

are either underfinanced or poor businessmen, or both.

Three, these landscapers require relatively large amounts of short-term credit to finance their projects. This credit is usually extended by their suppliers since it is difficult for them to obtain through banks.

Accounts receivable go sour for a variety of reasons. About the time the average sod man has figured that his system is finally perfected, some account manages a new way to escape through his grasping fingers.

Let's take some typical cases. There is good old Meanwell, for instance. He plugs along paying his bills more or less regularly. His great faults are two — he has no reserve and he is not sharp enough to ever make sufficient profit to build one.

His sod supplier may get along very well with him for a while. He may, in fact, be inclined to consider him a good customer. Suddenly, misfortune strikes! Meanwell is in an accident; or his wife has major surgery; or a child goes off to college. Take your pick. It all adds up to the same thing. Meanwell can't pay his bill. If this account has gotten too big, the sod man ends up holding a very empty bag.

Then there is the Sharp-E Landscape Company. Sharp-E breezes in with a line about how good your sod is and how wonderful your service. Thus disarmed, you charge his first order without further investigation. Before long, Sharp-E pays. But in the meantime his bill is running up much faster than his payments.

When he is finally called on the size and age of his account, naturally enough, he switches to a more accommodating supplier. Since this is exactly the strategy he intended to use, it really should not be any surprise to find out that he has no particular intention to ever pay his bill. Nor should it be surprising to find that Sharp-E owes money to every sod grower he ever patronized. He regards his unpaid bills as extra profit, a sort of bonus for clever thinking on his part.

Another dandy is Fleece Land-

# Faster way to wipe out broad-leaf and grassy weeds...

## **HOOKER MBC™**



This nonselective herbicide gives you quick knockdown of vegetation.

As a spray, it kills top growth almost on contact.

Dry, it leaches easily after rainfall or irrigation and quickly attacks the root zone.

MBC controls bur ragweed, hoary cress and many other weeds and grasses on noncrop land. It is especially good for such hard-to-kill, deep-rooted perennials as Johnson grass.

For suggested rates and other application information, please write for our descriptive folder. Agricultural Chemicals, Hooker Chemical Corporation, 410 Buffalo Avenue, Niagara Falls, N.Y. 14302.



AGRICULTURAL CHEMICALS

scaping. Fleece is a creative writer at heart. His most profitable work is done on paper — blank checks! Fleece likes to hit and run. His first check or two, usually small, may clear his bank in fine style. But that is just the setup.

What he really has in mind is hitting very quickly with two or three big ones all written and accepted before the first one bounces. Fleece is an adept liar. With a straight face he explains his rebounding checks: (a) One of his customer's checks bounced, (b) his bank has made an error, or (c) his wife forgot to make a deposit. "Just run it through again," he smiles. "It's OK now."

#### Protection Necessary

Well, how can sod men protect themselves from these kinds of losses? Can we eliminate credit losses entirely? If not, what is an acceptable bad debt loss? Why not eliminate the problem by eliminating credit?

Let's start with the last first. I reject a cash-only policy as impractical, overrestrictive, and unnecessary. For one thing, cash only requires the handling of relatively large amounts of cash. In many cases this handling would be done by hired help, either the landscaper's or the sod grower's. This is neither safe, nor businesslike, nor convenient.

Another argument against cash only is that there is a legitimate and justifiable reason to finance landscapers by offering short-term credit. Finally, there are ways to control credit to hold losses to an acceptable level so that the very inconvenient policy of cash only is unnecessary.

All right, what is an acceptable bad debt loss? At this point I would like to make some observations from our own experience at Horner Sod Farms.

In 1962 we opened our first wholesale sales lot in the Chicago area, which is about 75 miles from our farm. A hired manager was placed in charge. Our controls were almost nonexistent since he had no previous information to act upon, but we managed to muddle through our first season fairly successfully. In 1963 we really began to sell.

In December of 1963 we discovered that about 12% of our total 1963 sales was uncollected. By March 1964, 8% was still uncollected. (Most of this has since been written off.) The result was that, in the early months of 1964, we began to think hard thoughts about accounts receivable.

So obvious that it hardly needs stating is the first principle of credit management: *Accounts are easy to collect when they are small and when they are not old.* With that principle in mind we started revising our whole system.

#### How To Cut Credit Losses

The first change was to strip our salesman almost completely of authority to grant credit. This authority was reserved for our home office. Credit decisions are made objectively only away from the competitive battlefield that the salesman operates on.

It is not fair to the salesman, and it is certainly not smart business, to give him the responsibility to make credit decisions. He is much freer to operate when he can blame some dirty so-and-so in the home office for refusal to give credit.

Next, we set up an individual file for every customer and prospect. For these files we acquired credit applications, reports from references, reports from credit information organizations, old account ledgers showing the history of how accounts were maintained, etc. These files have proved of tremendous worth and they become more and more valuable as time goes by.

Each customer was studied

and a decision was made. No, we would not give credit. Or yes, we would give credit, but only so much. Credit limits granted varied from \$300 to \$2,000.

