- E. Sid Hanks, U.S. Forest Service, Mt. Sopris Nursery, Carbondale, Colorado. <u>Subject:</u> Use of Solvents for Weed Control.
  - 1. Mr. Ohs asked Mr. Hanks how often he sprayed his stock. Mr. Hanks answered that it was every  $3\ to\ 4$  days at  $40\ gallons$  per acre.
  - 2. Mr. Long asked how often he sprayed each year. Mr. Hanks answered that it was  ${\bf 8}$  to 10 times each season.

THE USE OF SOLVENTS FOR NURSERY WEED CONTROL

by Sid Hanks, Nurseryman Mt. Sopris Nursery, U. S. Forest Service

<u>Materials:</u> Mineral Spirits 10 to 20 percent of Aromatic hydrocarbons. Percent of aromatic hydrocarbons is the indicator of effectiveness of weed spray.

<u>Methods of Applications:</u> Tractor-mounted or drawn spray rigs usually with boom arrangement to cover 3 beds.

<u>Rates:</u> Pressure application at 40 to 50 gallons per acre. Some species are quite tolerant and up to 80 gallons per acre may be used. Some species, such as LPP, are intolerant and may not be sprayed safely at all.

Seedling Age: This is a critical factor in the application of mineral spirits.From 0-4 weeks old most species suffer damage from any rate of mineral spirits application. However, an application of mineral spirits prior to and during emergence of seedlings, while seed caps are still on the seedlings, can be very effective on weeds.

<u>Schedule of Spraying:</u> Hit or miss application of mineral spirits is not as effective as a. regular schedule of spraying during the peak of the weed germination period in early spring. Spray schedules should be followed closely for most effectiveness to be obtained from the use of this material.

Time for spraying is important. Early morning spraying with mineral spirits, while dew is still on the weeds, yields better weed kill than during the heat of the clay. Problems with wind are usually much less when spraying is accomplished early in the morning. Spray effectiveness is much greater if overhead water systems are turned on immediately after spraying and foliage is wet in this manner.

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The meeting was adjourned at 5:00 p.m. A dinner was served that evening for members from 7:00 p.m. until 9:30 p.m. at which time there was also a report presented by Mike Meagher of the University of Toronto. <u>Subject:</u> Growing Spruce and the New Developments in This Field.