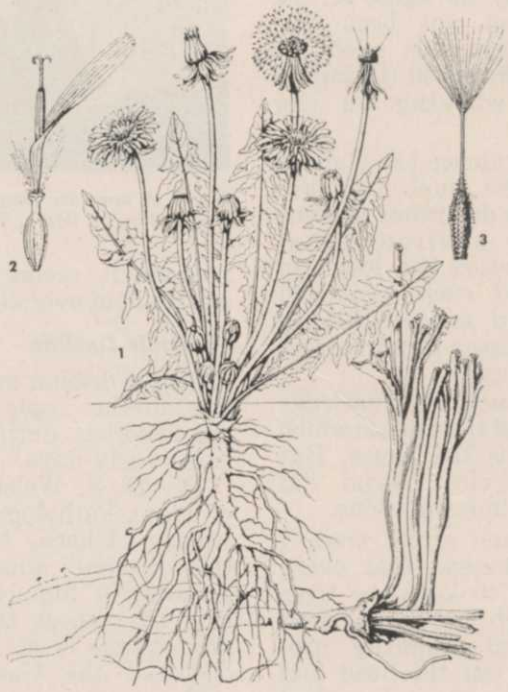
Know Your Species

DANDELION

(Taraxacum officinale)



Dandelion is a perennial which reproduces both by seed and by sprouting at the roots. Next to crabgrass it is probably the most common weed around homes, but it is well adapted to meadows, roadsides, and waste places. Widespread throughout North America, it is easily recognized either by the bright yellow head of many tiny flowers in May and June, or by the cottony tuft or "blow-ball" which it forms when the seeds are ready for dispersal (1).

Upon sprouting the stem remains very short (flush with the ground), forming a rosette of toothed leaves. Leaves, 3 to 10 inches long, are covered with short hairs and have a milky juice. From this rosette grows a hollow shoot (scape) which will bear a single head made up of many tiny flowers. When each minute, single-petaled flower (2) has been pollinated, the green sepals close over the flower and appear as they did before it first blossomed. When they open again the feathery tufts, each bearing one seed, are ready to be shed on the wind. The seeds themselves are oblong, 3/16-inch long, longitudinally ribbed, and barbed at one end (3).

The root is a fleshy taproot (growing straight down, like a carrot) with branches which can form new plants.

Chemical control of dandelion is still dependent upon postemergent treatment. Dandelion is controlled by foliage sprays of the phenoxy compounds such as 2,4-D; 2,4,5-T; MCPA; and silvex.

Applied in the spring or fall, these chemicals will eliminate broadleaved weeds. Treatment is recommended for fall; otherwise spaces are left when the dandelion dies. In the fall these spaces will readily be filled with desirable grass; in spring chances are that crabgrass or another weed will move into the vacant spaces.

Prepared in cooperation with Crops Research Division, Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland.

(DRAWINGS FROM NORTH CENTRAL REGIONAL PUBLICATION NO. 36, USDA EXTENSION SERVICE)

decline are dwarfing, chlorosis, and early defoliation. It has been observed that decline frequently follows attacks of tent caterpillars; cumulative dry periods are also believed to contribute to the progress of the disease.

High nitrogen factors may be helpful to stem the epidemics of maple decline, while relative heat and cold seem to be unimportant.

"Has there been a correlation in temperature cycles and outbreaks of maple decline?" asked Theodore J. Haskell, city forester from Lansing, Mich.

Haskell explained that a rise in mean temperatures over a period of years might cause trees to require more moisture, which in turn could influence a variety of tree ailments.

Dr. Welch replied that this factor is being considered, but that results thus far are inconclusive.

— Sweetgum Blight

Continuing the examination of some acute disease problems with which arborists are concerned, Dr. Marvin E. Fowler detailed the causes and symptoms of sweetgum blight.

Dr. Fowler is Chief of the Division of Forest Disease Research Northeastern Forest Experiment Station of the USDA in Upper Darby, Pa.

"Sweetgum blight is the major disease that affects one of our very important ornamental, shade, and forest trees — the sweetgum (*Liquidambar styraciflua* L.)," Dr. Fowler remarked.

The blight, first observed in Maryland in 1948, spreads rapidly once established, and increases in severity.

Sweetgum blight is probably the result of insufficient available water, Dr. Fowler mused.

Earliest indication of the sickness is a premature flush of fall coloration on one or more branches. This may occur several weeks before normal fall coloration shows up on healthy sweetgums.

Next spring the diseased branches may be dead or some of the buds on these branches may fail to open, and the foliage developing from other buds may be strikingly dwarfed and chlorotic.

"There is no known control for sweetgum blight in forest stands or in individual shade trees," Dr. Fowler said in summary. "Research indicates that pruning infected branches and applying fertilizers will not effectively con-

(*Continued on page W-18*)