

VINE MAPLE

(Acer circinatum)

Drawing from: California Range Brushlands and Browse Plants, by Arthur W. Sampson and Beryl S. Jespersen. Calif. Agric. Expt. Sta. Ext. Ser. Manual 33.

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Vine maple (*Acer circinatum*) belongs to the Maple Family (Aceraceae). The genus *Acer* consists of about 200 species that are well represented in the eastern part of the United States. Other species occur in Europe and Asia. Maples, well known for their ornamental qualities, are commonly used in landscaping. They also have economic properties, as some species produce hardwood lumber. In the springtime, sugars formed from starch present in the wood rays are secreted into the wood sap. When the wood is tapped at this time of year, bleeding takes place; the sap may be caught and concentrated into syrup for which the sugar maple (*A. saccharum*) is well known.

Vine maple is a reclining or vine-like or small tree, 5 to 35 feet high. Its leaves are simple, their blades 2 to 6 inches long and of the same width,

palmately veined with 5 to 11 lobes, dark green above and paler beneath. The petioles are 1 to 2 inches long and grooved. In the fall the leaves become a rich scarlet. The flowers are reddish-purple, occurring in umbel-like clusters of 2 to 10 or more. The twigs are purple.

This plant grows along stream banks and in well-drained shaded areas from the coastal mountains of British Columbia southward to northern California. It commonly forms an understory in pine, fir and coast hemlock forests from near sea level to an elevation of 5000 feet. Associated with vine maple is bigleaf maple (*A. macrophyllum*), red alder (*Alnus rubra*), and other woody species. Neither vine maple nor the other species may be any real economic problem in old virgin forests, but all of them may interfere in reforestation following either logging or forest fire. Vine maple, a vigorous sprouter, may not be a problem to, for example, Douglas-fir seedlings that require shade when young; but it may slow the growth of well-established trees, making them spindly and weak unless the competition for light and moisture is removed. Diameter growth improves when such competition is eliminated, but the increase in growth may require about 3 years to become significant.

In the Douglas-fir region of western Washington and Oregon, there are two general types of aerial sprays for release of existing conifers or preparation of areas for stocking by artificial means: bud-break spray (when buds are swelling) and foliage spray. Apparently there is but little transport of 2,4,5-T from leaves into the stems, so the foliage sprays are of minimal value. 2,4,5-T esters applied in oil allow both bark and buds contacted by the sprays to be penetrated. The sprays are applied by helicopter using a total volume of 8 to 10 gallons per acre. Such an application does not result in appreciable downward transport of the 2,4,5-T, so only the tops of the vine maples are killed. However, this is often sufficient to give the desired release necessary for the Douglas-fir growing just under the brush canopy. Newly planted fir may require an additional spray 3 to 5 years later.

Along rights-of-way, picloram can be used in conjunction with 2,4,5-T to control vine maple and other woody species when the plants are in full leaf. Fair to good control can be obtained, especially through reapplication. Kill is related to dosage; therefore, amounts can be increased in areas where it will be safe to do so.

2,4,5-T applied in diesel oil to the basal parts of the stem of the vine maple is reasonably effective. Such applications are, of course, limited to sites that can stand a relatively high application cost, such as along rights-of-way.