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This shows a portion of what Dr. Hansen has often declared to be South Dakota's most important crop. The scene is a wheat field on the ranch of C. Van Den Berg, near Strool, S. D., and the ladies are daughters Clara and Edna.

NORTH DAKOTA HORTICULTURE SOUTH DAKOTA

Nov. 1945

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THE LEAST BITTERN

By
O. A. Stevens

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The least bittern is a sort of smaller model of the American bittern, but enough smaller that it is quite a different bird. The large species has a length of two to three feet, while the small one is only 11 to 14 inches or about the size of a Wilson's snipe with a thin body. In coloration, the small bird is less streaked, more reddish brown on the back in the female, black in the male. Both sexes have a brownish patch on the upper wing which is lacking in the larger species.

The least bittern is much more elusive than its larger cousin, for its small size allows it to slip nimbly through the reeds. Its nesting range extends northward into North Dakota and southern Minnesota. It has been little observed in the Dakotas but is likely to be found in eastern South Dakota and southeastern North Dakota. It seems not to occur farther west. Its winter range includes the Gulf Coast, West Indies and northern Central America.

I recall that a number of years ago some small boys brought in one of these birds which they had tried unsuccessfully to kill by primitive means. It was not a promising looking object, but a friend kept it for some weeks and released it in a suitable location.

The least bittern climbs nimbly over the stems of the rushes and coarse grasses which grow around the pond edges. Its nests are usually suspended from the reeds above the water. One observer in Ohio reported that the nests were usually about 18 inches above the water, they are loose and frail, seemingly insufficient for the purpose. The eggs are usually four or five, bluish-white or greenish-white, oval in shape, about an inch and a quarter long.

The bird's food consists of various small animals and apparently almost anything of suitable size which happens in reach is likely to be taken Bent concludes that "small fishes, tadpoles, and small frogs make up a large part of its food." Dr. Roberts reports that crayfish found in least bittern stomachs had the tips of claws and legs removed. Audubon kept a bird in capticity and observed it caught flies and other insects. Stomachs examined by the U. S Biological Survey contained about 40 per cent fish and 21 per cent dragon flies, young-aquatic stage. One writer lamented that the bittern ate his pet hummingbird.

Dr. A. A. Allen has described how a bird which he observed at the nest at close range, kept the feathers pressed close to its neck so that it seemed only a reed stem; again, the feathers

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NEWSLANTS

By
Harry A. Graves

H. A. Graves

One of the most striking of the comparatively new things that I have seen this year is the Schubert Purple-leaved chokecherry from Wills. This chokecherry was discovered a few years back in a population of seedlings by Lawrence Schubert, foreman of the Will Fruit Nursery. Incidentally, Lawrence is a member of the North Dakota Horticultural Society of long standing.

The young leaves of this chokecherry are the conventional green or nearly so but as the summer lengthens, the leaves become a most purplish purple. The quality of the leaves is quite different from Cistena or Newport and I believe there is a place for this ornamental in the landscape. It should be grafted on Mayday roots to guard against the pesky common chokecherry suckers raising their ugly heads and then it could be planted with safety most anywhere.

The Fordhook hybrid tomato introduced this year by Burpee looks good when it gets ripe. I doubt it will seriously invade the realm of Bounty, Victor and Firesteel, however, on the basis of one year's observation. Pruned and staked it looks and behaves better, but when permitted to spawl unpruned it spreads out like a squash. The Fordhook hybrid tomato is merely the forerunner of things to come in the opinion of many horticulturists. Already we have several successful hybrids of Sweet Corn. Hybrid Cukes and Peppers were grown hereabouts this year and we hear rumbles of hybrid radishes and hybrids of other vegetables. People are ready and willing to try things new in vegetables so the plant breeders and seed houses can bring them on.

The reddish honeysuckle mentioned by friend Porter in the September issue may be the Zabelii variety. This is variously listed as a variety of L. tatarica or L. Korolkowii. I would suspect the latter case since I didn't think it favored the Tatarian. I saw a quantity of it in the grounds of Bergeson's Nursery at Fertile, Minnesota, early this fall. Some of the young plants still carried a few blooms. They were really red. Mr. Porter also mentioned Mr. Graetz and his nicely planted home grounds in Hansboro, North Dakota. I had the pleasure of visiting the Graetz place a few years back and I am not at all sure I got to see all of the many things of interest that can be seen there.

We want to congratulate Rev. Jackson on his Baptist planting of Iris. It would be difficult indeed to take anything away from Rev. Jackson, whom we knew in his years at Bismarck. We must call to the attention of Mrs. Brierly of Mobridge, however, that North Dakota has a "Green Fingered" preacher also, in the person of past-president Ralph McNeil currently stationed at Carrington. The Federated Church yard at Carrington has "blossomed like the rose" under the trowel, spade and hoe wielded by the McNeils. Rocks have been used extensively and a large pool shelters several hundred brightly colored goldfish. Rev. McNeil is a great believer in the use of native plants near at hand.

Going back to Vegetable Varieties, I want to report that I have never seen peas yield as did our Lincoln Peas this year. This is a most excellent variety, an outstanding character of which is that the pods are filled 100% in almost every case. I have heard reports that Lincoln is not the best for freezing purposes. Have any of the members tried storing them this way?

While visiting the Morden Station this fall we were impressed with the quality and behavior of the Grenville plum. We have written W. R. Leslie for a commercial source of this variety. This plum is hardy at Morden, has large size, good quality and an annual bearer. Another variety, not so hardy at Morden, is the yellow plum "La Crescent." This plum is almost pure yellow when ripe with a slight reddish blush. In the opinion of some it is the best plum sauce. The flavor is very mild and compares favorably with the flavor of some yellow plums that grow in our woodlot in Pembina County. These wild fruits are smaller, of course. Even though it is not entirely hardy we hope to risk planting a couple trees of La Crescent next spring. The extra quality appears to justify the risk.

President Ralph Smith has appointed a committee composed of Dr. C. I. Nelson, Dr. George Will and your Secretary to take steps towards straightening out the kinks in the premium list of the North Dakota Society. Already some progress has been made and we hope to have a standard premium lined up in time for the 1946 season.

Foxtail says: War is everything that Sherman said, but it's still the best excuse ever invented for raisin' prices and taxes.—Prairie Farmer.

Flowers are the sweetest things God ever made and forgot to put a soul into.—Henry Ward Beecher.

