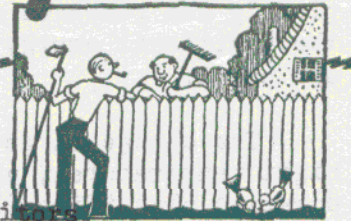




The Garden Spray

BULLETIN OF THE MEN'S GARDEN CLUB OF MINNEAPOLIS

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



September 1962
Volume 20, No. 9
G. Victor Lawrie, Editor

Associate Editors
Wm. Hull, Neil Barry
Otto Nelson

September Meeting

Date: Tuesday, September 11, 1962
Place: De Laria's Restaurant
Southdale
Time: 6:00 P. M.
Price: \$1.75
Food: Southern Fried Chicken

N. W. Christopherson President
Ev Haedecke Vice-Pres.
Dwight Stone Secretary
Charles Proctor Treasurer

Office of the Secretary
4620 Hampton Road

SPECIAL ATTENTION - Our September meeting will be held at De Laria's restaurant located on the lower level at Southdale, next to Woolworths.

P R O G R A M

Felix Dhainin will talk on "Progress of the Minneapolis Garden Center at the Lyndale Park".

Bull Session: A discussion by the members of their problems and experience in our gardens this summer while they are still fresh in our minds.

"The young still sow wild-oats . . .
. . . while their elders just grow sage".

President N. W. Christopherson has announced appointment of the following as the nominating committee and requests the membership make any recommendations to these members: Joe Witmer, chairman; Harold Kaufmann and Archie Flack.

SURVEY OF BOTANY FROM THE VIEWPOINT OF A LAYMAN

by Halsey Steins

Flowering is the change in plant growth from leaf-making to flowermaking. Sufficient leaf-area has usually developed to cause leaf-making to stop completely and reserves of carbohydrates and proteins have accumulated to supply the additional energy and material needed for the formation of flowers, fruits and seeds.

The change is governed primarily by heredity, modified by day-lengths, night temperatures, and a hormone in the leaves called florigen. Light duration classifies flowering plants as short-day, long-day, and day-neutral. Night temperatures change day-length response. Florigen, under certain conditions, develops in leaves to induce flowering.

In dutchman's breeches and spring beauties, flowers form while leaf-making continues. In some desert plants, leaf-making is completed and flowering commences in two weeks. Hepatica, bloodroot, and magnolia flower before leaf-making of the same season starts, the flower buds having formed the previous year after leaf-making has stopped. Most plants, other than trees, flower in one to three months: others, and most trees, only after several years.

The apple tree takes ten to fifteen years to form its first flowers. A seedling shoot, however, grafted on a fruit-bearing tree, will produce its own fruit in two or three years. Conversely, a twig from a flowering tree grafted on a sapling develops no fruit again for several years.

Scotch pine and spruce flower (produce cones) in thirty to forty years, and the tree-like bamboo, only once every thirty years. The century plant flowers in twenty to thirty years and then dies.

Flowering of short-day plants is restricted to daily continuous light periods of less than thirteen and fourteen hours: long-day plants, to those of more than the short-day. Day-neutrals bloom during both short and long-day conditions.

Among short-day plants are early spring and late summer or autumn wildflowers, chrysanthemums, poinsettias, and dahlias. Long-day plants are the late spring and summer wildflowers, delphiniums, and gladiolus. Day-neutrals are dandelions, heal-all and carnations.

Night temperatures of 63 to 65 F. on poinsettia, a short-day plant, stimulates flowering, but at 55 F., only under long-day conditions, and at 70 F., no flowers form. The Christmas cactus, another short-day plant, flowers under night temperatures of 63 to 65 F., but at 55 F. becomes a day-neutral, and at 70 to 75 F. does not flower under either short or long-days.

Florigen is a flower-inducing hormone produced under certain conditions in leaves. In cocklebur, a short-day plant, flowers form when exposed to ten hours of light and fourteen hours of darkness daily. If exposed to sixteen hours of light and eight of darkness, they do not. If, however, a branch from a flowering plant is grafted onto a non-flowering plant (one exposed to the sixteen hours of daily light) that branch will continue to flower and all others also, although under long-day exposure. The florigen, already produced

SURVEY OF BOTANY FROM THE VIEWPOINT OF A LAYMAN (Cont'd)

in even one leaf of the grafted branch, is transmitted to all branches and flowers develop in all of them.

