

Minnesota Nurserymen's newsletter



Prepared by

UNIVERSITY OF MINNESOTA
Institute of Agriculture

- Agricultural Extension Service
- Horticulture Department

In Cooperation with

- Minnesota Nurserymen's Association
- Minnesota State Horticultural Society

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WEED CONTROL IN NURSERIES

C. I. P. C. or Simazine

We have had a number of requests on the use of granular formulations of these chemicals for use as residual herbicides in nurseries.

Availability

C. I. P. C. through Columbia Southern, 1 Gateway Center, Pittsburgh 22, Pa., is available in granular form.

Simazine, Geigy Chemicals, Ardesly, New York, is available as a granular 4% and as a wettable powder 50%.

C. I. P. C. has been used for some 10 years and for 5 years or more as a granular formulation. Applied in late winter or early spring at 8 pounds active chemical per acre treated, it has done effective work in cold weather in killing winter annual weeds such as chickweed and annual bluegrass.

When used as a 10% granular formulation the 8 pounds of active chemical will come from 80 pounds of formulation. When the space between the plant rows is to be rototilled or cultivated as a management practice, C. I. P. C. applications can be restricted to a band along the plant row. This will reduce hand weeding or hoeing and will cut the amount of chemical per acre of nursery stock, since only half or less of the soil surface is treated. Similar application can be made over newly planted dormant stock at the time of spring planting. This applies to woody and to some herbaceous plants. Hardy chrysanthemums have been successfully treated on a large commercial scale. Garden phlox, particularly phlox subulata, can be badly injured.

Simazine is primarily of value in established evergreen stock and some deciduous plants. It is better used on annual weeds noted above--chickweed and annual bluegrass at germination or seedling stage in autumn. Rates of 2 to 4 pounds of active ingredient often give good weed kill for a full season (October to August) from applications of granular Simazine. Banding is recommended both for safety and economy reasons.

Use of Simazine on newly planted bare rooted plants has resulted in crop injury in some cases, and in seed beds and lining out areas it should be restricted to experimental use unless your own previous experience has been good. In this case care should be exercised to use as low poundage as indicated by local experience.

Lilac, honeysuckle, boxwood and other shallow rooting plants are likely to be the first to show yellow foliage. Roses appear to be uninjured in 3 years of testing. Fertilizing tends to correct injury.

Specific use of Simazine sprays to control quackgrass has been successful in roses and peonies while quackgrass was growing actively or forced to grow from cutting or cultivating.

Simazine is not outstanding in control of artemesia. Amino triazole is useful at 8 pounds - 10 pounds rate on young growth of artemesia. It is also useful at 1 pound or less on poison ivy.

Simazine is mainly of value for its effectiveness on a wide range of nursery weeds and for its long residual action. At rates of 2-4 pounds active per acre it does not, after a full season, interfere with growth of cover crops in soils tested following plowing or rototilling.

For those starting in chemical weed control follow the rates recommended and start with experimental blocks of either or both chemicals, remembering that C. I. P. C. is mainly of value during cool or cold weather.

From New York Nursery Notes
No. 156, March, 1960

CHEMICAL CONTROL OF CRABGRASS

1960 Cornell Recommendations
By John F. Cornman
Department of Floriculture

Long-term crabgrass control in turf areas depends upon the use of the right kinds of grasses, planting at the proper season, adequate and timely fertilization, correct mowing, insect control as required and intelligent watering.

These steps will keep crabgrass at a reasonable minimum in most lawns. Where these important steps to good turf management are not observed, no amount of chemical treatment will produce long-term gains.

For new lawns in crabgrass areas, soil sterilization with calcium cyanamid is worthwhile. For established turf where nearly complete control of crabgrass is vital, or where proper planting and maintenance are not adequate for the purpose, some artificial help in the form of chemical treatments to prevent or destroy the crabgrass and leave the desirable grasses may be necessary.

Post-emergence Crabgrass Control

The arsenates (DMA, AMA) or phenyl mercuries (PMA) in post-emergence treatments continue to perform dependably for the selective control of young crabgrass plants. Consistently good results (90 percent or better crabgrass control) may be expected if treatments are made properly. A series of three or more treatments is required, begun in late spring as the first crabgrass develops.

For the control of crabgrass alone, the arsenates and phenyl mercuries seem to be about equal in effectiveness. However, an arsenate is to be preferred for use on Merion Kentucky bluegrass or where "corn-grass" (the annual, Panicum dichotomiflorum) is troublesome, as it is in some areas of Long Island. The phenyl mercuries may damage Merion seriously, and are not effective against the Panicum.