GARDEN NOTES

By

W. E. H. Porter

W. E. H. Porter

All too soon summer has fled and we stand on the threshold of our dreadful arctic winter, a prospect brightened. however, by the cheerful window garden display which, judging from descriptive lists offered for perusal, should be varied and continuous. In retrospect are some haphazard jottings: Sept. 4th. 94 in shade, my noisy, happy, companionable slough visitors such as ducks, coots, phaleropes, bitterns, etc., have all left with even a late family of fledgling swallows, noticeable a few days ago, and no more is heard the chirp and melody of song birds in the grove, tho by the looks of the bushes they departed with a hideful of raspberries. The Manchester Guardian makes this interesting comment: "On the coast and in the estuaries, it is possible to see great migratory movements in progress, whereas from the woods and fields, our summer visitors slip away unnoticed." Situated here about 6 miles east of the geographical center of the North American continent one realizes its truth, but how this twilight silence of summer depresses one. Two late annuals are flowering, the cardiopetalum larkspur from southern France, with numerous small long spurred blooms of dark violet, and a rare native of Mexico the sage Salvia microphylla, a flaming red breaking out from white bracts. Rex Pearce goes into ecstasies over the supreme loveliness of this dwarf gem, shaped like the upper half of an hour glass, whose beauty is enhanced by dense dark green foliage. From a seed package I have a mere 5 mature plants all of which will be saved from frost and brot indoors as it makes an admirable pot plat. Sept. 10th. With temp. drop to 52, autumn gales of driving rain sweep down from the north—a bracing relief from recent oppressive heat and how the ferns respond, drooping fronds of ostrich and lady ferns get green again and rigid, but tall perennial asters are laid prone and henryi lily is bent beyond recovery. But the 6½ ft. mullein with its spikes of clustered primrose flowers is defiantly upright as also the 8 ft. white Thalictrum polyganum. As garden display becomes a memory mostly, our thots turn to seasonable bulb planting, encouraged by timely suggestions gleaned from catalog offers. In lily department Sandyloam easily leads with 139 varieties which grow exceptionally well in Vermont. Browsing thru their pages it is difficult to curb one's appetite for possession of all of them. Included is F. L. Skinner's hybrid yellow bunting, a variety of Coral lily, which lily, we are told, is a triennial rather than perennial, so it is advised to always have a supply coming on, as its gay late spring and early summer bloom is indispensable in a N. D. garden. Their address is Spoonerville Rd., North Springfield, Vt., and prices are from 25c to $25. I have managed to develop sufficient energy to work over a bed for planting of 13 varieties, which includes the variety W. N. Craig of umbellatum, a 1943 prize winner. All candlestick lilies, by the way, are fool proof in N. D. When digging a posthole, I found, about 2 ft. down, a pocket gopher run, stuffed full of pieces of sow thistle root and also a few pieces of blue geranium, evidently a winter larder. Sept. 15. First heavy frost, with ice still forming at 8 a. m. Sept. 17th. The murderous effect of that frost is seen everywhere; in utility garden only roots remain undamaged. Most annuals and some perennials are laid low including Wayside's dahlia-flowered sunflower, which showed one large flower and many buds. Perhaps next year this desirable perennial will be better established and show more resistance. Goldenglow, with a similar smaller flower, is unhurt, also all Delphiniums including cardiopetalum, the dwarf annual from southern France, and by the way, its open branching of dark violet blue spurred flowers is a pleasing window sill combination, with bright colored geraniums, as it is admirably adapted to pot culture. So with canary yellow bushes of Linaria pancicii, the tall nodding pale cream pincushins of Scabiosa ochroleaca, varied chrysanthemums and asters coming out cheerful indeed, is a yard high staked plant of our native Aster laevis, with its myriad mauve flowers at garden gate entrance we realize the force of Emerson's aphorism: "Flowers and fruits are always fine presents; flowers because they are a proud assertion that a ray of beauty out-values all the utilities of all the world." Sept. 20th. Overnight came our first snowfall and today thermometer records 36 above zero with grey sky and a wind that scatters leaves. Have received Roy A. Baird's latest geranium quotations. By the way, we are honored by having Mr. Baird as one of our paid up members. As usual Mr. Baird offers the newest and best in this most popular of house plants. A personal appeal to add to my collection is Marshall McMahon, golden leaves with a chocolate Zone and the dwarf black green lobed leaves of the latter, the demand always exceeds the supply, both

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MANITOBA NEWS LETTER

By
W. R. Leslie

W. R. Leslie

In 1918, horticultural investigators of the Northern Great Plains area assembled at the Northern Great Plains Field Station of the United States Department of Agriculture, Mandan, North Dakota, to discuss general fruit and garden problems. Much benefit was derived. As a result the group organized as a regional section of the American Society of Horti cultural Science.

Annual meetings were the general order until 1941. Since then stress of war efforts has prevented convening of the Northern Plains horticulturists. The lull was broken this August when a meeting was held very successfully in Minnesota on August 27, 28 and 29. Recent previous meetings were 1937 in Wyoming, 1938 Iowa, 1939 Minnesota, 1940 Manitoba, and 1941 in North Dakota.

Two of the Morden Station staff joined Messrs. F. L. Skinner of Dropmore, W. J. Boughen of Valley River, and Professor E. T. Andersen of the University of Manitoba. All were keen on gathering seed of attractive plants native in northern Minnesota, but which do not extend into Manitoba in wild state. Some of these were tall Gayfeather or Liatris, Tall Lobelia, New England Asters—rose pink, deep red, and dark purple; black, cherry, red oak, pin oak, and white oak.

The tours organized for the visitors included vegetable, shrubbery and flower plantations at University Farm, St. Paul; truck gardens west and south of Minneapolis, the Minnesota State Fruit Breeding Farm, and the Peter M. Gideon's farm near Excelsior.

Much is being done by the vegetable breeders at the University by way of developing hybrid seed of squash, cucumbers, and tomatoes. It would appear that results comparable to those from hybrid corn seed may be expected. New chemical weed killers showed efficiency in ridding asparagus, onion and carrots crops of enemies, such as pigweed and purslane. Base oil and No. 2 gas oil showed up well. Kerosene injured asparagus plants as well as the weeds.

The beautiful flowering red raspberry, Rubus odoratus, was still in bloom even though some seeds were ripening. The new Minnesota hybrid garden chrysanthemums were a grand array. Of the 18 that have been named, Duluth a yellow, Harmony an orange-red, Chippewa a large aster purple, Redhawk a blood red, Redwood a carmine, and Boreas an early white, seemed of promise for more northern gardens. Thousands of charming new seedlings were beginning to bloom for the first time.

