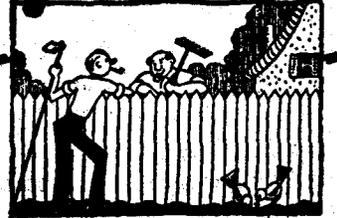




The Garden Spray

BULLETIN OF THE MEN'S GARDEN CLUB OF MINNEAPOLIS

Member--Men's Garden Clubs of America • Minnesota State Horticultural Society



October 1955
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G. "Vic" Lowrie, Editor

Associate Editors:
Don Methven, Wm. Hull,
N. W. Christopherson

OUR OCTOBER MEETING

Date: Tuesday, October 11, 1955
Place: Mount Olivet Lutheran Church
Knox Ave. S. & West 50th St.
Time: 5:45 P.M. Sharp
Dinner: Much for \$1.50

Officers

J. M. Witmer	President
F. F. Heschmeyer	Vice-presid
N. W. Christopherson	Secretary
R. C. Adams	Treasurer

P R O G R A M

6:30 SHORT BUSINESS MEETING
Joe Witmer Presiding

6:45 OUR LILY PLANTING REPORT
Morris Lifson

6:55 FALL BULB PLANTING
P. W. Young

7:00 "HARD-SHELL CRAB"
Rene Dufourd

7:15 INDUSTRIAL AND COMMERCIAL LAND-
SCAPING AND BEAUTIFICATION
R. W. "Bud" Law, Landscape
Architect, Morrell & Jacobs

Office of the Secretary
N. W. Christopherson
6145 Clinton Ave. So.

Office of the Exchange Edit
G. Victor Lowrie
417 Essex Building

Looks like another bang-up meeting, one you'll really enjoy besides getting a lot of good gardening stuff. Your program committee has worked hard to put on a good show, so don't get yourself out on a limb and be sorry later you didn't join up with the gang. The tables are going to be decorated with Mums donated by the members and you are all asked to bring your best blooming specimens for exhibit purposes. Label them please.

FALL GARDEN SHOW RESULTS

Specimens

Grand Champion Bob Carlson
Sweepstakes Frank Heschmeyer
Court of Honor
Al Blackburn Bob Carlson
Frank Heschmeyer Tom Krumm
Al Nelson Sherm Pinkham (2)
Leo Stillman

Arrangements

Grand Champion Eng Hoyme
Sweepstakes Eng Hoyme
Court of Honor
Al Blackburn Tony Koester

Individual Scores

<u>Specimens</u>		<u>Arrangements</u>	
Messrs Heschmeyer	88	Messrs Hoyme	36
Nelson, Al	86	Hull	22
Krumm	72	Blackbourn	18
Reif	72	Koester	16
Blackbourn	62	Stillman	12
Stillman	52	Nelson, Al	10
Lifson	46	Erickson	8
Koester	42		
Carlson, R.	36		
Rouf	34		

Special Chrysanthemum Show

At Our October Meeting

Since the weather threw our chrysanthemums off schedule and many were not open for our regular fall show, we're having an informal mum show with our October meeting.

Prepare your entry at home, preferably in milk bottles, and bring to the meeting, ready to set up on a table. Label all known varieties..

This is an experiment which your show committee wants to try just for interest and fun. Will you help? We'd rather have fifty men bring one mum each, than have two men bring twenty-five. So bring what you have.

No further notice will be given. Encircle your calendar.

NOTICE

In the September issue of the Spray we printed Bill Swain's receipt for Barbecued Ribs. Due to an error on our part we omitted one of the ingredients -

OVER THE GARDEN FENCE

By Bill Hull

It was a good show, even if I do say so myself, and I certainly thank those who were so willing to dig in and work. No show chairman can get along by himself and I personally thank fellows like Eng Hoyme, Al Coxe, Art Fakler, Benny Benson, Harold Kaufman, Don Methven (for signs) and the many others whose combined work made the show successful.

If you didn't participate, we can only feel sorry for you because you missed a lot of fun in the preparation and setting up of the show. After which came a superb picnic. Bill Swain, Rene Dufourd and their committee fed about 150 people a delicious meal of barbecued ribs and the trimmings. The evening was chilly so the hot coffee hit the spot.

Unsung hero of the show was Al Nelson, who lost specimen sweepstakes to Frank Heschmeher by two points. Al's total points in both divisions was the highest in the club, but we have no award for total combined points. Anyway, Al didn't enter for honor, but for fun.

