

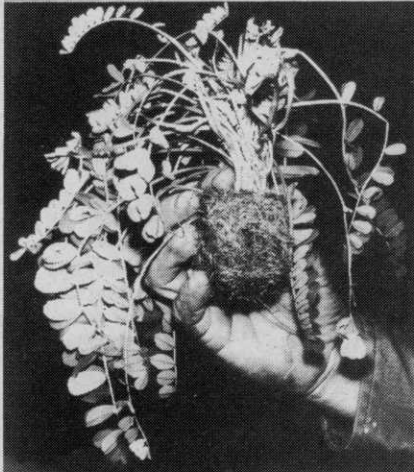
★ ★ ★ ★ ★
★ **Keeping** ★
★ **America** ★
★ **Beautiful** ★
★ ★ ★ ★ ★



The Pioneer Plant Food
Good for everything you grow. Roses, trees, shrubs, flowers, lawns, fruits, vegetables. Spark vigorous growth. Just dissolve in water, then sprinkle or spray. Fast acting, speeds results, no burning. High analysis 23-19-17%. The favorite of experts for years!

RAPID-GRO

For More Details Circle (120) on Reply Card



When all other methods
of establishing
CROWNVETCH fail,
use our pot-grown plants.

OR — USE THEM FIRST

Penngift or Emerald varieties
fully inoculated
in 2 1/4 in. plastic pots

15¢ each per 100 or more
12 1/2¢ each per 1000 or more

F.O.B., Nursery packing at cost. Best way
to ship United Parcel Service or Bus.
Minimum order of 120 plants.

PLANTS FOR YOU, INC.

R.R. 3, URBANA, ILLINOIS 61801
Telephone 217/367-7905

For More Details Circle (109) on Reply Card

Forest Ecologist Studies

Herbicides Residues

A professor of forest ecology at Penn State University has determined that herbicides applied to clay soils do a better job of controlling unwanted grasses and broad-leaf weeds than when applied to either sandy loam soils or clay loams.

Dr. Robert D. Shipman reports that this may be true because of the higher organic matter and microbial breakdown in the surface layers of sandy loams and clay loams of central Pennsylvania soils.

On soils where poverty grass, Kentucky bluegrass, and timothy are dominant, water movement and herbicide availability is more rapid throughout the entire soil profile on clay soils. However, surface runoff was also greater on the heavier clay soils, Shipman and his associates have demonstrated.

The persistence of residues and lateral movement of 11 soil-applied herbicides was influenced by degree of slope, rate of application, amount of rainfall, kind and extent of vegetation, and the herbicide's ease of dissolving in water.

In studies during the growing seasons of 1969 and 1970, the average distance that 9 herbicides moved through clay soil was 16 feet on an average slope of 7 percent. The longest distance moved was 35 feet on a 7 percent slope, which occurred with Tandex wettable powder. The least flow or drift occurred with a granular mixture of picloram and diuron which moved only 10 feet on a 13 percent slope.

The most effective herbicides for total control of vegetation were bromacil wettable powder, Tandex in granular form, Tandex in wettable powder, and picloram plus diuron mixture.

Eighteen months after application the herbicide bromacil—the most effective of all 11 weed killers tested—showed insignificant residues in clay. The other herbicides left only slight traces after 18 months.

In trials with seedling trees planted on treated plots, the clay soils showed the least herbicidal effect on Japanese larch and hybrid poplars. Both the larches and the poplars survived better on clay soils than on sandy loams and clay loams. Clay and clay loams showed better height growth than the loamy sand sites. Plots treated with diuron showed the best growth in height for both the larches and the poplars.

—Advertisers Index—

Ackley Mfg. Co.	54
Allis-Chalmers	41
Ametek/Plymouth Plastics Div.	61
Applied Biochemists, Inc.	31
Arps Corp.	26
Asplundh Tree Expert Co.	24
John Bean Div., FMC Corp.	23
Bowie Industries, Inc.	25
Brillion Iron Works, Inc.	55
Brouwer Turf Equipment	45
Samuel Cabot, Inc.	42
Ross Daniels, Inc.	26
Diamond Shamrock Chemical Co.	5
Dow Chemical Co.	15, 53
E. I. duPont de Nemours Co., Inc.	9, 13
Elanco Products	3A, 3B
Eversman Mfg. Co.	29
Ford Motor Co., Tractor Div.	2nd cover
Geigy Agricultural Chemicals	17
Gordon Corp.	40
Herd Seeder Co., Inc.	44
Howard Rotavator Co.	46
H. D. Hudson Mfg. Co.	52
Hypro, Inc.	38
International Minerals & Chemicals Corp.	7
Jacklin Seed Co.	8
Jacobsen Mfg. Co.	33-36
Jari Corp.	48
King Brothers Industries	31
Lakes Supply Co.	49
LTVAC Service Technology	47
Lofts Chandlerlin Seed Co.	4th cover
Mallinckrodt Chemical Works	11
Merck & Co., Chemical Div.	27
Merion Bluegrass Association	60
Milwaukee Sewerage Commission	56
3M Company	60
Mobile Aerial Towers, Inc.	43
F. E. Myers & Bro. Co.	32
National Mower Co.	39
Niagara Chemical Div., FMC Corp.	18
Parco Div., National Foam	49
Pennwalt Corp.	28
Plants For You, Inc.	62
Rain Bird Sprinkler Mfg. Corp.	6
Rapid Gro Corp.	62
Rockland Chemical Co., Inc.	46
Roof Mfg. Co.	48
Smithco, Inc.	44
Spraying Systems Co.	58
Standard Mfg. Co.	37
Stanford Seed Co.	58
Stihl American, Inc.	3
Thompson-Hayward Chemical Co.	59
U.S. Borax & Chemical Corp.	3rd cover
Velsicol Chemical Corp.	20, 21
Vermeer Mfg. Co.	45