Northern weed identification

Quiz yourself. Answers are on the next page.

A. _____

E. _____

F. _____

G. _____

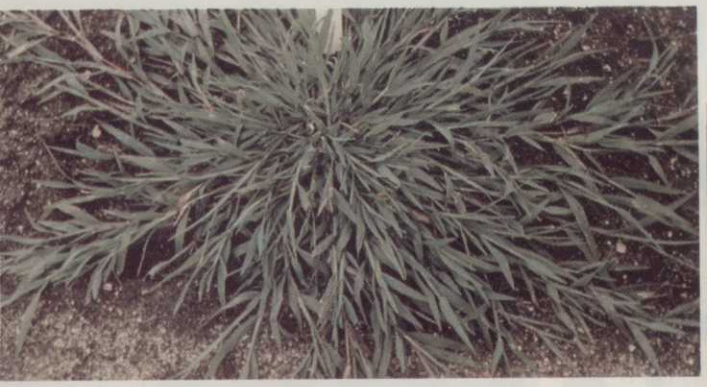
M. _____

L. _____

R. _____

S. _____

Q. _____



B. _____

C. _____

D. _____

H. _____

I. _____

N. _____

O. _____

P. _____

T. _____

U. _____

V. _____

W. _____

Cornell University professor tells which chemicals controlled weeds best during tests.

Turf weed research

By Dr. Arthur Bing, Professor, Dept. of Floriculture and Ornamental Horticulture, Cornell University, Riverhead,

The research this past year was mostly on corn speedwell *(Veronica arvensis)*, ground ivy *(Glechoma hederacea* L.*)*, and yellow wood sorrel *(Oxalis stricta)*, with observations on other weeds that may have been in the plots.

Spring postemergence treatments on **corn speedwell,** which is a winter annual, were successful in 2 tests with bromoxynil (Brominal Buctril). Dicamba, 2,4-D, MCPP or combinations of these were not very effective. The 2,4-D plus 2,4-DP treatment gave variable results, causing some burn initially. Dacthal 75 WP, applied postemergence at 12 lb active ingredient per acre (ai/A), did not look like it did much after a couple of weeks, but after six weeks it gave very good control. Although bromoxynil gave good control of corn speedwell, it was ineffective against some other weeds which will be mentioned later. This fall, preemergence treatments were made with several herbicides to see if this might be an approach to controlling corn speedwell.

In previous experiments, 2,4-D plus 2,4-DP looked good for postemergence control of **ground ivy.** Working with Vincent Calabro at St. John's Cemetery, we put out a good test on ground ivy September 10. The area was irrigated and had a good stand of the ivy. After one month there was nearly excellent control of ground ivy by the use of 2,4-D plus 2,4-DP at the equivalent of one pound of 2,4-D ai/A. The 2,4-D plus dicamba at usual rates only gave fair control. Bromoxynil and combination of 2,4-D plus MCPP plus dicamba at usual rates gave poor control.

Yellow wood sorrel is difficult to control because of seeds in the soil; some forms are perennial with an extensive underground stem growth. The ripe seeds are shot 10-15 feet from the pods, spreading this weed all over the place. The only material to give good control in 2 tests was the 2,4-D plus 2,4-DP combination at one pound ai/A, applied in May or June. Bromoxynil or combinations of 2,4-D, MCPP and dicamba were not effective.

This summer, **prostrate spurge** was more of a problem than usual. Only bromoxynil gave good postemergence control when applied in June. Weedone 20 and a 2,4-D plus 2,4-DP liquid formulation gave fair control.

White clover was very effectively controlled with 2,4-D plus MCPP or 2,4-D plus 2,4-DP. Common chickweed was not controlled by a June spray or bromoxynil, but there was good control with MCPP and excellent control with 2,4-D plus 2,4-DP.

Buckhorn plantain and **dandelion** were best controlled by 2,4-D. Bromoxynil in these tests did not give adequate control.

It seems that 2,4-DP (which is similar to silvex in chemical structure except for one chlorine less on the benzene ring) is a more than ample substitute for silvex in most uses. The one problem may be **mugwort** *(Artemisia vulgaris* L.*)*, which was controlled by silvex, but was not controlled by 2,4-D plus 2,4-DP in a limited test.

Wild onion and **wild garlic** are perennials that have onion-like leaves that you can rub and smell if there is any question about their identity. They form tall clumps of hollow, round stems and leaves in the spring before the grass has grown enough for mowing. They are propagated by underground bulbs that can remain dormant for several years, by bulblets on the top of the stem and by seeds, making control very difficult. Persistent use of 2,4-D with a wetting agent or on a waxbar before grass mowing starts is most effective.

Yellow wood sorrel, which is more often called by its scientific name, Oxalis, can be an annual or a perennial spread by seeds shot 10-15 from the elongated seed pods when ripe. Flowers are yellow. The 3-part (palmate) leaf looks like clover except that it is notched at the end. The perennial form has purple-tinged leaves and flowers and can spread by rootstocks. Postemergence control with 2,4-DP is possible.

White clover is a perennial lawn weed with 3-part (palmate) leaves and white flowers. Its creeping stems are very vigorous. On poorly maintained lawns it may be the only green color, especially during dry weather. It also makes its own nitrogen supply from the atmosphere with symbiotic bacteria. It may be undesirable because it stains clothing and the flowers attract bees. Control is good with 2,4-D plus 2,4-DP or MCPP.

Black medic has leaves similar to clover but much smaller, with a small inflorescence of yellow flowers. It is an annual or winter annual without the extensive creeping stems of white clover. It forms dense mats from the prostrate branching stems, but is not usually competitive in a good lawn, as is the case with white clover. Black medic is controlled by MCPP, dicamba or 2,4-DP.

Common dandelion is a perennial whose light seeds that have a parachute like structure are carried great distances by the wind. The plant has a deep, fleshy tap root, a basal rosette of deeply-cut long leaves, and leafless hollow stems each with a yellow composite flower and later a feathery seed head. Any part of the taproot can start a new plant and the seeds are blown great distances. Dandelion is very susceptible to 2,4-D.

Broadleaved plantain and its close

Continues on page 29

Answers to Weed Identification Quiz, page 21

A. Mouseear Chickweed; **B.** Crabgrass; **C.** Yarrow; **D.** Goosegrass (silver crabgrass); **E.** Prostrate knotweed; **F.** Creeping speedwell; **G.** Dandelion; **H.** Goosegrass (silver crabgrass); **I.** Broadleaved plantain; **J.** Perennial white clover; **K.** Yellow nutsedge; **L.** Annual bluegrass *(Poa annua)*; **M.** Tall fescue; **N.** Buckhorn plantain; **O.** Corn speedwell; **P.** Red sorrel; **Q.** Mugwort; **R.** Nutsedge; **S.** Healall; **T.** Prostrate spurge; **U.** Black medic; **V.** Ground ivy; **W.** Oxalis.

Photos courtesy of New York State Turfgrass Association's "Weeds of Turfgrass" slide set. Copies of the entire set may be obtained from Ann Reilly, Executive Secretary, NYSTA, 210 Cartwright Blvd., Massapequa Park, NY 11762, phone 516/541-6902.