The winners are listed elsewhere, so I won't dwell on them here.

It's too bad we can't also honor those fellows who entered only a very few items, knowing they wouldn't score high, but did it to support the show. Too bad we can't all enter at least one specimen, As it was we had 27 entrants, of whom 26 won ribbons, and for a total of 385 entries, Record highs are 30 entrants and 400 entries, so you didn't do so badly in spite of the poor year.

Judges Mr. and Mrs. Bryant and Herb Kahlert did a superb job and I know every entry was carefully appraised.

As a matter of interest, we incorporated several new ideas into the show.

1. A back room committee whose sole job was to keep the back room in shape and to move specimens into the display room.
2. Paper skirts around the tables in the entry room and the Court of Honor table. This gave a fresh, clean appearance.
3. A guest register. Including known guests who didn't register, we had about 400 visitors to the show from 6 O'clock Saturday evening on. Of the actual registrants, 59% were not members of the club, or associated with it. Actually about half of our entire visitors were strangers or friends of the Club.
4. Suspecting this type of attendance we prepared a printed brochure explaining the organization and purpose of our club, plus the community services it renders. We had many favorable comments from visitors and members.
5. Several special displays all of which could be described with superlatives: H.E. Nelson and Carl Nelson, each a table of dahlias; Greg Lucking and Carl Holst, trees, shrubs and roses; Larry Corbett, annuals; Herb Kahlert, annuals; Sherm Pinkham, tuberous begonias; Louis Fischer, apples; Joe Witmer, soil types. I also had a small display of water penetration into soil. I'd like to have had some "Special Award" ribbons to give those men who put on such fine displays.

That's enough about the show for now.

OVER THE GARDEN FENCE (Continued)

Had a long talk with Al Nelson recently getting ideas about improving my roses. I have a hardpan of packed clay that must be loosened and have been considering digging up the entire bed to a three foot depth. That's quite a job of course. Al suggests digging holes with a big posthole digger and filling that hole with humus and select soil. Then planting the roses over that spot. Sounds like an ideal solution. We also discussed mutual experience with fall application of fresh manure which can be turned under in the spring. Gives good results and lessens the disadvantages of odor and burn danger from using fresh manure in the spring. Plenty available at the St. Paul stockyards. A small handling

fee.

Now is not too early to start thinking of winter preparation. By the time you receive this you may have your garden pretty well cleaned up to rid yourself of possible disease carry-over. A clean garden is a healthy garden.

Also you will soon want handy a waxed snowshovel or a smooth running power snow remover, so start making preparations. Remember to clean your garden tools well before putting them away, coating with protective oil, plastic spray, or wax.

In the meantime, enjoy your chrysanthemums

NEWS AND VIEWS

Quite a splash Harold Kaufman made with his house and garden on the front page of the "Home and Hobby" section of last Sunday's Minneapolis Tribune. The whole affair was very well carried out - a real neat job, Harold, attractive as well as instructive.

* * * * *

Have you ever heard of the Hawaiian ti plant from which hula skirts are made? Well, the laboratory men have now discovered that is an excellent source of levulose, a very sweet fruit sugar which might be used for intravenous feedings and in the treatment of diabetes. Too bad we cannot grow this promising revenue producer in our own gardens.

* * * * *

Having trouble killing the chickweed in your lawn? Are you sure just which is which. The Mouse Ear chickweed having spruce-green, hairy leaves is a perennial and cannot be destroyed with 2, 4-D alone - either add potassium cyanate or mix 2, 4-D with 2, 4, 5-T. The annual chickweed is a much lighter green and can be effectively controlled with just potassium cyanate.

* * * * *

See where Armstrong's floribunda CIRCUS is the A.R.S. selection for 1956. Understand its really a beauty - a blend of yellow, pink and red with blooms three inches across; has a compact upright growth and is completely disease resistant.

NEWS AND VIEWS (Continued)

Take a bow Bill Swain, for your masterful cookery, of course, but more especially for your devotion to the Club, as shown by the tremendous effort you put forward, cooking a whole meal for 150 persons, on the Saturday night of our flower show. The very next day Bill was admitted to the hospital and the following day underwent surgery. We were extremely happy to hear that you are back home with your family Bill; you know, you have our very best wishes for a really quick recovery and again we say thank you.