Another change we made was to print new invoices, on which we stamped in big, bold letters the words: "Please Pay from this Invoice." Our terms had been net 30 days. Our terms remained 30 days with the important difference that 30 days is reckoned from the date of purchase and not from the date of the statement.

#### Calendar File Tabs Delinquent Accounts

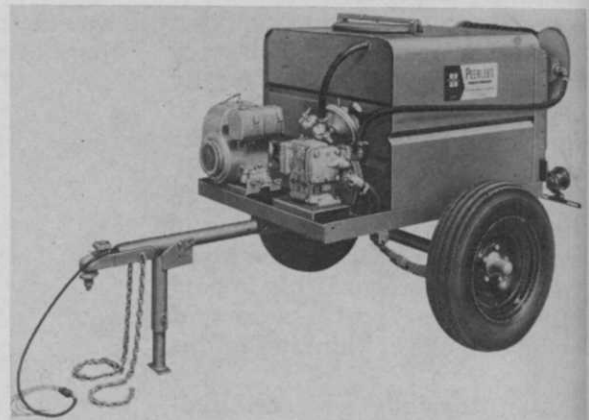
Our final and perhaps most valuable addition was a calendar file. This is simply a series of files numbered 1 to 31. As soon as our invoices are posted to the various ledgers, the originals are dropped into the file that bears the number corresponding to the date of purchase. That is, invoices dated on the first of the month are put in file 1, second in file 2, etc.

A month later these invoices are examined. Those that have been paid are removed. The unpaid are immediately acted upon. The customer is sent a friendly reminder that invoice so-and-so in the amount of such-and-such is unpaid. We suggest that it has probably been overlooked.

At this point we don't just dismiss it from our minds. The invoice is moved back 10 days and again it is either pulled if paid or else followed up with a slightly stronger note. At this point we cut off any further credit.

This process continues until the account is paid, or at the end of about four requests, each of

**Peerless Over-the-Road** sprayers, now available from Hudson Mfg. Co., come specially equipped with auto-type axle springs, dual tail-lights, directional license plate lights, plate holders, and a hitch with safety chains. Stainless steel lined tanks are standard. Up to 100 ft. of hose can be rolled onto a reel in the rear. Power for the sprayer comes from a Hudson Ten-O-Matic pump, rated at 10 gpm. For more details, write H. D. Hudson Mfg. Co., 589 East Illinois St., Chicago, Ill. 60611.



which is stronger than the previous, the account is referred to a collection agency.

We became convinced that the customer that does not pay his account after four or five notices and an elapsed time of 75 days is not worth having as a credit customer. He usually quits us after we put a collector on him, but we consider this no great loss since we shall, in all likelihood, lose enough on him eventually to cancel out any profit we could ever hope to have made on our sales to him.

That in a nutshell is the system we set up to manage our credit from 1964 on. Has it worked? Yes! In both 1964 and 1965 our credit losses were less than  $\frac{1}{4}$  of 1%. We were shooting for 1% or less and we were well below that. We would tolerate 1% if our competitive situation required loosening of our controls.

Is our system perfect? No, but we feel we are on the right track. At this point we feel our particular weakness is our vulnerability to bad checks presented in lieu of cash. It is the credit problem to which we have now directed our principal attention.

### Attack Next Year's Nematodes This Fall

Chemical treatment of soil to kill nematodes must be done when the temperatures are between 60 and 80°, advises Claude L. King, extension plant pathologist, Kansas State University, Manhattan, Kans.

Since most garden and flower crops are planted in cooler spring weather, he suggests treating soil the previous September while temperatures are still high. To treat small areas for the microscopic worms, he recommends furrowing 6 to 8" deep, with furrows 12" apart. One pint of D-D soil fumigant should be enough for 150 to 175 lineal feet, and after application, furrows should be filled with soil and packed lightly, the extension expert advises. At least two weeks must be allowed between soil treatment and planting.

Why the spring-activated feed plate — an exclusive feature of the

# FITCHBURG CHIPPER SAVES YOU MONEY!



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**No hard-to-control fly wheel.** The spring-activated feed plate makes a fly wheel unnecessary. No waiting for fly wheel to speed up, no worries about safety, bearing troubles, or clutch strain. Compare the ease and efficiency of a Fitchburg with *any other* chipper!

#### ALSO COMPARE THESE OTHER FITCHBURG FEATURES:

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- **SOLENOID SWITCH** (optional equipment). Motor can be idled between feedings. Saves fuel and engine wear.
- **PATENTED QUICK-OPENING 2-WAY CHUTE.** Operator directs chip flow, front or side with flick of wrist. Easy access to steel alloy blades.

**FREE** — Get full facts about Fitchburg Chippers. Write to the Fitchburg Engineering Corporation, Dept. WTT-62, Fitchburg, Mass.

\*Optional Equipment

## FITCHBURG ENGINEERING CORPORATION

# Anhauser Dwarf Looks "Outstanding" At Purdue's Midwest Turf Field Days



Chief agronomist Daniel explained experiments underway at Purdue's agronomy farm and in other test areas about the campus.

