

**CANADA THISTLE**  
(*Cirsium arvense*)



Canada thistle is a perennial which reproduces by seed and by sprouts from underground rootstocks. This aggressive and difficult-to-eradicate weed is found throughout southern Canada and northern United States. Its range extends south to Virginia and west to Calif.

A Canada thistle may be confused with other thistles such as bull thistle, *Cirsium vulgare*, or tall thistle, *C. altissimum*. A characteristic which will separate them is the size of the flower head. A Canada thistle head is less than  $\frac{3}{4}$  inch in diameter (usually about the size of the tip of a pointed finger). Heads of most other thistles are much larger. Also, tall thistle has no hair on its stem; bull and Canada thistles do. Canada thistle has a lavender flower, while bull thistle has a darker purple flower. Since Canada thistle arises from creeping roots, erect stems are often found crowded in twos and threes, whereas the other two species have single stems with taproots.

Stems of Canada thistle are erect, grooved, and branched only on top (A). Leaves have scalloped, prickly edges typical of thistles.

Flower heads of Canada thistle are more numerous than on many other species. Each flower is less than  $\frac{3}{4}$  inch in diameter and not spiny. Canada thistle is dioecious ("two houses"), which means that male and female flowers are borne on separate plants. Flowers on staminate or male plants are oblong, whereas those on seed-bearing plants are more ovoid, lengthening somewhat at maturity.

Seeds (B) are  $\frac{3}{16}$  inch long with a circular rib at one end to which is attached the tannish feathery down (C) which carries the seed on the wind.

Creeping stems and roots send up new plants intermittently (D, E). Roots may be several feet deep and are connected horizontally (F). It is this root growth pattern which makes Canada thistle so difficult to eradicate.

Where soil sterilization is not desired, 2,4-D in the amine form (because it kills tops slowly and permits herbicide movement to roots), or MCPA are useful control chemicals if applied to actively growing plants in the late vegetative to early bud stages of growth.

Soil-applied herbicides, such as sodium chlorate or chlorate-borate-monuron combinations and 2,3,6-TBA, will control Canada thistle. Repeated treatments of amino triazole as a translocated herbicide will also kill this troublesome weed.

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

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**Stauffer Has New Insecticide, Aspon, for Chinch Bugs**

Aspon, a new insecticide from Stauffer Chemical Co., is reported to be a highly effective lawn chinch bug control.

Initial kill in test areas has been 95% or better within 48 hours, according to Stauffer, and control frequently lasts 60-90 days or more. Moreover, the firm continues, even chinch bugs highly resistant to other insecticides, such as DDT, are controlled with Aspon.

Aspon, chemically tetra-n-propylthionopyrophosphate, is applied to lawns in water dilution, and will not have any harmful effect on turf grass, although it is slightly toxic to mammals, Stauffer points out.

After being tested in Florida for two years, Aspon is now on that state's recommended list for lawn chinch bug control.

For more information on the new insecticide, write to Stauffer Chemical Co., 380 Madison Ave., New York 17, N.Y.

**Control Scales with Oil Spray**

Scale insects should be controlled before they have an opportunity to attack ornamentals, and shade trees, according to William Hantsbarger, extension entomologist at Colorado State University.

"Apply a dormant spray before the trees break into buds," Hantsbarger recommends, using about a 4% solution. All parts of the tree must be completely covered to be effective, he added.

**Chemagro Reports on Dyrene**

Results of tests on Dyrene, a turf fungicide from Chemagro Corp., developed for dollar and leaf spot, melting out and rust, are available in a new booklet published by that firm.

Bound into an 8-page brochure, the reports show how grounds superintendents in New York, Massachusetts, and Michigan successfully used Dyrene; application rates and schedules are discussed as well.

Copies are available by writing to Chemagro Corp., P.O. Box 4913, Kansas City, Mo., and asking for bulletin DY6-163.