Dr. Krantz gave an optimistic picture of the unfolding list of new varieties of potatoes. Lately about 80% of the potatoes grown on the continent have been Irish Cobbler. The new crossbred early selections are less prone to disease, including scab. Only a low percentage are culls, as most tubers in the hill size up. As a rule, those varieties which do not develop seed balls from their blossoms yield the greatest crop of tubers. Dr. Langdon pointed out that hollow-heart in potatoes is not a disease but merely the result of stress during regrowth after a period of pause. The hollow may commence while the tuber is young and small. A steady water supply should avoid the annoying condition.

Prof. J. D. Winter said of the Ottawa Experimental Farm recent raspberry introductions that Madawaska had the best flavor, Rideau was next in appeal, Ottawa was doing well but the flavor was not pleasing, Trent was not yet placed in rating under Minnesota conditions.

Dr. Wilcox, at the Minnesota Fruit Breeding Farm, displayed many retest strawberry selections. As parentsf or inbreeding, Minnehaha was chosen for vigor, Dunlap for hardiness and quality and Premier for general adaptation. It was reassuring to note that many of the new crossbreds were free of all foliage diseases.

Prof. Alderman explained many of the new tree fruits. Mantet apple, an early dessert variety, introduced by the Morden Station, won enthusiastic praise from the many visitors. Minnesota 101 plum, sometimes also known as Minnesota 161, is probably in line for receiving a name. This variety has been fruitful at Morden for many years, and is considered one of the sweetest large dessert plums. Mount Royal, born in the province of Quebec, is a leader among the European prune plums. It was mellow ripe August 28. Other valued Europeans were Swiss Prune. Krikon, and Russian Green Gage. The Korean cherries, numbers 87, 88, 60 and 20 had high approval for jelly and pies. Red Cortland, a cherry-plum from Michigan, was large, dark fleshed and tasty.

The apple crab, Minnesota 1423, Dolgo v McIntosh, was worthy of both esteemed parents. In apples, Minn. 638, is a reliable late variety; Minn. 978 is Wealthy-like but an annual bearer; Minn. 714 is an early dessert apple. The crab Minn. 240

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GARDEN CLUB GLEANINGS

By
Juanita Jorgensen

Mrs. Jorgensen

Official Greetings from the President

By the time that this number of Horticulture will reach you mimeographed copies of our revised constitution probably will have been reviewed by all member clubs of our Federation. It is hoped that every garden club will read the constitution carefully and accept it as a guiding rule of procedure. It was adopted unanimously at our convention. It naturally is not perfect. No instrument of this sort can be perfect, and must be subject to repeated amendments in accordance with the ever changing conditions. Our Federation of Garden Clubs is of rather recent origin and has all the elements of rapid growth in it.

Ours is supposed to be a government of law and moral precepts and not a government, and not an administration, of arbitrary and willful men. Unless and until our constitution is legally and conventionally altered it should be cheerfully and scrupulously followed.

Our constitution states the purposes and aims of our Federation of Garden clubs, and for that matter, with those of the individual persons who compose the membership of our respective garden club organizations.

The principal institution of our Federation of Garden Clubs as such is our annual convention. The convention period, therefore, is a good time to take inventory of past efforts and achievements, and perhaps also survey past mistakes and shortcomings. It is by trial and error that we can make progress. The convention period also is an appropriate time to make plans for next year's activities and for future endeavors. Ours surely is a great cause. We can take much pride in this cause ourselves and sincerely and enthusiastically recommend it to our neighors and friends. Probably every state in our beloved America has garden clubs and at least forty states are united in a National Council of State Garden Clubs. Happily our own Federation is a member of this fine national organization.

Our recent convention clearly showed the interest and enthusiasm of our society. Despite the 98 degrees of the weatherman and despite other detracting circumstances, the garden club members in attendance stayed until the very end. They strenuously objected to the omission of any part of the program. The papers presented and the pictures shown were of a very high order and were much appreciated. The reports of the activities of the several clubs were interesting, suggestive, and helpful. It clearly appears that the clubs of our Federation vie with one another in splendid endeavors and first-class achievements. It is hoped that the members who were privileged to attend the convention will tell their experiences to their clubs so that they may learn and benefit therefrom. Let us make the coming year the best so far! There are many projects before us and we may discuss some of them in future issues of this magazine.

—Carl Christol.

Vermillion, S. D.

Apology to Mr. Shank

It is too late to do anything about it now, but a sincere apology is hereby offered to Mr. Elton Shank who concluded Dr. Snyder's term as president of the South Dakota Federation of Garden Clubs last year. When the National Council asked each president for a report from his state Mr. Shank was so busy he turned the request and the job of answering it over to the secretary. Evidently the compiler of the reports took it for granted each president had written his own notes, and those of you who read the reports saw Mrs. Jorgensen's name as president of the South Dakota clubs. We are truly embarrassed to be masquerading under such an honor not due us; but we are not sorry that our Federation has been able to make such a good showing during its brief existence, and want to encourage each individual club to carry on with renewed vigor and interest.

Mobridge Is In Again

Mobridge is happily in the news again because of its start towards a fine memorial planting; because of its flower show in connection with the Northern Show of Progress; and, sadly, because the city, state, and Federation has lost another horticulturist in the family of Rev. and Mrs. Ellis Jackson who have moved to Akron, Iowa. Like every good gardener, Rev. Jackson left tangible evidence of his presence in the advancement of horticultural knowlege in the community; in the formation of the garden club; and finally in paving the way for a memorial planting with his horticultural donations. Our good reporter, Mrs. F. Briley, says: "The loss of Rev. and Mrs. Jackson was a sad blow to their many friends here, and to the Mobridge Garden Club. Before leaving the Jacksons presented the City Park and the Public Library with a large collection of their choice

iris. The caretaker at the Park immediately set to work and the plants are all moved into their new homes. A lot south of the library has a planting of five long rows three feet apart and reaching to the alley. It is Rev. Jackson's wish that this particular plot be marked as a memorial to the Mobridge boys who served in World War II."

