

AGRICULTURAL EXPERIMENT STATION
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Corvallis

Circular of Information No. 296
(Rev. of Cir. of Inf. No. 80)

February
1943

CROWN TREATMENTS FOR HOP DOWNY MILDEW CONTROL
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Crown treatments offer an effective and economical means of reducing the number of basal spikes as well as the number of infected hills in Oregon hop yards where downy mildew is present. Complete control of basal spike formation cannot be expected. It will be desirable, therefore, to patrol infected yards regularly and to remove and burn the spikes that do occur. This practice will assist in making more effective other control measures, including spraying or dusting, which should be carried on throughout the growing season.

WHAT TO USE

Calcium cyanamide has been found to be the most effective of the many materials that have so far been tried. It will, however, probably not be available during the war emergency.

As a substitute for calcium cyanamide, a dust consisting of 10 parts monohydrated copper sulphate to 90 parts hydrated lime is advised. Copper sulphate, however, is also a critical item and ample supplies of it may not be obtainable.

As a non-critical substitute for copper sulphate, zinc sulphate is recommended. If not monohydrated, it should be of sufficient fineness to be suitable for dusting purposes--200 mesh or finer.

These dust mixtures may be purchased ready-mixed. They should be packed in tight containers and stored in a dry place until used.

Growers who wish to buy the ingredients separately and make up their own dusts should take pains to secure a thorough mix in order to insure uniform results.

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HOW MUCH TO USE

Approximately two ounces per hill of any of the materials mentioned above should be sufficient. The necessary poundage per acre will vary with the number of hills being treated.

WHEN TO APPLY THE DUST

Best results will be obtained when the dust is applied in the spring after danger of floods is past. If possible dusting should be done after the old vines have been removed and before shoot growth has started. If pruning of the crowns is not practiced, or if pruned crowns are covered with soil immediately afterwards, the dust may be applied to the surface of the ground. Better results may be expected, however, if the crowns are pruned, from applying the dust to the exposed crowns and leaving the crowns uncovered until the vines are strung.

HOW TO MAKE THE APPLICATION

The dust may be applied with a hand duster, an improvised sifter, or by means of a coarse-meshed burlap bag. An even layer of dust about one foot in diameter should be applied over the crowns in each hill.

CAUTION

As a precaution to prevent possible injury, calcium cyanamide should not be used on replants. On well-established plants its use should be confined to the soil surface before pruning or after crowns have been recovered following pruning.