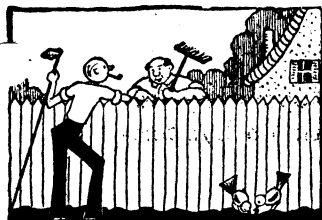


# THE GARDEN SPRAY



BULLETIN OF THE MEN'S GARDEN CLUB OF MINNEAPOLIS

MEMBER—MEN'S GARDEN CLUBS OF AMERICA  
MINNESOTA STATE HORTICULTURAL SOCIETY

November, 1951  
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Vic Lowrie, Editor

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## NOVEMBER MEETING

Date: Tuesday, November 13, 1951

Place: Hasty Tasty Cafe  
1433 West Lake Street

Time: 5:45 P.M. sharp, please

Dinner: \$1.50

### PROGRAM

6:30 P.M. Business session - Fred Paul presiding

6:45 Report of the Nominating Committee and  
Election of Officers

7:00 Report of the Awards Committee to be  
voted on by the members

7:15 Talk on Soils, Soil Analysis, Fertilizers,  
Trace Elements and their Importance by  
Paul M. Burson, Professor of Soils, Uni-  
versity of Minnesota Department of Agri-  
culture

7:45 "Your Own Special Gardening Interest"  
sessions - Harold Kaufmann

### Officers

Fred Paul, President

Vic Lowrie, Vice-President

Rene Dufourd, Secretary

Bill Brooks, Treasurer

Cortis Rice, Jr.,  
Past-President

You won't want to miss this meeting, one of the more important meetings of the year and one which promises to be most fruitful from the standpoint of enriching your gardening knowledge.

First we have the election of officers for the coming year. It is the duty of every member of this Club to help select and vote for the men who will be charged with the responsibility of directing the Club's activities during the year 1952. So come on out and cast your vote for the men of your choice. The next order of business will be to endorse by vote the member selected by the Awards Committee to receive the MGCA Bronze Medal for outstanding service to the Club.

Archie Flack comes up with another excellent speaker who will talk on a subject few of us know too much about, "soils." Professor Burson is an outstanding

## OCTOBER MEETING

We had a bang-up meeting! Our two principal speakers were tops - spoke well and interestingly, imparting much knowledge. (Dick Widner's talk on Systemic Insecticides appears elsewhere in The Spray.)

"The Identification of Conifers" by Dr. Leon Snyder was most graphic. Not only did he have actual samples of all of our native evergreens, but Leon supplemented his talk and demonstrations with a series of colorful slides showing the plants under cultivation in fields, parks and gardens. In addition, he distributed among the members descriptive literature on the subject including a booklet entitled "Evergreens," which you members who did not attend may procure from the University of Minnesota Agricultural Extension Service, U. S. Department of Agriculture. You will find a wealth of information in this booklet including the nine major groups of evergreens, their uses, planting and care, how to keep them healthy, and three tables of injuries giving the description, causes and treatment.

### DUES ARE DUE DECEMBER 1st

If you haven't paid your dues, won't you please send your check for four dollars made payable to the Men's Garden Club of Minneapolis, to the Club Treasurer, William W. Brooks, 6 Mill Road, Bellgrove, Minneapolis 16. Early payment will be much appreciated. We need the money in the bank so that a sound budget may be formulated for the operation of the Club next year.

### CHRISTMAS PARTY DECEMBER 11th

It's not too early to make reservations for the Christmas Party. Mail them to Rene Dufourd, 5020 Second Avenue South and don't overlook those garden slides. Get them to Bill Block or George Titus or "P.W." Young as soon as possible. They will be returned to you immediately following the Christmas Party. Hope to see all of you there!

### NOVEMBER CHORES CANCELLED

As the Garden Spray goes to press, all is at peace in the garden, though not necessarily in the mind of the gardener, particularly if he was caught with his gardening pants down - no dahlias nor gladiolus dug, roses not hilled, climbers left unburied and tender plants unpotted. That's just what did happen to your tardy editor, who traded on faith in the delusive weatherman, gambled, and lost. How much is hard to say.

Jack Cohen related seeing a gardener digging out his glads with a pick and having trouble breaking through two and one-half inches of frozen ground. Yesterday six hybrid tearose plants arrived from Oregon. What to do with them? A fork wouldn't open up a hole in which to bury them; the garage is too cold for storage, and the basement hot enough to cook them. What a climate for gardening! What a challenge! What fun!

Might just as well put your tools away, boys. I had a whole raft of chores all ready to dish out for November, but they're cancelled now until October, 1952.

Of course you plushy greenhouse aristocrats, your fun has just begun; and as for the window ledge growers, why not turn those chores over to the Mrs.? She probably can do them better anyway!

## SYSTEMIC INSECTICIDES

E. D. Widner

Systemics may be absorbed through roots, stems or leaves, depending on the method of application. The absorbed insecticide enters the sap stream and moves up to the upper leaves and buds - accumulates in sufficient amounts to become toxic to insects. It does not move down from the upper to lower leaves, nor from the leaves to roots, and it does not usually accumulate in the stems.

Excessive doses cause leaf injury and actually decreases the amount absorbed. The amount of the chemical absorbed into the plant is affected by age and condition of the plant, and the time of the year. New rose leaves will absorb seven times as much as an older leaf further down the stem. Leaves injured by insects absorb the chemical slowly.