Of the close-cut bluegrasses inspected by some 200-plus at Purdue's agronomy farm, during the August 8-9 Midwest Turf Field Days, Anhauser dwarf has continued to be "outstanding" when maintained at  $\frac{3}{4}$ " cut, without disease control, but with weed and insect control. For three years blocks of bluegrass, both commercial and experimental, have been grown by Field Days host Dr. William H. Daniel and his agronomy department staff at this Purdue University farm just north of Lafayette, Ind. Severe damage with leafspot occurred in April and May '66, but Anhauser dwarf seemed to successfully weather the obstacles. Prato was badly damaged with leafspot; of two other experimentals, 0217 has been one of the better performers, and K-5-47 continues to "look good," shirt-sleeved delegates were told as they stood on the 92°, sun-drenched farm examining experimental plots.

Graduate student Terry Riordan explained he is continuing his research on low-growing bluegrasses which have good rhizome development. Similar ef-

fort is being devoted to finding vigorous, aggressive, fast-spreading clones that will be suitable for highway use. Available varieties from this work are at least six years away, Riordan amplified through his portable squawkbox.

### 3 Years With 4 lb. N

Crowds moved next on the 400-acre farm, where the turf work began in 1950, to grass plots submitted to fertilizer testing. During 1966, nine sources of nitrogen, including five experimental fertilizer blends, are being compared at rates of 0, .5, 1, 2, and 4 lbs. actual nitrogen per 1,000 sq. ft. Ureaform 4 lb. actual N/100 sq. ft. per application is of "particular interest," Daniel reported, because where this has been repeated for three years, its release pattern is quite uniform compared to single applications of previous years.

Soil always appears to need nitrogen, the turf expert continued; it can't seem to be stored in the soil for more than a year. And, there is a related need for potash to balance the nitrogen; the more nitrogen applied, the more potash required. Dr. Daniel

said a ratio of about one-half as much potash as nitrogen should be applied to get continued healthy growth.

But, no matter which grass variety experts deal with, Daniel reminded the sun-parched outdoorsmen, it must be kept vigorous to protect it from disease, drought, and competition.

Crabgrass killers under test include CY-5702 (American Cyanamid); S-W-25 (Sherwin-Williams); Ortho CS-5331 (Chevron Chemical); Planavan (Shell); and Dow's Zytron 15# A/A. Of the newer chemicals, CY-5702 look especially promising.

Delegates trekked to the Purdue Stadium where continued use of bluegrass is now favored. Daniel admitted the zoysia which was originally planted (mixed with bluegrass) has completely died due to fall fertilization combined with wintertime temperatures (which sometimes fall to 10° below zero in this flat, windswept section of the Midwest).

### Drains for Soggy Sod

Too much water is often as much of a problem to turf maintenance as too little, especially



Terry Riordan showed these results of seed plantings six months old.

on athletic fields where Big 10 varsity football roughs up the sod. Excess water, often a soggy headache during the peak fall pigskin season, is tackled by vertical slitting.

"Wherever disposal of surface water is a problem, vertical slitting may help," Daniel related. Vertical slitting, he described, is making narrow trenches into which porous materials, such as pea gravel or coarse sand, are placed and then capped with sand or calcined clay. Purdue's football field is slitted with a "Groundsaw" that trenches 20 to 24" deep. The technique is also said to be widely used in low areas on golf greens.

Another tip Daniel revealed for extending the durability of athletic fields is to broadcast light and frequent overseeding with a 5 to 10 lbs./A mixture of bluegrasses just before home games. This helps to make a better sod this season, and extends it into the next, Daniel explained.

#### An Idea from Sweden

Hopscotching across the Purdue campus to other test plots, turfmen looked at some utilizing an idea from Sweden involving the placement of small slitted plastic pipes under a layer of sand. This is dirtied at the top

with soil, peat, and calcined clay, and used as a thin rootzone. The storage of moisture and nutrients is limited, but that present is readily available to short roots, Daniel revealed. Rootzone depths of from 4 to 12" are being prepared by grad student David Bingaman in a new project being installed.

It's been found, after seven years, the durability of numerous calcined clays appears adequate. Exposure to wear, weather, and chemicals has not caused a rapid deterioration. If soil under calcined clay pulls much of the capillary water out of the calcined clay above it, the rootzone is too drouthy. Where there is a sand layer to reduce capillary pull, adequate moisture is retained.

On their enviable, velvet green experimental putting green, Purdue agronomists exhibited a new and different approach to sub-surface irrigation. Here they have large sheets of plastic and slitted plastic tile. Adjustable float valves maintain a reservoir of water in base sand; distribution pipe serves as drainage for excess rain. Laboratory determinations have shown a column of sand placed above a reservoir can be kept moist at the surface. Research of grad students, David Ralston and David Bingaman, is



**Kathryn House**, popular agronomy department secretary, registered over 200 Field Day participants, welcoming back oldtimers, some of whom have attended all held to date.

utilizing one-square-meter plots of this experimental green to determine reservoir depth, rootzone depth, exact rootzone texture needed, and possible mixes which can be used for this. Results of these experiments are being anticipated with keen interest.

Practical adaptability of much of what visitors saw on either of the two days, each of which was an exact carbon of the other, may be years away, but some of the findings may be available for use in 1967, such as the availability of seed for Anhauser dwarf bluegrass.

