

SLIPPERY ELM

(*Ulmus rubra*)



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Prepared by J. H. Kirch, forester and horticulturist serving as Marketing Manager, Industrial Chemicals, for Amchem Products, Inc.

Slippery elm, sometimes called red elm or moose elm, is a medium-sized tree 60 to 70 feet high and 12 to 30 inches in diameter. It is found on rich, well-drained limestone soils, but will grow on poorer sites. This species is found from the valley of the St. Lawrence River south to Florida and west to North Dakota and Texas.

The leaves are alternate, simple, about 5 to 7 inches long, oval to obovate and dark green. Both leaf surfaces are very rough.

The wood of slippery elm is very resistant to decay, making it useful for posts, railway ties, and agricultural implements.

Slippery elm may be distinguished from American elm (*Ulmus americana*) in several ways. Its leaves are rough above and below. Those of American elm are smooth to very slightly rough above, pubescent below. The inner bark of slippery elm is much more mucilaginous and fragrant than that of American elm. Although the slippery elm resembles American elm in general appearance, the bole is clear for a greater length and the twigs have a tendency to be more ascending.

The fruit of slippery elm is another distinguishing feature. The short-stalked samara consists of a seed surrounded by a wing with no hairs on the margin. American elm fruits are more hairy particularly around the margin of the wing. Both trees bear fruit soon after flowering in the spring. Buds of slippery elm are a dark

Whether a plant species is desirable or undesirable often depends on the situation in which it occurs. This is true of all the trees to be discussed in this series of articles on identification. For example, maple (*Acer rubrum*) is a useful ornamental in landscape plantings because of its early red flowers, pleasing growth habit, and spectacular autumn foliage coloring. It is a nuisance on the right-of-way because of its resistance to chemical treatment. Similar comments could be made about the other species to be described. They have ornamental, and economic value, but not on a utility right-of-way which must be kept clear of tall vegetation. Strong resistance to treatment makes it especially important that a few "problem" species be clearly recognized when they are encountered in clearance work. Otherwise there may be needless disappointment, and waste of time and material through inappropriate treatment. J. H. Kirch.

chestnut brown with 12 overlapping bud scales coated with rusty brown hairs. The buds of American elm are lighter in color and less pubescent.

Slippery elm is easily top killed by foliar applications of 2,4-D/2,4,5-T, ammonium sulphamate, dicamba, 2,3,6-TBA and picloram. If the phenoxy herbicides are used, best rootkill is obtained by combining them with 2,3,6-TBA, dicamba or picloram as a foliage spray, or by applying them as a dormant cane or basal spray in oil. Slippery elm is a vigorous sprouter and careful attention to thorough wetting of the root collar zone is essential regardless of the spray applied.

In basal spraying, better rootkill has been obtained by combinations of 2,4-D and 2,4,5-T alone. 2,4-D alone is very effective on elm.

Aerial sprays of 2,4-D/2,4,5-T applied as an invert emulsion have been effective in top killing this species. Repeat aerial sprays or follow-up basal sprays are needed for complete rootkill. Aerial applications of particulated sprays containing 2,4-D and picloram have given good rootkill on this species and other woody plants growing in association with it. Combinations of 2,4-D/2,4,5-T and dicamba or 2,3,6-TBA applied by helicopter also show promise.

Ammonium sulphamate is often used where crops are present along the rights-of-way. Pellet applications of fenuron or picloram are effective in controlling this species. Care should be taken not to apply these pellets over roots of trees adjacent to the right-of-way.