In regard to the show she says: "The Mobridge Garden Club had charge of registering and also the arrangement of the exhibits for the Northern Show of Progress which was celebrated at Mobridge for four days. The exhibits were brought from Walworth, Campbell and Dewey Counties and included crops, garden, canned things, and flowers. The flower display in the basement of the Auditorium won the plaudits of all who saw it and was generally described as one of the most colorful and varied ever shown here, according to the Mobridge Tribune. There were nearly 100 entries including these varieties: bittersweet, delphinium, mums, gaillardia, snapdragon, pansies, hollyhocks, roses, coxcomb, Russian spike (physostegia to the horticulturists), achillia the pearl, and many varieties of mixed flowers in bouquets. The table of oddities entered for exhibit was interesting. There was found a large leaf tobacco plant over six feet tall, okra, a potato shaped like a gat hand with four fingers, a peanut plant with peanuts attached, and a tomato vine bearing small tomatoes growing from a potato. The room was beautifully decorated with floor baskets of zinnias and marigolds gathered from the City Park; and branches of bittersweet and asparagus were twined around the posts. Cash prizes amounting to $100 were awarded by the Mobridge Civic Association."

Club Calendars

At this time when garden clubs may be considering plans and programs for the new year let us note a few of the most interesting features of the year books entered in the recent contest. Flandreau's mimeographed prize winning booklet contains a list of sources from which program leaders may obtain information on the topics assigned to them. Poems of the garden and of club work are given a prominent place, and the calendar for such month contains a roll call topic and two seasonal topics for discussion. Intriguing titles are: Conservation or Starve, Name and Describe a Butterfly, South Dakota Wildflowers, Beautiful But Rampageous, A Study of Vegetables of American Origin, Halloween Plant Superstitions, Flowers, Fruits and Vegetables Named in the Bible.

Rapid City's hand-typed, 42 page booklet has space for notes and clippings each month; contains a list of 16 of Dr. Hansen's finest plant introductions; and a double-page record in connection with their attendance contest during the whole year. This record and contest shows a remarkable attendance percentage among the members and might well be adopted in other clubs. The club has committees as follows: constitution, flowers, flower show, scrap book, telephone with a chairman for both sides in the contest, and yearbook. I like their suggestions of work for each month, too, as, "Make a corsage and wear it to club August 9," and "Practice making large arrangements suitable for church, halls, USO clubs, etc., in baskets and large vases" for July. A quotation, "Be charitable. Each member has a right to promote measures in which is is interested and have a voice in those she disapproves" is an apt one for any organization.

If we printed all the dear poems and erudite philosophies we encounter in the year books and magazines we wouldn't have space for anything else, but DeSmet's Friendly club has a rhyming bit that is new to me, and very lovely:

"You can't forget a garden
Where you have planted seed.
Where you have watched the weather,
And known the roses' need.
When you go away from it,
Howe'er long or far,
You leave your heart behind you
Where roots and tendrils are."

Their purple-covered booklet contains many wise program topics such as: New TCP Kills Toughest Weeds, Are You Up To Date on Iris? GI Garden Around the World, Milweeds Will Stuff Mae Wests, and The Story of Johnny Appleseed. I'm always glad when I note a publicity committee for any club, and De Smet has this besides a committee for exchanges, for Sunshine, and a music committee.

We learn many interesting sidelights from the yearbooks that monthly reports do not always contain, but the cheerful red handbook of the Vermillion Garden Club gives no hint of the many fine projects which are carried on by them each year. Instead of "telling all" by way of the calendars, the program committee names the speakers for each month and then keeps the members in suspense as to the topic. Perhaps that is one way to encourage attendance at the meetings.

The oldest club in the Federation, Centerville, has a unique spatter work cover on their yearbook, possibly a print of their club flower. The group is very active in all welfare work.

SOME INTERESTING FACTS ABOUT THE CARRION FLOWER

By
H. R. Woodward

H. R. Woodward

On at least four different occasions during the past year examples have been brought or sent to me of the Carrion Flower, smilax herbacea, or as has been named by Dr. Aven Nelson of the University of Wyoming in his "New Manual of Rocky Mountain Botany," nemexia herbacea. In all instances it was brought in for identification so I must assume that so far it is not too widely distributed. At least if widely distributed it must be considered somewhat rare. It is a beautiful decorative type of vine that is unarmed by thorns, yet has a most disagreeable if not to say putrid odor at the time it is in blossom.

Its odor serves a very distinct purpose and that is to attract a certain type of insect that will carry the pollin to other flowers of the same species. This insect is the type of insect that is attracted by the smell of decaying flesh, such as certain types of flies that feed upon carrion. Insect pollin carriers are known to be attracted by some kinds of odors and repelled by others. Some are even overcome by heavy fragrance, while others are invigorated by the heavy fragrance of flowers. Some insects are attracted by odors over long distances. One of the interesting things about this whole phenomenon is the fact that it shows that the insects have a very powerful sene of smell. Experiments have shown that some insects have an extraordinary sense of smell and that on the whole it is more highly developed among the insects than any other of the invertebrate animals. The sense is located in the smelling pits of the terminal segments of the antenna. This putrid odor presented by the flower is the reason why it has been so named.

The Carrion flower is a vine in most instances and may vary from three to fifteen feet in length of its stem. In the case of shorter stems it might not even appear to be a vine, but an ordinary herbaceous shrub. Its leaves are oval-round with the lower basal leaves more or less heart-shaped. The stem has a pair of tendrils at the base of each leaf, one on each side of the stem. This enables the plant to climb over the plum bushes or other plants in its society. On the top of the branches of each stemlet is the hemispheric flower cluster. The flowers are yellow and rather insignificant except for the disagreeable odor and since the pistillate flowers are on one plant and the staminate flowers on another, it is easily seen why the insects must be attracted. Most flowers of this type are pollinated by wind. The solidly packed cluster of berries are most attractive. They are at first a light green and later become a blue and finally black. It is most usually the black berry cluster that is brought in for identification. The seeds are red and one person reported that evidently the berry was an article of diet for the pheasant by the presence of so many red seeds in the crops of the pheasants she had prepared for the table. I might say that the berry is not poisonous.

The plant grows up each year from a perennial tuberous rootstock much the same as does the iris, yet the carrion flower belongs to Smilaceae or the smilax family. Like other members of this family it prefers river banks or stream banks or other ravines or gullies where there are thickets of other shrubby plants. It may be found from the Atlantic coast as far west as Wyoming. There is a sub-species, nemexia herbacea melica, found in the canyons of the mountains of northern Colorado.

Since so many have asked for identification of this plant a more complete and concise description is best given by Dr. Nelson as follows:

"Stems elongated, climbing, glabrous; leaves numerous; blades ovate, triangular-lanceolate to lanceolate, essentially alike throughout the plant, 4-8 cm. long, short-acuminate, 7-9 nerved(rounded or truncate at the base; bracts subtending the peduncles like the leaves: Peduncles much surpassing the subtending bracts at maturity; flowers carrion-scented: sepals and petals greenish, oblong or broadened upward, acutish; dioecios; filaments twice or thrice as long as the anthers: berries subglobose, bluish black, 6-8 mm. in diameter."