The phenyl mercuries are less effective late in the season when the crabgrass plants have begun to root at the joints; then either a series of one of the arsenates or of potassium cyanate will give better results.

Pre-emergence Crabgrass Control

Post-emergence materials are troublesome to use because repeated treatments are needed and the timing of the treatments and rates of application are easily subject to operator error. Hence there has been great interest in pre-emergence chemical controls for crabgrass, that is, chemicals to be spread on the turf weeks or months ahead of crabgrass emergence and which, it is hoped, will prevent the crabgrass from developing without damaging the permanent turf.

At eastern agricultural experiment stations during 1959, control with pre-emergence crabgrass materials was considerably more promising than in the previous season. Results at other eastern institutions were not identical with those we obtained at our Long Island test areas but in general they agreed rather closely. A summary of our observations follows.

Pre-emergence Crabgrass Control Tests 1959 season

Good to excellent crabgrass control 90% +

Calcium arsenate--Now widely available in granular formulations.

Zytron--A new material (Dow Chemical Company) to be sold as a granular formulation in limited markets in 1960. Less toxic to humans, etc., than the arsenicals.

Dacthal--A new material (Diamond Alkali Company). To be sold as a granular formulation in limited markets in 1960. May damage or destroy red fescue at rates used for crabgrass control.

Fair crabgrass control--80-90%

Lead arsenate--Standard grub-proofing material. More costly than calcium arsenate and apparently less effective.

PAX--A complex proprietary mixture of arsenicals + fertilizer + chlordane. Singled out for testing only because of longer and more widespread sale than most other commercial products. There was some injury to permanent turf (from fertilizer?) in our tests and there are similar reports from other experiment stations.

Mediocre crabgrass control--50-75%

Chlordane--Results differ somewhat between liquid and dry formulations and between various eastern experimental stations, but chlordane formulations were consistently less effective than other materials in 1959.

Discarded

Alanap 1F and Crag herbicide have lacked effectiveness and dependability for crabgrass control and are no longer being tested.

Recommendations

We recommend that any home use of pre-emergence crabgrass chemicals be on a small scale. Many questions require answers before a broader recommendation can be made. For example:

1. Will the newer compounds be as effective in 1960 as in 1959? Some compounds have been discarded as ineffective yet they looked very promising for a few seasons. Several of the compounds still under test performed fairly well in 1959 tests but were much less effective in 1958.

2. What will be the long-term effects of the relatively large amounts of chemicals on the permanent turf?

If you do try one of the pre-emergence crabgrass materials this year, be sure to follow directions as to time of application, amounts of material and manner of distribution.

TREE WOUND TREATMENT

Wounds on the trunk and branches of shade trees are common. They stem from a wide variety of causes--skidding automobiles, carelessly operated lawn mowers, bark-gnawing rodents, pruning, wind and snow storms.

A wound occurs when a section of the bark is destroyed in any manner. Bark is a protective cover; if it is broken, the underlying tissues are exposed to attack by wood-decaying diseases. Once established, these may move into the heartwood and produce cavities that result in loss of the tree.

According to procedures advocated by the National Arborist Association, all wounds should be treated as promptly as possible after their occurrence to lessen the chance of disease invasion. The manner of treatment varies somewhat with the nature of the wound.

In wounds resulting from impact by automobiles or other heavy objects, an irregular-shaped section

NOTES TO THE NURSERYMEN

by

Walter P. Trampe
Supervisor of Nursery Inspection
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Dairy and Food

THE PORT OF DULUTH

Raymond E. Carson is now attending the Division of Plant Quarantine Training Center in New York City. This is a three months' training course taken in preparation for his assignment as a plant quarantine inspector for the Minnesota Department of Agriculture, Dairy and Food, at the Port of Duluth. Mr. Carson is completing his Master's degree in entomology from the University of Minnesota.

The opening of the ports on the Great Lakes to ocean-going vessels provides many avenues of entrance for exotic plant pests that come in on ships and cargo from foreign ports.

The state inspector will work as a collaborator with a federal inspector who is being assigned to duty at the Port of Duluth. The Department of Agriculture is taking this step to safe-guard Minnesota agricultural and horticultural interests from these dangers. It is estimated that 500 foreign ships will call there next season. Each ship is an individual problem for the inspectors.

