

FOR FARMERS, STOCK BREEDERS AND GARDENERS

Fragrance Adds Charm To Garden Picture

MANY SWEET SCENTED FLOWERS MAY BE GROWN FROM SEED THE FIRST YEAR. IMPROVED SUBJECTS HAVE FINE APPEARANCE.

Fragrance in gardens is a charming attribute, we often talk about, but too seldom find. Just why this should be true is one of those mysteries of current fashion, which is hard to explain. We find the modern gardener in a frenzied effort to create the perfect color setting, and in his haste forgetting to include



Nicotiana glauca. One of the Best Fragrant Annuals.

these sweet-scented subjects which give such a delightful perfume to summer evenings.

Some of this neglect may be due to the homely dress of some of the

SOYBEANS

(Experimental Farms Note)

The soybean is adapted to a rather wide range of climate. In general, the climatic requirements are about the same as those of corn. The soybean plant or seedling in the early spring has proven less sensitive to frost than corn, thus permitting earlier planting than corn, and allowing a longer period from planting to maturing.

Soybeans being a legume have the ability to fix nitrogen in the soil, and are ensiled and fed as silage. However, since there are other heavier yielding legumes that can be grown more easily, it does not seem likely that soybeans will become important as a forage feed here.

Seed production appears to be the greatest and most economical method of employing this crop. The seed having a high protein content can be fed to good advantage in proper proportions. Soybean flour is also used as human food, in proportions of 1-4 bean flour to 3-4 wheat flour.

Considerable attention has been directed to the production of soybean seed for oil extraction, for commercial use. This outlet is very limited and is controlled entirely by the price paid for crude soybean oil in bulk that is imported in large quantities from Manchuria and laid down in Winnipeg around \$5.75 per 100 pounds.

Approximately nine bushels of seed are required to produce 100 pounds of oil. The cake after the oil has been extracted competes in the market against meat meal, oil and tankage. With the Prairie's variable climate it does not appear that this commercial aspect will become very important.

In the three years preceding 1935, drought and blister beetles did not permit seed formation on plots at the Morden Experimental Station. The blister beetles have a great fondness for the flowering parts.

In the 1935 test at Morden the variety yields were:

- Manitoba 24.5 bushels per acre.
- Manitoba 23.7 bushels per acre.
- Manitoba 22.7 bushels per acre.
- Wisconsin Black 19 bushels per acre.

No increase was secured in the inoculated seed over non-inoculated seed. Fertilizer seeded at the rate of 35 pounds Ammonium phosphate per acre did not increase yields.

Best results were secured when seeding was arranged to permit inter-tillage between rows.

If you have a vacant lot next door, or other space nearby, grow a vegetable garden. A plot 30 x 50 feet will provide most medium sized families with all the fresh vegetables they can eat, with plenty left over for canning.

An Essay Competition on Registered Seed

Sponsored by the Sub-committee on Education of the Canadian Seed Growers Association

Director: W. H. McGregor, Lot 16, Prince Edward Island.

RULES

1. Subject, "The Registered Seed Crops for My Home District."
2. Length, not to exceed one thousand words.
3. Open to all residents of Prince Edward Island and Nova Scotia under 21 years of age April 1st, 1936.
4. Closing date, April 1st, 1936. All essays to be in the hands of the committee not later than that day.
5. Judging of essays, ties, disputes and all other details will be decided by the committee. Their decision shall be final.
6. Essays are to be written on one side of the paper and contestant's name, address and age should appear clearly on each sheet.
7. Mail all essays to the Department of Agriculture, Charlottetown.

Prizes to be awarded in each Province: 1st, \$7.00; 2nd, \$6.00; 3rd, \$5.00; 4th, \$4.00; 5th, \$3.00; 6th, \$2.00; and seven prizes of \$1.00 each.

Championship for best essay submitted \$10.00. Reserve, \$5.00.

GRAFTING FRUIT TREES

(Experimental Farms Note)

Grafting is done to secure fruit similar to that produced on the tree from which the grafting wood is taken. One-year-old wood is used for scions. The growth habit above a graft does not influence the growth below, and vice versa, nor is the fruit changed because of the variety grafted into. Many varieties may be grown true to kind on the same tree. Because this is possible the carrying over of trees from one variety to another is extensively practised by apple growers.

Growth takes place between the wood and the bark, in a layer called the cambium. The important thing in grafting is to have the cambium layers united. Because new layers of bark are made each year, it is obvious that the bark on an old branch is thicker than that of a year-old branch, and to place the outer edges of the bark in line would not bring the cambium layers together and growth would not result. Judgment and care when doing the grafting are of the utmost importance in order to effect a proper union.

The wood in which the scion is to be placed may be several inches in diameter, or only grafted by cutting off the stem six inches above a lower branch. This stub is split through the centre and spread apart for inserting the wedge-shaped scions, one at each side. This is called cleft-grafting. These scions are firmly held in place by the pressure of the split wood. The parts of the injured wood are covered with grafting wax to keep out air and water, and prevent drying out of the wood, thus insuring a proper growth. Large branches not readily cleft-grafted are grafted along the edge of the bark, placing the scions 2 to 3 inches apart. Branches too small for cleft grafting are usually side-grafted.