Next year, the Midwest Turf Field Days will be split, with one being held late in July and the other early in October.

#### Don't Cut Grass Too Short

Leave enough grass leaf surface each cutting to provide food to support the plant and develop a strong root system, reminds Colorado State University extension horticulturist, Charles M. Drage.

Extra fertilizer, more frequent watering, and more intense management will be required if grass is cut closer, the plant expert cautions.

"If grass is permitted to grow taller than the usual height, cut it back to its regular height gradually, not at one clipping. And keep your mower sharp," Drage suggests.



Merits of Anhauser Dwarf were closely examined in this plot at Purdue.

# Myers Shows Complete, Versatile Lineup of Spray Equipment

With 175 sprayers, the F. E. Myers and Bro. Co., of Ashland, Ohio, claims to have the broadest lineup of equipment in the power sprayer industry. Both air and boom sprayers, designed for uses from A to Z, from apples to zoysia, were shown at the Myers Sept. 12 Power Sprayer Conference in Ashland.

Several sprayers in the Myers line are constructed largely of the company's own fiberglass, "GlasStran," which is said to reduce sprayer maintenance and weight, and consequently shipping costs and fuel expenses, while still offering structural strength and durability. Other steel tanks and sheet metal parts used in the sprayer line are coated with a baked Epoxy material for corrosion resistance and longer life.

Myers makes air sprayers for crop applications, boom sprayers for golf course and general-purpose use, tree sprayers, small "estate" sprayers, and a line of industrial sprayers. The latter encompasses 30 models, which can be mounted on trucks or railroad cars for highway brush control, railroad right-of-way spraying, and tree and turf maintenance. Myers "Industrial Right-of-Way" Sprayer is said by the company to provide complete and even coverage of steep cuts and hard-to-reach downgrades, and has been approved for appli-



**Tall Tree Mist Sprayer**, shown here in action, delivers 30,000 cfm air volume. Entire Myers unit swivels through 360°.

cation of MH-30 growth retardant.

Shown here are a utility sprayer designed for mounting on a standard ¾-ton pickup truck, and the TT29 Tall Tree Mist Sprayer, whose air outlet elevates or depresses through 70° for versatility on the ground or in the air.

## Florida Spraymen To Talk Industry Trends, Nov. 3-5

New trends in the spray industry and new laws and regulations pertaining to spraymen will be scrutinized when the Horticultural Spraymen's Assn. of Florida meets at the Pier 66 Hotel in Fort Lauderdale, Nov. 3-5. Due for discussion at the Saturday, Nov. 5 business meeting is the proposed formation of a Horticultural Pest Control Association for the Eastern United States.

Technical sessions also are on tap for the meet, with presentations scheduled on lawn grass characteristics, lawn renovation and aerification, and lawn maintenance equipment. On Friday afternoon, a discussion forum will tackle the complex question of weed, fungus, and fertilizer relationships.

More than 200 participants are expected to visit display booths and equipment demonstrations planned for Nov. 3. Registration,

which includes the Nov. 4 banquet, is \$10 for certified owner-operators and \$5 for all others. Contact HSAF president, Larry Nipp, at American Power Spraying, 90 South Vermont Avenue, Fort Lauderdale, Fla., for registration and program particulars.

## Cal. Scientists Develop Bermuda Variety for Smog

Santa Ana, a new bermudagrass variety bred from a South African grass is about to be made commercially available. Described as "an excellent variety for southern and central California," Santa Ana boasts an inbred resistance to the troublesome smogs of that area.

The new turfgrass, developed by scientists at the University of California, is not easily discolored by smog, as are related types of bermudagrass, Tifway, and Tifgreen. Other advantages of the variety include good resistance to damage by the Eriophyid mite and an extremely high level of salt tolerance.

Expected to be available to the public in 1967, Santa Ana has already been distributed to commercial sod and stolon producers. Nurseries interested in obtaining limited quantities of propagating material should contact the Department of Agronomy, University of California, Riverside, Calif. 92502.