Systemics are most effective when applied to young, actively growing plants. They are not very effective on woody plants such as trees and shrubs. Older plants which have been cut back should be treated when new growth is elongating. When applications are begun after lower foliage has hardened or has been injured by mites, younger foliage will be toxic to mites, although other mites will persist on the lower foliage for as long as four to eight and perhaps more weeks.

Quickest and most efficient means of application is a foliage spray applied as a mist over the top of the plant and usually mixed with a spreader at 1:600. The mist should not injure the plant; however, wetting foliage thoroughly may cause injury.

Soil application requires a greater quantity of the chemical, but is probably easier to apply and safer. Heavy rainfall or watering may flush the chemical out of the soil before the roots take up an adequate amount, necessitating repeat applications.

Sodium selenate is the most familiar systemic. It can be applied in liquid or pellet form. Sodium selenate mixed with superphosphate will control most insects except scale and mealy bug. It is good for house plants too, but avoid spraying heavily; should liquid burn foliage, syringe off immediately. Systemics are of most value in keeping plants clean rather than cleaning up a heavy infestation. With soil application, the effect is not at its peak for at least two weeks. Be careful not to apply to a newly transplanted plant. Wait until the root system is well established. Regular applications of 1 oz. to 30 gal. may injure some plants. It might be safe to apply 1/3 or 1/2 doses at 10-day to two-week intervals. Watch your plants carefully for stunting after the first spray. Some plants are much more sensitive than others. One series of applications should last a season. DO NOT use systemics on food crops. They will be poisoned for human consumption.

Newer systemics include Systox and Pestox and Ompa, the latter are octamethylpyrophosphoramides. Systox will probably be available to the home gardener in limited quantities. The newer materials are phosphates, as are TEPP, HTP and Parathion, and should be used with the same precautions. Avoid skin contact and wear protective clothing if spraying.

The newer systemics can be used more safely from the plant's viewpoint since they break down rather rapidly in soil. After two to four applications of Systox or Pestox, the foliage should remain toxic for four weeks or more. Further applications at 2- to 4-week intervals are necessary to maintain toxic levels in the plant.

Systox, Pestox and OMPA are not general insecticides, but are valuable mainly for killing resistant mites and aphids on some plants. Aphids on other plants

Since soil applications of insecticides is probably the cheapest method considering the cost of labor, systemics will probably be used to a greater extent in the future. Incidentally, sodium selenate can be mixed in with liquid fertilizer and applied at the same time.

Much more research is going to be necessary before the use of these newer systemics will become widespread in home gardens.

### HOUSE PLANT INSECTS

Department of Entomology, University Farm, St. Paul, Minnesota

Following is a list of the common house plants and the names of the insects infesting them. The number after the insect refers to the control formula:

Aspidistra	Red Spider (1); Scale (1)	Gloxinia	Leaf-tyer (2)
Asparagus fern	Scale (1); Leaf-tyer(2)	Heliotrope	White fly (1)
Begonia	Thrips (1); Mite (1); Leaf miner (3)	Hyacinth	Red Spider (1); Aphis (1)
Cineraria	Leaf-tyer (2); Leaf miner (3); Aphis (1)	Ivy	Scale (1); Mealy bug (1)
Citrus (grapefruit orange)	Scale (1)	Martha Washington	White fly (1)
Coleus	Mealy bug (1); White fly (1); Red Spider (1)	Oleander	Scale (1); Mealy bug (1); Red spider (1)
Cyclamen	Mite (1)	Primula	White fly (1); Aphids (1); Leaf-tyer (1)
Fern	Scale (1); Caterpillar (2) or (3)	Rose	Leaf-roller (2); aphis (1); red spider (1)
Fuchsia	Mite (1); Red Spider (1); White fly (1)	Rubber plant	Mealy bug (1); scale (1); Red spider (1)
Geranium	Mite (1); White fly (1); Leaf-tyer (2)	Salvia	White fly (1)
		Tulips	Aphids (1)

Aphis or plant lice, red spider, white fly, mealy bug, scale and mites have sucking mouth parts and can be controlled by THOROUGHLY SPRAYING or dipping the foliage in Formula No. 1, making 2 to 3 applications a week to 10 days apart.

Formula No. 1.	Formula No. 2	Formula No. 3
Nicotine sulfate $1\frac{1}{2}$ -2 tsp.	Arsenate of lead 4 tsp.	Arsenate of lead 6 tsp (level)
Soap 1 oz.	(heaping)	Nicotine sulfate $1\frac{1}{2}$ -2 tsp.
Water 1 gal.	Water 1 gal.	Water 1 gal.

Any spray containing pyrethrum or rotenone is effective against both types of insects. The soil about the roots of many house plants often becomes infested with little maggots or worms. These are the immature forms of the fungus gnats. Best control is to dissolve one 7.3 grain tablet of corrosive sublimate in a pint of water. Dissolve in a wooden container (never use metal). The solution should be used copiously and in place of a regular watering.

Earthworms or angleworms often become numerous in the soil. They do no actual damage other than loosening up the soil so that the roots dry out. The same solution as for the fungus gnat larvae will subdue them.

Ordinary lime water is often effective against some of these soil pests too.

To sterilize soil, bake in an oven. Put a piece of potatoe in the soil in the oven and heat. When the potato is baked, the soil is sterilized.