Soybeans, another short-day plant, flowers on all branches if a flowering branch is grafted on a plant held under non-flowering long-day control, providing, however, all leaves on all branches but the grafted one are removed. If the leaves on the grafted branch are also removed, no flowers form on any branch. In this case, a flower-inhibiting hormone is produced in its leaves under long-day conditions.

Horticulturally, the master key to flowering may be florigen. Sometime in the future, if science succeeds in isolating it and its chemical nature and way of functioning become known, flowering would presumably be produced at will, and the value of many money crops of fruit and seed increased inestimably.

Reprinted from "The Wind," MGC Chicago Region

U of M, HORTICULTURE DEPT., RESEARCH PROJECT REPORT
Continued from August issue

The introduction of the Trumpeter strawberry in 1960 brought the total number of fruit varieties introduced by the Department of Horticulture to 65. Other recent introductions are the Earlimore strawberry (1959), Welcome gooseberry (1958), and the Centennial and Northland apple-crabs (1958). Wilcox, Weir.

The most recent hybrid tomato, Hybrid EE, was introduced in 1960. Seed of the parent lines (Bounty by Earliana) has been furnished to three seed companies. Currence.

Other hybrid vegetables include Hybrid R and G squash and Hybrid C and D cucumber. A number of male sterile squash lines have been developed and are being tested for the development of superior F₁ hybrids. These have been distributed to seedsmen and other breeders. Hutchins.

Tests using various materials for covering plastic greenhouses suggest the use of 4 mil polyethylene where a "cheap" temporary cover is desired. For a more durable cover 5 mil Mylar or Scotch Pak are recommended. Widmer.

Many varieties of garden chrysanthemums make excellent flowering pot plants in the spring when grown in the greenhouse. Some of our University of Minnesota introductions that are especially suitable for this purpose are Glacier, Harvest Bronze, Wanda, Minnpink, Princess, and Minnehaha. Such plants are cut back after flowering and planted in the garden (by June 15) where they will produce satisfactory fall bloom. Widmer.

Hybrid tea roses protected with at least a 2-foot covering of mixed tree leaves survived very well after winters which were most severe. Conventional covering methods with about a foot or soil mounded around the base in the fall before the ground freezes, plus a foot-deep covering of coarse hay, gave much poorer survival. Plants should be covered at least 2 feet beyond the center of each plant. White.

RESEARCH PROJECT REPORT (Cont'd)

Effective weed control in garden chrysanthemums has been obtained, using CIPC at the rate of 8 pounds per acre. Evergreen and shade tree plantings treated with simazin at 2 pounds per acre of active ingredient gave seasonal weed control. Widmer.

In the pre-emergent control of crabgrass and other lawn weeds, Dacthal and Zytron continue to be highly effective. The arsenicals also control crabgrass when used as pre-emergent applications. Post-emergent control is realized by the use of methyl arsenate, although repeated applications are required. White.

Mouse-eared and common chickweed were effectively controlled by both Pax and Neburon. No regrowth of chickweed has occurred a year after treatment. Silvex is also a good contact spray for the control of chickweed. White.

Boyne, a new variety of red raspberry from Morden, Manitoba, has shown real promise over the past two years. It has medium-large, firm, attractive berries and has been extremely productive in trials. It merits trial as a commercial variety in the area. Andersen.

The iron chelate FeEDDHA (Sequestrene 138 Fe Iron Chelate) has been very effective as an iron source for strawberry plants growing in high lime soil likely to induce iron chlorosis in many woody ornamentals and fruit crop plants. Andersen.

Trials with dwarf apple trees have shown that the commonly used East Malling stocks are not sufficiently hardy unless mulched with straw, sawdust, or some similar material in winter, or have the benefit of sod culture. Apple trees growing on these dwarfing roots at the Fruit Breeding Farm near Excelsior have survived several winters, including the unusually severe conditions of the winter of 1958-59 where they were mulched or growing in sod. Andersen.

Annual weeds in canning peas have been effectively controlled by pre-emergence applications of 4 pounds of Radox per acre. Broadleaved weeds and Canada thistle can be controlled after pea emergence by the application of 6 ounces of MCPA per acre. To minimize pea injury, apply MCPA in the early morning after the foliage is dry. Nylund, Ayres.