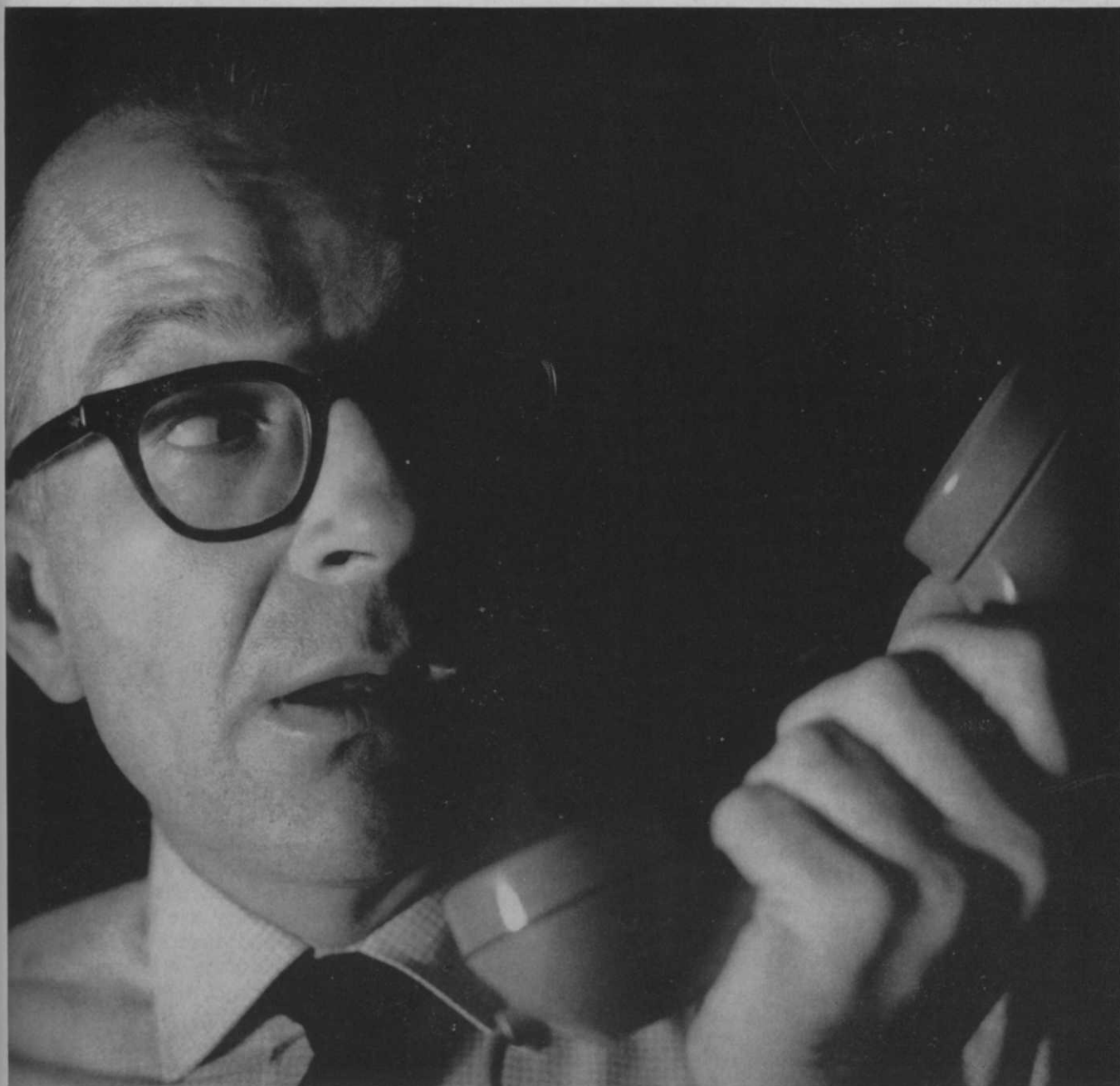
## Beautification Aid Available from AAN

In response to the current emphasis on beautification and screening objectionable views from sight, the American Association of Nurserymen has released a new publication, "Living Screens for America" to aid in the beautification battle.

Developed by a panel of expert nurserymen, the booklet describes suitable screening plant materials under four categories based on plant hardiness zones and keyed to a map. Appropriateness for use as plant screens, rapidity of growth, availability, disease resistance, low maintenance, and reasonable cost were considered along with hardiness



**Multi-Purpose Myers Industrial Sprayer** is designed for mounting on pickup. Remote control nozzle is optional.



## Want to hear from your customers less often? Use Geigy herbicides.

You'll hear from your customers less often in this case for only one reason. And that's because they'll be getting positive long-term weed control that Geigy industrial herbicides deliver with just a single application.

This, of course, will help you to eliminate time-consuming and unprofitable call-backs. So you'll be free to take on new customers or expand the maintenance services you offer.

Each Geigy industrial herbicide has special features to solve specific problems. As a group, they can handle just about any annual and perennial weed problem customers can toss your way.

So it will definitely pay you to find out more about these Geigy herbicides: Atrazine 80W wettable powder, Simazine 80W wettable powder, Pramitol™ 25E emulsifiable solution, Pramitol™ 5P pellets, and Atrato™ 8P pellets.

Remember, each one has its place in a fully effective weed control program. So you might need them all in order to solve most of your customers' weed problems.

Write us today to find out more about Geigy industrial herbicides.

Geigy Agricultural Chemicals,  
Division of Geigy Chemical Corporation,  
Ardsley, New York 10502.

**Geigy**

CREATORS OF CHEMICALS FOR MODERN AGRICULTURE

## BLACK NIGHTSHADE

(*Solanum nigrum*)



Black nightshade, an annual that reproduces only by seeds, is found throughout the United States and southern Canada. Introduced from Europe, some forms of this poisonous plant are probably native to North America.

Sometimes known as deadly nightshade, garden nightshade, and poison berry, the plant is seen in cultivated fields, gardens, waste places, and is frequently found in moist, shady spots.

Black nightshade grows from an erect or spreading stem to a height of 1 to 2 feet and is widely branched (1). Oval leaves are about 1 to 3 inches long with wavy edges. Leaves are attached alternately to the stem.

