

DWARF ALBERTA SPRUCE: Picea
glauca 'Conica'

Spruce Spider Mite: Oligonychus
ununguis (Jacobi)

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SPRUCE SPIDER MITE CONTROL IN CONTAINER-GROWN DWARF ALBERTA SPRUCE NURSERY STOCK, OREGON, 1987: Infested 1.0 m, container-grown, dwarf Alberta spruce in Marion County were used to evaluate the efficacy of selected miticides. Trees selected harbored overwintering eggs of spruce spider mite on previous season's growth. Six randomly selected individual replicates per treatment were sprayed with clofentezine on April 7, and avermectin B1 and propargite on May 7. A backpack sprayer with with an adjustable hollow cone nozzle was used to apply treatments at the rate of 100 gallons of solution per acre at 40 psi. It was 64 degrees F and cloudy when the clofentezine treatment was applied; 94 degrees F and sunny when propargite and avermectin B1 were applied. One day after treatments, 0.5 inches of water was applied using overhead sprinkler irrigation. Treatments were evaluated on July 14 by selecting four 2.5 cm branch tips from the lower one-half, northeast side of the plants. A microscope was used to count the number of motile mites and eggs on each sample.

Propargite significantly reduced the number of motile mites. Propargite, avermectin B1, and clofentezine effectively reduced the number of spruce spider mite eggs with no significant difference between the materials. No phytotoxicity was observed.

1 Treatment and lb ai/A	2 Motile mites	3 Mite eggs
	4	
propargite 30 CR 1.35	0.3a	1.7a
avermectin B1 0.15 EC 0.01	1.0ab	0.8a
clofentezine 4.0 FL 0.125	1.2ab	0.5a
untreated	2.7b	4.7b

- 1 Spray treatments were applied on May 7, 1987, except clofentezine which was applied on April 7, 1987.
- 2 Mean number of motile mites per tree 68 days after April 7 treatment.
- 3 Mean number of mite eggs per tree 68 days after April 7 treatment.
- 4 Numbers within columns followed by the same letter are not significantly different at the 5% level of probability using the DMR test with transformed data ($\sqrt{Y+0.5}$).