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were fluffed out, covering the neck, the barring on the feathers making them resemble shadows among the stems.

It is not surprising that this bird is unfamiliar to most people. It is not likely to be seen unless one makes a special attempt to find it. However, Dr. Roberts related that some years ago it nested in a swamp within the city limilts of Minneapolis.

Worry, the interest paid by those that borrow trouble.—G. W. Lyon, in Judge.

FRUIT AND VEGETABLE NOTES

By
F. X. Wallner

F. X. Wallner

"Wallner's special salad" consists of vine ripened red and yellow tomatoes, sweet red and green peppers and sweet onions, seasoned by an expert woman chef at 41st and Minn. Ave., Sioux Falls. After eating one helping you just want another, and the cost is less than a nickle. The poor keeping qualities of dehydrated vegetables will be the one obstacle to the popularity of this type of vegetables. Corn and sweet potatoes keep best, beets and green beans next, but white potatoes were fifth, followed by pumpkin and squash, carrots were poorest, in keeping qualities. The rye crop is 12 million bushels short of the ten-year average, while tobacco is 50% over the ten-year average with a crop of two billion pounds. Yesterday a man drove in from a distant town. He must have at least one red onion to make a poultice for his eye. I told him a white or yellow onion was just as strong, but it was a red onion poultice that cured a growth on auntie's eye, so he looked thru some boxes that I thot had some red onions mixed in, and found two, to cure his eye. Oct. 13th. Today the last onion rolled down the topper, a little later than other years, but I worked alone some of the time and was short of help all the time, and also had the biggest and best and highest priced onion crop in our 50 years of growing vegetables. One grower here is shipping onions to Hollandale, Minn., into an onion district. Wet, backward season must have been the cause of their almost crop failure. Squash and all vine crops was almost a total failure with us the past season, just a few acorns, and not of the best quality; no buttercups, hubbards, or melons and few cucumbers. The tomatoes, picked green more than four weeks ago at the time of the first frost danger, most all ripened and have been selling for $1.50 to $2 per 30-pound lug. Wallner's Pink seems to color up best and looks as well as a vine ripened fruit. Oct. 21st. This afternoon I saw a nice crop of carrots being harvested, a long type of Chantenay. We have found the red cored Chantenay a little short for a good bunching carrot. The treasury of both the Sioux Falls and the South Sioux Garden clubs have been enriched by $5 each, as a result of the vegetable displays at the Sioux Empire Fair. Friends of the boys seem disaffected if I do not say a word about their welfare. Paul has been home and helping us the past month, getting in our crops. Jim says his "all in lie" tent escaped the storm on Okinawa, but that the whole island needs rebuilding. The Doctor is on his way to Japan. Francis is recovering after another operation, in the hospital at Temple, Texas. John is still at the atom bomb plant in Washington state. North Dakota's seed potato crop is reported to be the best ever grown. Ideal growing conditions and the state's rigid certification system are turning out thousands of acres free from any virus disease. Beekeeping should be seriously considered by our returning veterans, particularly by the disabled ones, as an occupation that will be within their power and which will furnish a good and independent income. In this occupation he will have the willing aid of thousands of female workers that can be relied on not to strike or join labor organizations and who do not demand a 40-hour week. From the Dept. of Agriculture's clip sheet, here is a success story from a neighboring state, which can easily be duplicated here:

"Bees in 800 hives are working over farms near Saratoga, Wyo., busy in behalf of a United Nations victory. They belong to H. J. States, and are making a three-way contribution to the war effort, by producing honey and beeswax, and by pollinating farm crops.

States, his wife, and son are now devoting all their time to bees. Since 1941, with help from the Farm Security Administration, they have increased their hives from 300 to 800. Last year the bees produced 80,000 pounds of honey for market and 3,000 pounds of beeswax, with an estimate of 100,000 pounds of honey and 3,700 of beeswax this year.

Proud of this record, States points out that the casual observer may overlook the importance of beekeeping as a branch of agriculture. But there is no substitute for beeswax. Practically all types of ammunition from rifle cartridges to 16-inch shells are coated with it. Beeswax neither expands in jungle heat nor cracks in the sub-zero cold of airplane guns at high altitude. It is also used by pharmacists and in chemical warfare. As for the importance of bees in farming —at least 50 crops depend largely on bees for pollination or yield more abundantly when bees are working in the fields.

States puts out 50 to 75 stands in one location Locations are about two miles apart and selected in relation to cultivated areas that have most alfalfa and clover. In exchange for a good loca-

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FALL GARDEN NOTES

By

Dr. S. A. McCrory, Brookings

S. A. McCrory

This is an attempt to supply our secretary and magazine editor with an article of some timely interest. Most of our work for the summer is to date largely a collection of field records, and as yet is not ready to present. However, there are some very interesting features that that have come about as a result of the past growing season.

Three years ago we started some studies here at Brookings as well as the substations to determine in just what ways we might extend the period of time over which garden vegetables are available. The most logical approach seemed to be to induce earlier maturing of vegetable crops Since our normal frost free period is only 130 days, we used such practices as forcing the plants in the greenhouse, and hot beds for later transplanting to the garden, used early maturing varieties, used hot caps and forced the plants with commercial fertilizers. The results of forcing plants into early maturity are reported in Experiment Station Bulletin 374.

The last two years have given us some results regarding the fall planting. To date the impression I have is that fall gardening is decidedly more hazardous than the spring garden.

Results obtained this fall differ greatly from results obtained last year. Sweet corn has been one of the most dependable crops for fall gardening. The early maturing varieties generally can be depended upon to produce a crop when planted by July 1st. Never have we grown a fall crop when smut and ear worms have not made their appearance and generally both cause severe loss. I am convinced that a smut resistant variety is one feature always to be considered in selecting a fall or late summer sweet corn.

Cauliflower is generally a hazardous crop, but for home use is well worth the risk involved. In 1944, we produced excellent quality, but small heads of cauliflower, from plants set in the garden on August 1st. We used the Snow Ball variety. This year plants set two weeks earlier have failed to head. I think this indicates the uncertainty of this crop in the fall garden. It is extremely difficult to get plants to survive if planted in hot weather and later planting is likely to fail.

Cabbage are generally grown as a fall crop, by planting a late maturing variety in the late spring or by seeding directly into the garden. This crop is so commonly commercially grown that it hardly seems worth mentioning. However, plants of the Golden Acre variety set in the garden on August 10 of this year produced nice heads of excellent quality. I am inclined to think that perhaps the gardener who is interested in a high quality cabbage might use late set plants.