Berries (2) are green, turning black when ripe. The smooth and round berries are about  $\frac{3}{8}$  inch in diameter and contain a number of small, round, flattened, yellow seeds. Seeds are about  $\frac{1}{16}$  inch in diameter and have a pitted surface.

White, 5-lobed flowers (3) are borne in drooping clusters on long stalks occurring between the leaves. Flowers are about  $\frac{1}{4}$  inch across and look somewhat like tomato blossoms.

Leaves, stems, and green berries of the plant contain a toxic alkaloid which has been known to poison livestock and is regarded as poisonous to man. Though ripe berries and dried plants are less toxic, the best advice is to eradicate the entire plant whenever it is found. Black nightshade appears late in the season, but produces seeds quickly. Plants should be destroyed to prevent birds from spreading the seed.

In some areas, only fair control of black nightshade has resulted from application of 1 pound of 2,4-D per acre, and other areas report the plant resistant to 2,4-D. Silvex, applied at the same rate, may give good control. Also, simazine at  $\frac{3}{4}$  to 1 pound per acre as a preemergence will give good control.

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

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

in formulating the recommendations.

The booklet provides such information as eventual growth of the plant, method of planting, recommended sites, and advisable trimming practices. "Living Screens for America" can be obtained from the American Association of Nurserymen, 835 Southern Building, 15th & H Streets, N.W., Washington, D.C. 20005. Cost is 50c each, or 25c in quantities of 25 or more.

## Rain Bird Has New Sprinkler Heads

A new line of spray head sprinklers is now being marketed by Rain Bird, which claims its "Space 15" sprinklers can be set 15 ft. apart, reducing the number of sprinkler heads required and saving up to 40% in pipe, sprinklers, trenching, and labor costs.

Three models make up the line: model 2800 pop-up sprinklers; model 2600 surface spray heads; and model 2400 shrubbery spray heads. All models are available in square sprinkling patterns as well as full, half, and quarter-circle patterns. Special nozzle design to eliminate burred edges and insure precise part-circle patterns with wider sprinkler spacings, all-brass construction, adjusting screw to regulate pressure and radius of water flow, and clog-resistant swirl plates are features of the new Rain Bird line.

Literature on "Space 15" sprinklers is available from Rain Bird, Glendora, Calif. 97140.



Model 2600 surface spray head is one of three new "Space 15" Rain Bird sprinklers.



## Illinois Publishes Aquatic Plant Guide

"Aquatic Plants of Illinois," a new directory of the water weeds and plants of that state has just been published by the Illinois State Museum and the Department of Conservation. The 142-page book is a result of a 1964-65 study of aquatic plants, during which 1188 collections were made. It updates the previously released "Submerged and Floating Aquatic Plants of Illinois, a Preliminary Illustrated Manual."

With semidiagrammatic drawings keyed for plant identification, the following categories of aquatic plants are included: submersed (growing under water); floating; plants with both submersed and floating leaves or parts; and emersed marsh and marginal plants (standing in water or having some plant parts above water level).

Biggest criteria for inclusion of plants in the booklet was the frequency of occurrence, though some plants infrequently collected are included for information purposes. Indexed by common and scientific names, the booklet is available for \$1.25 from the Illinois State Museum, Springfield, Illinois 62706. Quantities of 10 or more may be ordered for 75¢ each.

## Weed Killers for Tree Nurseries Affect Soil

Some chemical weed killers can create an imbalance of soil conditions by killing various bacteria, fungi, and nematodes, which influence chemical properties of soils, availability of nutrients, and breakdown of applied pesticides.

Soil productivity can be affected as a result, University of Wisconsin scientists say. They are currently studying the effect of Dacthal on beneficial organisms, such as mycorrhizal fungi, and harmful ones, such as damping-off fungi and nematodes.

Dacthal, applied at the low rate of 4 lbs. per acre, killed common weeds in red pine, jack pine, and white spruce nurseries without damage to seedlings or soil fungi. Dacthal at 12 lbs. per

acre killed some bacteria and fungi, though fungi later recovered in the Wisconsin U. experiments.

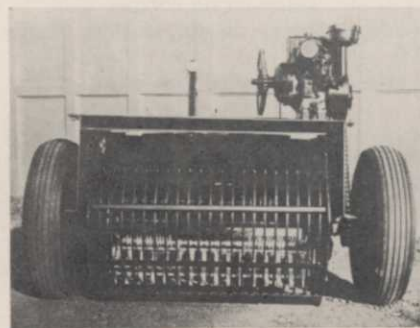
## Pixtone Is Self-Contained

A machine that gathers rocks and debris from fields without using power from the pulling rig has been introduced by Bridgeport Implement Works, Inc.

Named the Pixtone, the machine's own engine powers the stone-picking mechanism. Four- to eight-hp. engines are available to meet specific work loads. The unit is equipped with pneumatic tires and has a trailer de-



Rock capacity of up to 2,500 lbs. per load is a feature of the Pixtone picker.



