infestations by first-generation scales on the 3% soybean-, 6% soybean-, and 3% petroleum oil-treated trees did not differ significantly, but all fruit were significantly less infested than the controls.