Head lettuce has been a rather successful vegetable crop when planted in early spring. As reported in other work, we transplanted large plants from the forcing structure into the garden in early April. Such a practice has enabled us to get a crop rather consistently but the heat of summer makes the season extremely short. To lengthen this period the fall crops offers some possibility. Plants set on August 10 this year have produced good heads by October 15. They are of marketable size and excellent quality. There is a marked varietal difference but preliminary observations indicate that the variety New York 515 is among the best. It ranks well both as a spring and fall crop.

We have been unable to produce a crop of peas from late planting. This is about as one would expect.

Spinach has been a consistently good fall vegetable. I know of no vegetable that can be seeded as late in the summer and mature. To date we have not found what is the latest possible seeding date, but a crop appears reasonably certain from a late August seeding.

This is by no means a complete list of vegetables that can be grown in the fall. Certainly late maturing garden vegetables will be in the season until frost. With a late planting made during the late summer months, a great deal can be done to lengthen the season of fresh vegetables. If this is combined with a storage cellar, the family vegetable supply can be amply taken care of for most of the year.

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have red flowers. Sept. 22nd. A day of wind and rain with an especially vicious gust splitting the top of a tall white elm, temp. is 59. The last rose of summer is the Will rose with two fragrant expanding buds and several bright red autumnal hips the size of cherries. Sept. 27th. Ice making frosts are becoming the rule, to which, surprisingly, the Mexican Graptopetalum paragyense is resistant. I am tempted to find out how hardy it really is by leaving a plant out all winter. It

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BEEBE'S PHILOSOPHY

By
H. E. Beebe, Hollywood, Calif.

H. E. Beebe

Thankful Thoughts

In memory of the war dead and in thanks for those men returning each individual might change a bit of God's earth to some special permanent beauty. A lily pool, stone lined walk, low stone fence to sit on and to hold heat for late fall flowers, maybe a clump of bushy perennials would show the boys that you remember. Let them know it whether it is your lad or the neighbor's.

For the towns—a swimming pool, recreation house, skating rink, a park down town; small, well watered lawn where people may sit and picnic—all of these are in the reach of every town in the Dakotas. The great increase in cash should be used before it is dissipated in trying to make more money. Ten per cent of the increase in cash over what people had any time before in the past fifteen years would transform any prairie town. Now is the accepted time.

Here is a poem, "Thankfulness," from the pen of Helen Rowland that fits:

I thank the Lord for many things!
For winter stars and gentle springs,
For autumn skies and sunny Junes,
And kisses under summer moons.

For pleasant drives thru quiet lanes,
For taxicabs and Pullman trains,
For charming books and picture plays
To fill the fleeing peaceful days.

For men who do not bore me—much
And friends who never make a "touch"
For winter roses, fresh and sweet—
And more than all—enough to eat.

For movie stars and glamour boys,
And holly wreaths and Christmas toys:
For all the charming gifts I'm giving—
Oh yes—I thank the Lord—I'm living.
All day the heart within me sings
"I thank the Lord for lots of things."

Elephantine Explanations

Due perhaps to my own carelessness or misguided efforts to correct my spelling, the opening of the August poem is:

"Of persons we know a great no,
Who go to the opera and slo."

Blue prints will be sent to anyone whose Garden club members do not "get" all of the poem I still say it's "extry" as Seth Parker used to say in Jonesport Nights, altho my wife maintains it isn't. Her folks were of the same nationality as W. E. H. Porter. He sent some poetic support—for me—as follows:

Life is strife for everyone,
For every son of thunder.
Then be a lion, not a lamb,
And don't be trampled under.

That might be a good idea in our foreign relations.

Youth Yumps

In the July, '43 magazine attendance of young people at Easter at Hollywood Bowl was mentioned and the hope that they would start telling the older ones what to do in church. There appears to be some awakening here under the leadership of Rev. Porter Barrington. I saw 12,000 young people at the Bowl on Saturday night listening to a live program and one church is turning over its evening service to a youth pastor whose organization is entirely different.

As a good many churches in the Dakotas have no evening service they might get out of the manger and turn their equipment for that Sunday time over to some local youths' organization run not by members of the church and with very unorthodox views. The wind would blow a very musty smell away.

My greatest desire tho, for young people, is "Saturday Night for Christ"—good, clean, happy times—preparing the mind for the next day, and associating the church with lots of fun and future mental contentment.

Winter Winds Win

Hannah in Argus-Leader wrote "Between the tree rows the earth is a carpet of carefully blended greens and browns. The leaves from other trees shed long ago and now the Chinese elms' late greening falls and the Russian olives still cling to their silvered summer draperies. This is the season of crowds—crowded streets, crowded stores, crowded trains, crowded buses. Poultry crowded into houses and small yards. Hogs and cattle and sheep in barn lots. Woodpiles, corn cribs, fodder stacks, machinery. A gathering together against the winter ahead."

"Back to Eden" article "Winter Boquets" by N. E. Schmidt ends: "For winter arrangements, Bitter Sweet, Wahoo, Chinese Lantern, Love Apples are in a class all by themselves." Our readpleas are in a class all by themselves." It gives ideas for the small home.

BLIZZARD BELT GARDEN NOTES

By
Mrs. G. M. Jorgensen

Winter Decorations

Mrs. Edith Seabury, one of our faithful readers from Plainview, Nebraska gives a timely hint on decorative effects as follows:

"Gather now all your Silver King Artemesia for Christmas decorations. Under artificial light it looks off-white and we much prefer it to evergreen. Blue or red decorations harmonize beautifully with it. I put it over chandeliers, and drape it back and around large mirrors and pictures, and it is always much admired."

Browning of Evergreens

From the New York State Agricultural Experiment Station at Geneva comes this information on a universal problem wherever evergreens are grown. Householders who are fearful that their ornamentals are being attacked by insects or disease may be assured that the browning of evergreens at this time of year is a natural occurrence, according to Dr. F. L. Gambrell, Station Entomologist. It is nature's way of pruning these trees, he says, hence is no occasion for alarm. In the early fall the amount of browning may vary considerably in different years, says Dr. Gambrell. Commonly this condition is quite natural, that is, it is a case of shedding or pruning of the older leaves and branches and is comparable to that which occurs on deciduous plants Fall browning is particularly noticeable on arborvitae and may also be observed on pines, spruces, firs, and other conifers in the form of browning and shedding of the 3- and 4-year old needles. Occasionally the 2-year-old needles fall, but this may be due to some organic agency or adverse weather conditions. Undoubtedly, extended periods of hot, dry weather contribute somewhat towards this condition.