Rake teeth of Pixtone stone picker can be changed to accommodate various rock sizes.

sign suitable for highway travel. The company also states that Pixtone can carry up to 2,500 lbs. per load, and features interchangeable raking units to handle stones from 3/8" to 9" in diameter.

The self-powered device has proved adaptable for stone picking on sod farms, highway medians and roadsides, and in various grass areas, the manufacturer claims.

Write Bridgeport Implement Works, Inc., Box 286, Stratford, Conn., for complete description and performance data on the Pixtone.

## Meeting Dates



**Florida Nurserymen and Growers Assn. Trade Meet and Short Course**, George Washington Hotel, Jacksonville, Oct. 14-16.

**National Conference on State Parks, 46th Annual Meeting**, Kentucky Dam Village State Park, Ky., Oct. 16-21.

**Southern California Landscape Equipment and Materials Exposition**, Fanny Morrison Horticultural Center, Pasadena, Oct. 18-19.

**Central Plains Turfgrass Conference**, Kansas State University, Manhattan, Oct. 19-21.

**Southern California Turf Conference**, Huntington-Sheraton Hotel, Pasadena, Oct. 20.

**Tennessee Turfgrass Assn., Meeting and Turf Clinic**, Nashville, Oct. 24.

**New England Agricultural Chemicals Conference**, Concord, N.H., Oct. 25-26.

**Northwest Turfgrass Assn., 20th Annual Conference**, Salishan Lodge, Gleneden Beach, Ore., Oct. 26-28.

**National Weed Committee of Canada, Eastern Section**, Research Station, Canada Agriculture, Kentville, Nova Scotia, Nov. 1-3.

**Horticultural Spraymen's Assn. of Florida, Annual Convention**, Pier 66 Hotel, Fort Lauderdale, Nov. 3-5.

**New Jersey Federation of Shade Tree Commissions, Annual Meeting**, Haddon Hall Hotel, Atlantic City, Nov. 13-15.

**Nebraska Association of Nurserymen, Annual Convention**, Cornhusker Hotel, Lincoln, Nov. 14-15.

**National Weed Committee of Canada, Western Section**, Research Station, Canada Agriculture, Brandon, Manitoba, Nov. 29-Dec. 1.

**Illinois Turfgrass Conference**, University of Illinois, Urbana, Dec. 1-2.

**Minnesota Nurserymen's Assn., 40th Annual Convention**, Curtis Hotel, Minneapolis, Dec. 5-6.

**North Central Weed Control Conference**, Broadview Hotel, Wichita, Kans., Dec. 5-7.

**Connecticut Nurserymen's Assn., Annual Meeting**, Hotel Park-Plaza, New Haven, Dec. 28.

## Monthly Insect Report

WTT's compilation of insect problems occurring in turfgrasses, trees, and ornamentals throughout the country.

### Turf Insects

#### ARMYWORMS

**Georgia:** Larvae heavy in dwarf bermudagrass golf greens in Telfair County.

#### A CHINCH BUG

(*Blissus insularis*)

**Texas:** Heavy damage to st. augustinegrass lawns continues from central area to gulf coast. Populations and damage appear higher than in previous years. Extensive damage reported in Jefferson, Falls, Montgomery, Orange, Angelina, Jasper, Brazos, and Wharton counties.

#### WHITE GRUBS

**Missouri:** Causing dead patches in bluegrass lawns through central third of the state. **Wisconsin:** Major problem in lawns throughout state. Damage severe to roots of lawn turf.

#### SPITTLEBUGS

**Georgia:** Infesting centipedegrass in Laurens County.

#### THRIPS

(*Chirothrips* spp.)

**Arizona:** Controls necessary in Yuma County bermudagrass.

#### SOD WEBWORMS

**Georgia:** Heavy in dwarf bermudagrass golf greens in Telfair County. **Iowa:** Numerous adults reported. **Kansas:** Moderate populations causing some damage to lawns in northeast area. **Michigan:** Numerous adult *Crambus* spp. trapped in Kalamazoo, Branch, and Lenawee counties. **Nebraska:** Moderate to severe injury in bluegrass lawns in eastern area from *Crambus* spp. **New Jersey:** Increasing activity reported in central counties. **Oklahoma:** *Crambus* spp. damaging golf courses in Tulsa and Garfield

counties, lawns in Payne County. **Rhode Island:** Adults heavy in Kingston and Providence counties. **South Dakota:** Unspecified species heavy in many lawns in state.

### Insects of Ornamentals

#### BAGWORM

(*Thyridopteryx ephemeraeformis*)

**Texas:** Heavy and widespread on many lawn ornamentals in Wharton County.

#### A LEAF-FOOTED BUG

(*Leptoglossus* sp.)

**New Mexico:** Moderately heavy on ornamental junipers in Bernalillo County.

#### SPIDER MITES

**Iowa:** Increased injury due to dry conditions. **New Mexico:** light to medium on Arizona cypress and ornamental junipers in Albuquerque area.

### Tree Insects

#### ELM LEAF BEETLE

(*Pyrrhalta luteola*)

**Arizona:** Continued damage to elms in Graham and Maricopa counties. Controls largely ineffective. **California:** Locally heavy in Santa Cruz County and Santa Clara County. Medium local occurrence in Santa Barbara County. **Nevada:** New infestations found in Clark County. **Texas:** Moderate to heavy on elms in Midland County. Some trees 60 to 80% defoliated. **Utah:** Many elms severely injured at Huntington and Green River, Emery County.