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Our Photographic Committee is assisting Historian, Fred Paul in completing the Club's history by taking pictures of our present and all living past club officers. These honorable gentlemen will be notified where and when to appear before the camera. Their cooperation will be much appreciated.

OCTOBER CHORES

Time to prepare for a better garden next year. A good cleanup of all diseased plants, uprooting and burning of annuals, and removal of all stalks from perennials are the first and essential steps you must take.

Continue to spray roses for black spot, mildew and aphids; this will help them go into the winter as strong and healthy plants - a helpful protection against winter kill.

Take up those plants you wish to house during the winter - geraniums, coleus, cacti, ivy, philodendron, parsley and chives, etc. Also bring in soil for potting and seeding before the ground freezes too hard.

Clean up the vegetable gardens, placing undiseased leaves in compost pile, burning all others. Fall digging is most beneficial; add manure or compost, spade deeply, and allow the rough earth to stand exposed during the winter.

Don't burn your leaves. Build a compost heap. If you haven't room for a pile, dig a pit and put leaves, clippings and vegetable refuse in along with a dressing of lime and an activating agent.

Protect your young trees from rabbits by using chicken wire, or wrap with tarpaper up to 3 feet in height. Keep roots of shrubs and young trees moist, especially evergreens - they will winter better.

Before the ground freezes, hill young shrubs and plants and all roses to a height of a foot if possible. After the ground is frozen, cover roses with coarse leaves or marsh hay and mulch the more delicate perennials.

Don't fail to stake where bulbs are being planted, and spot your perennials, particularly those slow to show life in the spring. Also tag roots and bulbs dug up for winter storage.

Young pansy plants may be planted where they are to flower if the beds are high and dry. Cover lightly with mulch hay after the first hard frost, thus protecting them from wind and sun while they are frozen.

Remove seed pods from hybrid tearoses and other bedding plants. The plant needs to store all its food to increase cold resistance during the winter.

U R A F O R M

By Dr. R. Milton Caletton

You can at last buy uraform, a 38-percent nitrogen fertilizer, over the counter. And that's the best news in a long time, because uraform is a plant food with a basic difference.

Unlike other plant foods, uraform doesn't dissolve in water. It has a resinous base that breaks down at a constant rate - and supplies nitrogen for as long as a year.

Perhaps the most dramatic example of what uraform will do is found on the vast lawn in front of the Plant Industry Station of the U.S.D.A. This lawn was built on pure gravel, with a thin skin of sand and clay. With one application of uraform, a permanent lawn was built in a single year. All year long, the grass fed with uraform stood out rich and green against a test strip of thin, weak grass.

Reports of the long, steady feeding that results from use of uraform have come in from Penn. State, Purdue, Rhode Island, University of California, and other great turf research centers.

In my own tests, I applied uraform in September of 1952. In April of 1954, I could still detect its influence on turf growth and color. There was no sudden rush of growth, such as follows the use of chemical plant foods in spring. Growth rose to a point where the grass was in perfect shape, then stayed there.

In spite of this enduring response, it has another quality few gardeners had ever dared hope for - it cannot be made to burn grass. And I don't qualify this in anyway - I mean it doesn't burn.

Results on vegetables and flowers have been equally striking. True I had to add potash, phosphorus and other elements. When this was done, a single application of uraform gave steady growth from early spring until frost. Roses fed with uraform produced 11 percent more flowers and showed less winter damage.

Where does uraform fit into the garden picture? It doesn't supply the complete range of nutrients that balanced plant foods do. It's a supplement to, not a substitute for, plant foods now on the market. Uraform adds nitrogen only - no phosphorus, no potash.

Earlier this year, a balanced plant food that remains effective up to six months was placed on the market. With uraform available, gardeners now have a wide choice - they can use liquid plant foods that give quick boosts, buy dry ones that are effective for a few months, or choose uraform which gives its special benefits for as long as a year.

Pound for pound, uraform will cost more than other fertilizers on the market. Measured by results and area covered, it ranks among the cheapest. At present prices, \$3 to \$5 worth will supply an average front lawn with nitrogen for an entire year.

Sounds like a miracle. Maybe it is.

PLANT HORMONES

First Chapter of a Lecture Given by S. C. Harland, D.Sc., F.R.S.
Professor of Botany, University of Manchester
Reprinted from the Journal of the Royal Horticultural Society

The subject of this lecture is the very general one of plant hormones. The word "hormone" has now got into the vocabulary of man in the street via the daily press, though not with any precise connotation. It is indeed difficult to talk about a subject without defining it, so I shall begin by being a little historical.