A wilt-resistant muskmelon, Minnesota Honey, is now available for Minnesota gardens. Another wilt-resistant muskmelon having only male and female flowers has been developed. It is expected to be very useful as the female parent in producing hybrid muskmelons with wilt resistance. A new hybrid having this line as the female parent is going to be introduced as Muskmelon Hybrid 16. Currence.

A number of promising woody ornamentals have been tested at the Arboretum, the Fruit Breeding Farm, on the St. Paul Campus, and at the branch stations. Some of these are being propagated by commercial nurserymen. These include the Mollis azaleas, the Korean boxwood, the many-flowered cotoneaster, Toba hawthorn, Lemoine deutzia, Canby's pachystima, and Summerglow tamerix. Johnson, Snyder.

The Radiant flowering crabapple, introduced in 1958, has become one of the most popular varieties in this area. Another selection with upright form is being propagated by our nurserymen and will be introduced in 1963. Johnson.

Quackgrass can be controlled in potatoes by the application of dalapon at the rate of 10 pounds per acre. The method of treatment is to allow the quackgrass to grow 6 to 8 inches tall, then apply the dalapon in a sufficient volume of water to give uniform coverage. After 7 to 10 days the field can be plowed and planted to white varieties of potatoes. Red-skinned varieties are lighter in color when grown in treated soils. Nylund.

Early yields in tomatoes have been increased by growing an early hybrid variety such as Hybrid EE, by using transparent plastic mulch, by using a starter solution when setting plants in the field, by applying a hormone blossom-spray to the first and second flower clusters when three to five flowers are open in the cluster, and by growing seedlings in peat, clay or plastic pots rather than in flats or bands. Nylund, Ayres.

Hollow heart in Irish Cobbler potatoes increases as the number of tubers per plant decreases. Also any practice that increases the rate of tuber growth after the tuber initiation may increase hollow heart. A close association exists between internal browning and hollow heart of potatoes. Nylund.

Muskmelon yields, particularly early yields, can be greatly increased by growing in peat pots and transplanting seedlings through slits cut in black polyethylene mulch which has been laid down in the field or garden. Nylund.

POTATO BREEDING WORK EXPLAINED AT CROOKSTON

CROOKSTON, Minn. - Somewhere among the 14,000 plants which visitors saw waving in the breeze on a six-acre field just outside Crookston today (Tuesday) may be a new and better variety of potato.

But it will be 12 to 15 years before it's known whether any of the seedlings in the field will survive rigorous and extensive testing, said Florian Lauer, associate professor of horticulture at the University of Minnesota.

He explained potato breeding work at the annual Crops and Soils Day at the University's Northwest Experiment Station. The seedlings came from tubers of plants which came from true potato seed grown in the greenhouse the previous year.

The Crookston station is important in potato variety development because here the seedlings are grown and selections made under conditions prevailing in the Red River Valley, one of the nation's principal spud growing areas.

Only about 5 percent of the seedlings in the field at Crookston will be selected for further testing. Over the coming decade or more, they and their descendants will be subjected to increasingly extensive testing - for horticulture characters, yielding ability and processing qualities, as well as resistance to common scab and late blight. Throughout this time, the selections will be indexed in the greenhouse to maintain them free of viruses.

The tests become progressively more extensive as time goes on.

A selection surviving all of these tests will finally be entered in large-scale demonstration trials simulating grower conditions. Three of these demonstration sites are located in the Red River Valley, one at Osseo and one

POTATO BREEDING WORK EXPLAINED AT CROOKSTON (Cont'd)

When a selection passes all tests with flying colors and merits release as a named variety, the stock is increased at the University's North Central Experiment Station, Grand Rapids, for further increase by certified growers. When sufficient stock is available, the variety will be named and released.

In addition to the Crookston station, the testing is carried on at the University of Minnesota Potato Breeding Farm at Castle Danger, the Red River Valley Potato Research Farm at Grand Forks, the University's Grand Rapids and Duluth experiment stations and University plots at Hollandale and on the St. Paul Campus.

News release, Institute of Agriculture, Univ. of Minn.

POTATO BREEDING WORK EXPLAINED AT CROOKSTON

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OVER THE GARDEN GATE

by Bill Hull

What a wonderful August meeting we had with a tour starting at Joe Witmer's, Friendly Bob Adams (somewhere there's a firm by that name, Bob) had prepared another belt-loosener with barbecued ribs and cake. Very fine.

