

Revision of Trees Book Now Available At OSU

A 127-page illustrated revision of the booklet "Ohio Trees" is now available. It is authored by F. W. Dean, L. C. Chadwick and William Cowen. The new revision covers more than 150 tree species, giving a species key and descriptions of genus and species. For information write to Dr. K. W. Reisch, 1827 Neil Ave., Columbus, Ohio 43210.

Greater Drift of Spray With Small Droplets

Large spray droplets and calm weather are musts if contamination by spray drift is to be reduced.

Large drops naturally fall faster and more directly to the ground. Small droplets fall slowly and breezes carry them laterally. This causes the common damage problems.

Orrin Berge, agricultural engineer, University of Wisconsin, has pinpointed drift factors. He says that droplets the size of light rain will fall 10 feet in 2 seconds. These can be carried sideways only about 8 feet in a 3 mph wind. But particles the size of mist take a full 10 seconds to drop 10 feet in a 3 mph wind. These smaller droplets can drift 44 feet laterally in the 10 seconds they are airborne. Even smaller droplets, those the size of water vapor or fog need 17 minutes to drop 10 feet. This lets them drift almost a mile in a 3 mph wind.

Larger droplets are possible by use of a 10-gallon per acre nozzle size, rather than the 5-gallon size. Reducing the spray pressure will also increase the particle size. A pressure of 30 pounds per square inch is adequate for almost all weed and insect control work.

Berge cited other drift reduction procedures. He suggested lowering booms on sprayers to 2

feet above the ground and use of non-vaporizing sprays when possible. The ester forms of insecticides and herbicides are the most volatile. They are most likely to drift farther than the amine forms of chemicals. Whenever a choice is possible, the amine form should be used.

Spraymen Assume Liability When Mixing Own Chemicals

Liability is assumed by the sprayman of a herbicide mixture if the mixture is not registered and labeled by a company. Conversely, if a manufacturer secures a government registration for a mixture he then becomes liable.

A sprayman may legally mix and apply a herbicide mixture containing chemicals which are registered individually, but he must then accept liability. Without a label, the sprayman will find difficulty in obtaining information on the rate of each herbicide and when to apply the mixture.

According to Dr. Richard Behrens, plant scientist, University of Minnesota, the advantages to be gained from mixtures are several. These include control of a larger variety of weeds, consistent weed control under various weather conditions, less chance of herbicide residue in soils, lower herbicide costs, and increased herbicide effectiveness.

New Fruitless Olive Tree Imported From Australia

Horticulturists at the University of California, Davis, have adapted an ornamental "fruitless" olive tree. Grafting wood of the tree will be given to nurseries this summer for propagating purposes.

Foliage of the tree is the same as commercial varieties grown in

California. The underside of the leaves has the desirable gray coloration but the young stems are a little angular in shape instead of round.

Cuttings of the tree are difficult to root so propagation will be done by budding or grafting onto rootstock plants. Distribution of the grafting wood will be done by the Foundation Plant Materials Service Dept. of Viticulture and Enology, University of California.

The tree is to be named "Swan Hill" after the town in Australia where the original was found. Scion wood from this lone "fruitless" olive was brought to this country in 1960 by Hudson T. Hartmann, professor of pomology, UC.

Herbicide Buildup Not Serious In Nurseries

A recent survey shows no serious buildup of herbicide residues in nurseries. Large herbicide buildups which might be expected from repeated applications did not materialize.

Leroy Holm, University of Wisconsin scientist, reports the continued use of simazine in a Connecticut nursery showed no harmful effects on yews and Euonymus shrubs. These shrubs had been used as indicator plants for 5 years. The use of a single chemical such as simazine, however, did invite the buildup of perennial weeds such as bindweed and vetch.

Established plants of Euonymus can have chemicals like simazine, diuron and neburon applied around them without hurting the plants. If they are removed and new plants placed in the herbicide-treated soil, the new plants may develop injury.

Sensitive plants such as Douglas fir, Arborvitae and Con-toneaster were not harmed when planted in a nursery in Wisconsin. In this case, the soil had been