NURSERYMEN PROMOTE TELEVISION

by

Donald P. Watson
Department of Horticulture
Michigan State University

The Michigan Association of Nurserymen in cooperation with Michigan State University is inaugurating a series of television programs for the home gardener. The series will consist of weekly half-hour programs during the spring of 1960.

A garden studio is being designed and constructed so that live programs can be produced. Video tapes of each program will be distributed throughout the state.

Subjects will be timely, and topics will be based on questions that are most commonly asked by consumers from week to week during the period of the television series. In general, such topics will be presented as insect and disease control, how to select and where to buy good plants, fertilizers, weed control chemicals as well as planting, watering, mulching and descriptions and pictures of trees, shrubs, vines and roses.

The Michigan Association of Nurserymen is making it possible to record these programs on video tape so that they can be distributed to at least four stations throughout the state and be made available within a week from the time of the original telecast.

of bark often is torn away, the sapwood gouged and splintered, and the bark at the edges of the wound loosened. Somewhat similar wounds may be caused by squirrels and rabbits in feeding on the bark.

When treating wounds where the bark is torn, cut away the loosened edges with a sharp knife or a mallet and chisel and smooth the splintered wood. Then shape the wound to form a pointed ellipse with the long axis parallel to the length of the stem. This shape favors healing since callus growth develops primarily along the sides of a wound rather than from the top and bottom.

Preliminary shaping of pruning wounds is done as a part of the pruning operation. In removing a branch, make the final cut as close as possible to the parent stem. Never leave a stub. Smooth the surface of the cut, removing roughened or torn bark and protruding wood.

The final step in treating any wound is the application of a good-quality tree-wound dressing, available at garden supply stores. Usually this is an asphalt base paint containing a disinfectant but free of chemicals that might injure the living tissues at the edges of the wound. Such dressing materials are the best known substitute for living bark.

To be effective, the film of wound dressing material must be intact during the entire time the wound is healing. Therefore you should inspect treated wounds occasionally and, if cracks or checks have developed, reapply the dressing.

- Indiana Nursery News, Jan. 1960

BEWARE OF PITFALLS

A large number of nurserymen have risen through production rather than marketing. Often they do not understand sound distribution and modern retailing methods. Many a company has been prevented from getting an equitable share of the market because of reluctance to spend necessary amounts on advertising, sales promotion, trade deals, salesmen's compensation plans, etc., for what they consider to be a relatively low volume of unit sales. Often they fail to see the ever-changing character of markets and distribution.

Because of a seller's market, there are some who have not been exposed to the steady increase in customer services and the growing subservience to the customer that other industries have experienced as they have come into today's buyer's market. This change to a buyer's market must be recognized if markets are to be held and expanded.

American Association of Nurserymen
March, 1960

Leaflets will be distributed to the members of the Michigan Association of Nurserymen in an attempt to coordinate the consumer's interest in the program with his visit to his local garden store. Special mention will be made of some unusual plants in an attempt to determine the number of people who are viewing the garden program.

The series will be entitled "Plants are for People." The programs will be practical and cover several topics in one-half hour, attempting to show the audience how they may enjoy their garden.

EDITOR'S COMMENTS by -

C. Gustav Hard, Extension Horticulturist,
University of Minnesota

Building a stable business and attracting sales are two goals which a good nurseryman should be interested in achieving. Building a business is a long-term goal; attracting sales is immediate.

Considerable information is provided by your national organization concerning your business and sales promotion. From time to time we see the nurserymen using these ideas to improve sales and business. One such idea is a demonstration landscape planting for your sales station, garden center or nursery.

Pictures are fine, but often the public is skeptical of them. Words can be eloquent but do not always capture the imagination of a customer. A fragrant French hybrid lilac in a sales bin with several other plants tells the customer nothing about its size, form or fragrance. However, a living specimen planted in the landscape tells the customer many things about a plant.

A landscape planting can be more. It can provide nurserymen with the opportunity to say, "Won't you visit us again?" A landscape planting is dynamic. It is ever changing. Capitalize on this change by

inviting your public back during June and July to see your weigelas, mockoranges and summer spirea and many more plants.

Trees and shrubs used for your landscape setting sell themselves. When a customer sees that a nurseryman feels that they are good enough to plant at his own place of business, then the customer will be convinced that these are materials he too can use. Provide a good example.

Proper labeling is an important part of the landscape planting. Train your customers to buy by name.

Make your customers comfortable. Let them rest in the cool shade of a tree. Even a drink of cold water on a hot day can win you a customer for life.

Let your business speak of quality materials and hospitality. These are two ingredients for a stable business and increased sales.

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