For those who couldn't be there, we bussed to Cortis Rice's, Archie Flack's and Harold Kaufmann's, seeing four very fine gardens. Joe Witmer's beautiful garden was again impressive as is his neighbor's. Joe is the compost heap artist as far as I am concerned and it pays off in his garden. At Archie's we again saw a gorgeous border with balcony petunias artfully employed to spot masses of color; among the many fine features was a bed of fibrous begonia plants - probably over a hundred of them. At Cortis' we saw his very fine border with expanse of lawn which nicely sets off the flowers. Some of the finest phlox we've seen and lots of it; also interesting bird houses and feeders (where was Dr. Rodda?). Harold's garden is always most interesting and he deserves special praise for bringing color into the front area. His petunias were really gorgeous. Many fine things here, including some most unusual caged birds. What are they, Harold?

It was a fine evening, only the Twins lost.

Nice getting to talk with many of the fellows again. Our past president Rene Dufourd and silver medal winner Al Blackburn were both present and enthusiastically welcomed back. What does Florida and California have that Minnesota doesn't have better in the summer time? Another guest, John Fatcher, was referred to us by our friends at the Minnesota Hort. Society. John is a science teacher at Jordan Junior High.

Good to see Ken Scoggins again and renew our old college ties. Ken was a member several years ago and had to drop out because of the speed of the world; once the gardening bug bites you, Ken, it won't let you go. As the dermatologist's nurse said, "When your hand itches, you're getting something; when your head itches, you've got it."

Les and Mrs. Johnson are leaving on a western tour August 27. Out to Seattle and to California. Then to Texas and home. Will be quite a trip and he hopes to visit some Men's Garden Clubs en route. Wonder if his school gardens will still be going when he returns?

A friend went to the doctor complaining of a pain in his leg, which he had for ten days beforehand. The doctor asked why he hadn't come in sooner. The reply; "Every time I say something is wrong with me, my wife says I have to give up drinking."

Fred Holzman, rose tester, is going to visit in Elgin, Ill., with national rose test chairman John Kienzle. A fine article in the Chicago papers recently about John and his work for Men's Garden Clubs. Mention it, Fred.

Where roses aren't red
And violets aren't blue,
Spaceships can take others -
But not me and you.

--WHH

OUR FLOWER SHOW

At 9:30 P. M., Sunday, August 19, another Flower Show became history. Once again we have opened for public viewing a successful and beautiful display.

A large percentage of our membership participated in one way or another: in the planning by plain hard work in setting up and arranging the show room and tearing down again Sunday evening, and by entering a total of 791 specimens and arrangements. This figure is a new high.

We cannot begin to mention everyone who participated. Special accolades should go, however, to P. W. Young for handling the general decoration of the exhibition hall; to Les Johnson for the exhibits in the outer hall, including the special exhibits by member; to the member who planned and arranged these special exhibits; to Dolph Bezoier for a grand job of publicity; Bud Christenson for an excellent job in the backbone job of the show as Staging Chairman. Bill Brooks made all arrangements for the judging.

I would be remiss if I failed to express our sincere thanks to Mr. Peick of American Hardware Mutual for making the space available to us and for the myriad little things he did to insure the success of the show and ease the burden on the show chairman.

34 members exhibited a total of 791 entries.

We feel this was a successful show. However, there undoubtedly are areas where changes could bring about improvement. We would appreciate if anyone who has any suggestions would discuss them with one of the club officers.

Charlie Proctor, Show Chairman

TOP HONORS WENT TO:

Specimens

Les Johnson

Bob Smith

Dolph Bezoier - dahlia
Dale Durst - african violet
Bill Hull - rose
Les Johnson - aster
Al Nelson - mum
Bob Smith - clematis
Phil Smith - delphinium
Dwight Stone - Gloriosa Lily

Arrangements

Bill Hull

Bill Hull

Grand Champion

Sweepstakes

Court of Honor

Eng Hoyme
Bill Hull
Vic Lowrie

THE 10 HIGHEST POINT WINNERS

Specimens

Entries

Points

Bob Smith	38	66
Frank Vixø	56	59
Dale Durst	44	58
Dwight Stone	39	54
Les Johnson	42	48
Eng Hoyme	40	47
P. W. Young	36	44

Arrangements

Entries

Points

Bill Hull	14	62
Eng Hoyme	9	44
Ev Haedeke	8	26
Vic Lowrie	7	20
Bob Smith	4	20