Browning of evergreens may occur in the early spring and again in the summer, says Dr. Gambrell, and in such cases several factors may be involved, some of which require care to prevent serious injury. If browning occurs in late February and early April, it may be attributed to a drying out while the soil is still frozen and the tree unable to replace the water lost by the needles. Exposure to the prevailing winds and direct sunlight generally accounts for this injury which may be reduced by shading or screening the trees wherever this is practicable.

Summer browning of evergreens is most generally caused by insects, with the spruce mite as a common source of trouble, especially during hot, dry weather. This insect attacks other types of evergreens as well as spruce and can be detected upon close examination as tiny reddish creatures crawling about the trees. Dusting sulphur gives good control. Summer browning may also be caused by scale insects, root weevils, spruce gall aphids, unfavorable or poorly drained planting sites, hot, dry weather, or the failure of newly transplanted trees to become established.

Pagoda-Tree Trial

A wide knowledge of plants is an absolutely necessary part of good gardening so we try, through the medium of these pages, to mention various plant species and varieties which may be new to some of our back-yard gardeners. Knowledge of plants which will grow in South Dakota can only be accumulated by growing them under different conditions of altitude, soil, care, and protection. All of these affect the growth and hardiness of plants; and each experiment in growing a new variety adds to our general fund of information, and aids our recommendations of it. So it is that we want to tell you about our trial growth of the Sophora Japonica, variously known as the Chinese Scholar-tree, and the Japanese Pagoda-tree. The Pagoda-tree grows to be a real tree, 75 feet or more in height, and in addition is covered with blossoms like an ornamental shrub. I'd like to see a full grown tree swaying its long chains of creamy white flower clusters, especially since the tree blooms in July and August when most flowering trees and shrubs are reflecting a calm well-being of a task done long ago.

My Pagoda-tree has survived the vicissitudes of a May frost, hail, drought, and of being half buried all one summer. The tree is only two years old, but has come through two winters splendidly. It was received in October, 1943, heeled-in in the open garden over winter, and planted in early April the following spring, its branches being just as green when it was dug as when covered up in the fall. On May 5, soon after it had leafed out, it withstood a freeze hard enough to freeze the ground solid, without apparent damage. Then on May 14 a severe hail storm stripped it of almost every leaf, gouged deep gashes in the trunk, completely destroyed half of the tree, and broke many smaller branches, leaving it a sorry looking specimen indeed. This

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SECRETARY'S CORNER

By
W. A. Simmons

W. A. Simmons

Have recently been reading a couple of books in which the author dropped in a few words of the inhabitants of the foreign country they were writing about, which always infuriates me and I am wondering why they do it. The most obvious answer that comes to mind is that they seek to show the readers how smart they are. If they knew the reactions of at least some readers they would know they are only proving how dumb they are. Mrs. Mary Tschirley, of Roscoe, writes: "The picture on the cover surprised me I have a flock of mallards this year again, in fact had a few duck dinners lately." Oct. 18th. While taking advantage of the wonderful Indian summer weather, to gather in the remainder of the soy bean crop, I was surprised to find about half a peck of good, mostly green tomatoes, that had escaped with their lives from the freeze by reason of being warmly covered up by the heavy foliage of the plant on which they grew. I still have a lot of tomatoes ripening in the office, where the temperature seems to be just right for that process. Better clip Dr. McCrory's article in this issue and put it where you can refer to it during the next gardening season. An acquaintance told me recently of the large potato crop he raised this year and, wishing them to mature fully, so they would keep better, put off digging till a few days ago. The vines were large and healthy looking, but the field was spotted with pocket gopher mounds, and he found they had beat him to the spuds, leaving him only a few of the smaller ones. Now he threatens to trap and eat the gophers as being the only way he can get any food out of that ground. Perhaps those gophers had been hearing some of the government propaganda, urging everyone to eat more potatoes, so as to consume the second largest crop on record, 433 million bushels, 15% more than the ten-year average. Mr. H. L. Palmer, of Pittsfield, Me., writes that his best pear is the Bierschmitt, top-worked on one of the hardy Hansen pears. They bore heavily this year, even with an eight-inch snowfall on May 10th. He likes the Tokata plum best, on account of its high quality, tho he also likes Kahinta. Those that have magazines to renew this fall should send me the list and get the prices we are able to get them for you, as this will result in a substantial saving for you, in many cases much more than the annual dues. Many years ago Dr. G. F. Will pointed out the world's indebtedness to the western hemisphere in general and our friends the Indians in particular, for greatly enlarging their stock of food. He gave this list as corn, wax beans, many of the better field beans, squashes, pumpkins, potatoes, tomatoes and tobacco. Said he: "The early white settlers not only secured all of these products from the Indians, whom they encountered, but also learned the method of growing them from the Indians, who taught them the methods still in use for growing corn, squashes and potatoes." This list is a formidable one and causes one to wonder what the people lived on, before Columbus discovered the new world. Probably mostly meat, which doubtless didn't require red points in those days. The following from a Dept. of Agriculture release, is interesting, in this connection:

"Foods of the Western Hemisphere—corn, tomatoes, and potatoes, in particular—have been an important long-range factor in improving the nutrition of the whole world and making possible the increase of population, Dr. W. C. Lowdermilk of the U. S. Dept. of Agriculture pointed out in a recent address. He warned, tho, that sustaining future population and civilization itself depends upon man's conservation of the world's limited acreage of productive land. In a discussion of population and nutrition he cited estimates of population indicating that, in the last 50 years, the increase alone has been about as great as the total population of 545 millions in the world in 1650. This grew to 906 millions in 1800, to 1,608 millions in 1900, and to 2,171 millions in 1940.

Dr. Lowdermilk, assistant chief of the Soil Conservation Service, commented on the importance of modern medicine and of industrialization but observed, "More than medicine is needed to reduce death rates." He continued:

"In ancient times populations increased in those areas where food was grown in large quantities after the discovery of agriculture, as in Egypt and Mesopotamia and the Wei Valley of China. And in more recent times further increase in population of the earth has followed two important discoveries. First, the navigation of the sea and development of cheap transport, and second, the discovery of the new lands of the New World and its food plants, such as corn, potatoes, and tomatoes.