The term "hormone" was minted in 1902 by BAYLIS and STARLING, and is derived from a Greek word meaning "I arouse to activity." Hormones denote chemical substances secreted by the endocrine gland which, when carried by the blood stream to another organ, affect the functioning or activity of that organ.

Hormones have also been thought of as "chemical messengers." What do they do? To answer this question we must realize that all animals possess certain tissues and organs performing different functions, and carrying on special activities. The entire body has to work as an integrated and harmonious entity. No one part or tissue has to get out of step. Organs and tissues must therefore in some way be subject to a system of co-ordinating controls. These controls are, so far as animals are concerned, of two kinds. There is first the nervous system, which "may be likened to an intercommunicating network of telegraph wires centering in the brain, spinal cord and ganglia." Second there is a complex system of hormones or chemical messengers emanating from the endocrine glands which by altering the activity of an organ, also affect the activity of others. The hormones act as a sort of balance wheel to enable the metabolic processes of the organism to function in an optimum way, and also to buffer or to minimize the evil effects of violent fluctuations of the environment. It will be sufficient to mention one or two animal hormones. Adrenaline, or epinephrine, is a hormone secreted by the adrenal glands. In periods of stress brought on by fear, rage or hunger, there is a discharge into the blood-stream of a much larger amount of this substance than usual. There is a rise in blood pressure and a general mobilization of bodily forces which enable the organisms to meet the emergency.

Another hormone is insulin, which is secreted by the pancreas and has to do with sugar metabolism and with the control of the blood sugar level. Failure of insulin production brings about the disease known as diabetes, and the therapeutic use of insulin for this disease is now well known.

Animal hormones have now been studied for fifty years and a great deal is known about the chemical and physiological properties of the thirty or more which have so far been identified.

A plant is also an association of different tissues and organs which require the same kind of co-ordination as we have seen to be necessary in animals. Plants have no nervous system and any co-ordination must therefore be through other mechanisms. It can be shown that there are in plants chemical substances which are formed in one part of the plant; they pass to other parts; they produce special growth effects, and they are thus entitled to be known as plant hormones.

PLANT HORMONES (Continued)

HORMONES AND ROOT GROWTH

An example of hormonal regulation in a plant is provided by the relationship between roots and leaves. By means of special techniques it is possible to grow excised roots in an aseptic culture medium. If this medium contains the right substances in the right amounts, these isolated roots grow as fairly normal roots. The medium first employed was one containing a complete array of mineral salts, with added sucrose, to supply the carbohydrate normally transported from the leaves to the roots. In successive transfers of flax roots to fresh media it was found that growth became poorer with each successive transfer. The roots needed something for growth which they were either not getting at all or which they were making in too small amount. The necessary substance proved to be the well-known vitamin thiamine, and it was needed in the very low concentration of one part to ten million. When supplied the roots grew well.

The nutritional requirements of tomato roots are somewhat different, and vary somewhat from strain to strain. Some strains need not only thiamine, but also pyridoxine, nicotinic acid, or both these substances.

How does the root obtain its supply of thiamine and other necessary substances? It can be shown by some simple ringing experiments that in the tomato plant thiamine accumulates above a stem girdle between the root and the stem, and also above rings at the base of the leaves.

Absence of thiamine from the nutrient solution produces characteristic symptoms. Cell division slows down and finally ceases. Thiamine is therefore a factor influencing cell division. It is also a factor influencing respiration. Pyridoxine is concerned with the syntheses of amino acids; nicotinic acid has to do with respiratory enzymes. All three substances thus play an essential part in the biochemical economy of the plant.

It has been known for years that most animals including man require thiamine and other vitamins of the B complex as essential constituents of their food. These vitamins are made by plants, not to prevent deficiency diseases in animals or ourselves but for their own growth and well being.

LEAF GROWTH HORMONES

Just as there are root growth hormones, there are also leaf growth hormones. If, for example, immature leaves of the pea plant are excised and placed in a nutrient medium containing the usual mineral salts and sugar, they grow very little. But if the amino acid adenine is added growth is promoted. Adenine thus functions as a leaf growth hormone in the pea plant. When tried with leaves of certain cereals, however, it was without effect. It is therefore likely that different species of plant need quite different substances to play the role of leaf growth hormones.

(To Be Continued)