#### LARGER ELM LEAF BEETLE

(*Monocesta coryli*)

**Georgia:** Heavy on elm in Pike County.

#### SMALLER EUROPEAN ELM BARK BEETLE

(*Scolytus multistriatus*)

**Colorado:** Taken on elm at Grand Junction, Mesa County for new county record.

#### RED-HUMPED CATERPILLAR

(*Schizura concinna*)

**Colorado:** Damaging honeylocust in Denver area.

#### WALNUT CATERPILLAR

(*Datana integerrima*)

**Ohio:** Numerous roadside walnut trees defoliated in Darke and Preble Counties. **Wisconsin:** Defoliation continues from trace to complete throughout southwest area.

#### AN OLETHREUTID MOTH

(*Proteoteras aesculana*)

**California:** Larvae of this and omnivorous looper locally heavy in maple trees in Santa Barbara County.

#### ORANGE-STRIPED OAKWORM

(*Anisota senatoria*)

**Rhode Island:** First infestation of season noted in Kingston. **Tennessee:** Infesting pin oak in Knox County. **Virginia:** Larvae feeding on red oak in Nansemond County.

#### PINE NEEDLE SCALE

(*Phenacaspis pinifoliae*)

**Ohio:** Abundant on some hemlock in Wayne County. **Utah:** Severe damage to Colorado blue spruce and moderate to Engelmann spruce.

#### OYSTERSHELL SCALE

(*Lepidosaphes ulmi*)

**Utah:** Severe on some poplars and willows in Ashley Valley area, Uintah County.

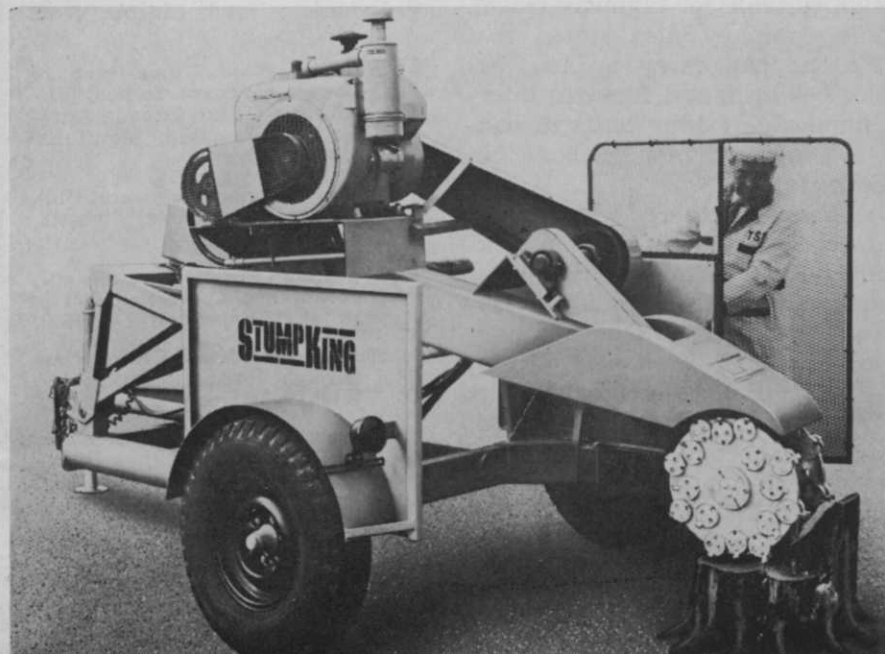
#### MIMOSA WEBWORM

(*Homadaula albizziae*)

**Illinois:** Caused severe browning of honeylocust in central area. New county record in Cass County. **Maryland:** Heavy on many mimosa and honeylocust trees in central and southern sections. **Ohio:** Populations high. Observed in Miami, Montgomery, Preble, Warren, Fairfield, and Franklin counties. Infestation causing from 5 to 100% leaf destruction in individual trees. Reported in Summit County for new county record.

Compiled from information furnished by the U. S. Department of Agriculture, university staffs, and WTT readers. Turf and tree specialists are urged to send reports of insect problems noted in their areas to: Insect Reports, WEEDS TREES AND TURF, 1900 Euclid Ave., Cleveland, Ohio 44115.

New StumpKing model stumpcutter features Dial-a-Stump cutting speed selector, low-profile "Beaver Tail" boom, and new hydraulic system and clutch, said to speed setup and reduce operator time.



## Dial Selects Cutting Speed on New, Improved StumpKing

By means of a new Dial-a-Stump cutting speed selector on '67 models of the StumpKing stumpcutter, operators can dial the exact cutting speeds required for a particular stump while the cutter is in operation, according to its manufacturer, Brooks Products Division of The Tool Steel Gear & Pinion Co.

Time lost in stopping the cutter to make necessary adjustments is eliminated, the company says; more cutting time is delivered for each hour of operator time. Other new features