"These are food plants that are especially well suited to humid and cool climates. They were spread quickly through the Old World, and sup-

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AUTUMN

By
Dr. Geo. F. Will

DR. G. F. WILL

Fall is definitely with us now and the part of the year which to me has always seemed the finest. Crisp mornings, warm, hazy days and bright cool evenings mark the season. Cranes are flying south in great flocks, making the dome of the sky resound with their raucous but not unpleasant calls. The sloughs and lakes harbor uncountable quantities of all kinds of water fowl and the fields are plentifully filled with pheasants, grouse and other game birds. Altogether it is hard for a man who cannot spend at least a portion of the day in the open.

Fall colors, too, are beginning to run riot over the landscape. The pageant of color is led by our autumn skies which are the most brilliant of the whole year. The brilliant reds and oranges of the sunrises and sunsets are enhanced by the grays and blues and whites of the clouds and the wonderful clear blues and greens of the open sky Have you ever stopped a moment near sundown and tried to distinguish and describe to yourself the various colors present in the spectacle. Actually a painting which faithfully depicted them would be criticised as fantastic and exaggerated.

Then we have all the varied autumn colors in the landscape. Grasses, shrubs, trees and prairie perennials present the most varied compositions and contrasts in colors. There are still many greens with us from the light, glossy greens of the cottonwoods to the black green of the oaks already beginning to take on their Fall bronze. There are yellows, oranges and pale golds in foliage, as well as a whole series of reds from bright crimson to the dark purples of the sheepberry.

And that is not the end of the color display. The very face of the land itself furnishes us with further studies in color. The Fall plowing has turned up in some places the damp soil to give a strong black, in sandy spots, the color is more of a yellowish gray. The grain stubble spreads out in broad patterns of grays and yellows, many of the pastures on the lower ground are still brilliantly green and I saw yesterday on the river bottom a forty acre field all of a bright golden color as a result of the effect of frost on the one species of grass. The prairie hills have taken on their permanent grays and golds which will change little till Spring comes again with its new bursting buds and the gradual drawing of a green cover over them again. The autumn hills too are distinctive, one day they are only a pencilled outline on the horizon, hazy and mysterious. Another day their lines stand out, sharp, clear and black in clearer air. They also are changing in appearance as the sun moves southward and the shadows grow longer, deeper and darker on the northern slopes where in their steeper portions the sun will not strike again until Spring.

But winter is not so many weeks away so let us make the most of the pleasant Fall days while they are still with us.

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is a sort of stemmed hen and chix, a really lovely thing especially grown in full sun when the mother of pearl becomes pink, and is easily propagated by leaf. Of knotweeds, the common yard and also silver lace vine auberti are still green and unaffected, the latter tho in its 2nd year has shown no bloom. But the English Polygonum reynouta went down before the first breath of winter. Like all knotweeds it blooms late and seldom gets beyond the pink bud stage altho this ground cover is fully winter hardy. Chrysanthemum erubescens in full flower, the best garden chrysanthemum on account of its hardiness, earliness and very bright summery accent.

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tion States gives the farmer a five-gallon can of honey."

The honey bee will not do its best work without encouragement, say U. S. Department of Agriculture bee experts. Bees will not gather honey or pollinate crops in the most efficient manner unless the hive is large enough for them to develop a large family. The minute bees fill a hive, especially a small one, they start to swarm. A swarming hive at once divides its working force into two parts, neither of which can do the job of gathering a full crop of honey. Swarming can be controlled by increasing the size of the hive. This is done by adding "supers" in such a way as to keep in step with the number of bees in the hive, and with the quantity of honey they have gathered. Bees should never be allowed to see the end of their job.

Foxtail says: Word from the furniture stores is that there's a bad shortage of rockin' chairs. Word from the farm is that there's a worse shortage of time to set and rock.—Prairie Farmer.

States are as men are; they grow out of human characters.—Dr. L. E. Jackson.

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is of high color, hardy and useful for sauce.

The morning of the third day was spent in the Department of Agricultural Engineering and of Plant Physiology. Improved devices for cold storage home units, for washing and grading potatoes, and for quickly shelling peas, beans and soybeans were studied keenly. The botanical visit concluded with inspection of many lawn treatments to combat weeds and undesirable plants. The discovery of these new plant hormone weedicides is exceedingly comforting to gardeners who dislike dandelions, plantains, and such in their grass area.

A discussion of the rather wonderful new insecticide DDT warned of danger to man and beast when the poison is applied in an oil medium. Oil may be absorbed to considerable extent through the skin. Application as a dust is less harmful. As a dust mixed with copper it is an effective insecticide on potatoes. Insects taste with their feet. Flies are paralyzed and killed by contacting a surface carrying the poison. DDT destroys tarnished plant bugs. It is only partially effective against aphids, and not of much use against Red Spider mite. These two pests are among the most troublesome in Canadian prairie orchards and home grounds. Local gardeners must look for other treatments for control.

Dr. Brierley shed much light on the widespread problem of Winter Hardiness. Much of his deductions were based on extensive tests with raspberry plants. He noted six conditions as being concerned. These are maturity; stage of cold resistance; speed of development; ultimate cold resistance; retention of cold resistance; and ability to re-harden. The tendency has been to measure hardiness in terms of plant survival. Maturity of plant tissue has proven to be less important than we thought. Varying temperatures during the dormant season are very important. Latham has withstood winter cold of -49 degrees without apparent hurt. On the other hand, this popular raspberry has suffered winter injury in some rather mild seasons. The conclusion is that there is a closs association often between warm spells of weather during the winter and injury. The ultimate cold resistance of a variety, such as -49 degrees for Latham, is of value but conditions of weather must be such that it may be able to retain this relatively great ability to withstand hard freezes or killing back is likely to result.

A meeting of the Group is planned for 1946. Dr. Longley of Minnesota is chairman; Dr. Babb of Wyoming, vice chairman; and Mr. John Walker, of Saskatchwan, secretary.

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was a severe blow, but it slowly recovered, put forth many beautiful locust-like leaves, but did not increase in height that year. After enduring the winter in perfect shape it was again eager to grow this spring, and has made good progress in spite of being part way covered with earth and boards made necessary by building operations on the place.

The Pagoda-tree looks very much like a locust in leaf and flower and should make one of our most beautiful trees if they can be successfully grown over the state. The promising start of my tree may encourage others to try it, and we would appreciate hearing of other trials of this tree, as well as news of future progress.

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plemented the food plants of the ancient world and have added new sources of mineral elements in the enlarged food supply. Food drawn from a wider area of different soils normally supplies a greater variety of minerals with better nutritional value. The increase in population may be ascribed in large measure to decline in death rates brought on by better nutrition in a great variety of foods and minerals that make for better health and vigor of people."