Below the stub to be grafted a branch should be left to insure sap circulation and growth in the branch. If the scions grow, these branches that were left are removed the following year, in part at least.

It is not advisable to remove more than one-third or one-half of the top of a tree the first year. By a judicious selection of branches evenly spaced around the tree on the main branches, the tree may be grafted over at one time.

Grafting should be done before the buds start to swell, usually from the first of March to the middle of May. A good wax is made of 5 pounds of rosin, 1 pound of bees-wax and 1 pint of raw linseed oil melted together. This is poured in water and when cool enough is worked by pulling until light yellow in colour. This is later made pliable by the use of slight heating in the sun, or by the hands, using a little soap to prevent sticking to the hands. Information on grafting and varieties to use is available at the Dominion Experimental Station, Kentville, N. S., or other similar Stations.

is grown the soil type, and moist conditions, says Dr. L. E. Kirk, Dominion Agronomist. Broadly speaking, crested wheat grass is well adapted to the brown soil zones, while brome grass and slender wheat grass are better adapted to the dark brown and black soil areas.

Crested wheat grass has been grown in a small way in western Canada during the last few years, but only now is it coming into general use. While the seed is still comparatively expensive, its production is being increased very rapidly, about 300,000 pounds having been produced in 1935. Crested wheat grass promises to provide a much needed perennial hay and pasture crop for the semi-arid sections of the West. At the University of Saskatchewan at Saskatoon, crested wheat grass has yielded at least as much as brome or slender wheat grass over a six-year period, and in the very dry season of 1931 it produced twice as much as either of these. It is high in feeding value, withstands grazing well, does not become root-bound, provides feed in the early and late parts of the season, and produces seed abundantly.

Probably the most satisfactory hay and pasture crop for the Park and adjacent areas is a mixture of Brome grass and alfalfa. This mixture produces a superior quality of hay, and the yield is likely to be greater than either crop by itself. Brome grass and alfalfa is highly recommended for all parts of western Canada where the alfalfa crop grows successfully.

Without the sturdy border is likely to be a helter-skelter arrangement with little sequence in height, color or season of bloom. It is possible to get data on the way flowers grow before beginning operations. It is found for the most part in seed catalogs, and usually this information about local conditions and what will grow best in the community. When the choice of flowers is made, a scale plan on paper should be drawn and each subject located on it according to its height and color.

Most perennials have a shorter blooming period than annuals. The real skill in arranging perennials is in assembling combinations that will give a consecutive show through the season without leaving wide bare stretches at any time. Know the habits of the plants; the habits of plants is indispensable in achieving

Nasturtium Golden Globe Is Fine Dwarf Yellow

Lovers of fragrant garden flowers will be pleased with nasturtium Golden Globe, a new addition to the Gleam family, an dthe first named color variety of the Gem type of nasturtium. It won an All-America award of merit for 1936, and will be justly popular with flower growers for years to come.

This delicately scented subject is uniformly dwarf and compact, and suggests many uses in the garden. Its deep green-yellow has a warm and mellow appearance which should make it welcome alone or in company with other colors. In the window box it has the advantage of small stature, as well as fragrance, and it is said to run true to type as the Golden Gleam.

Nasturtiums are the ideal flower for the gardener with poor soil. They will grow almost anywhere, with small amount of attention. For dry, sandy or gravelly locations they cannot be beat, although they will respond well supplied with water. It is a good idea to watch this seed where climbing or trailing types are planted. In the case of dwarfs, plant them on poor soil, if possible, as they have a tendency to run to leaves at the expense of bloom on richer soils.

One of the charming features of the nasturtium is the mingling of flowers and leaves. This effect can be imitated very easily in arrange-



Nasturtium Golden Globe.

ments for the house if you will cut both and closely follow the original stand.

They make showy beds, and the dwarf types, including Golden Globe, are good edgings. The tall ones are really sprawling in habit, but may be easily trained to climb a trellis or wall fitted with wire or lattice work by tying the vines. As they have no tendrils, they will not climb without support.

NEWSY NOTES

BY AGRICOLA

ANGLO-SAXON POETRY (2)

Practically all this old poetry is written in the same kind of verse. The lines are short and have a break or caesura in the middle; and one word at least in each half line must begin with the same letter (alliteration). There was no rhyme as we know it; rhyme was brought in by the Normans. Alliteration made a brief but glorious reappearance in the fourteenth century, in Piers Plowman, and other poems, but its revival was not lasting. It was, however, greatly and gracefully used as an artifice by later poets, as in the lines "The Swallow's Nest" by the "old filer at twilight".

The third collection of Anglo-Saxon M.S.S. was given by Bishop Leofric, Chancellor of Exeter Cathedral, where it still remains. The "Exeter Book" was not put into print till 1842. The most notable poems in it are—"Christ," a poem of three divisions, the first dealing with Advent, the second with the Ascension, and the third with Doomsday, a favorite subject of old writers. The terrors of the earth's destruction by fire, are powerfully depicted. "The story of the tortures and martyrdom of a noble Christian maiden in the reign of Galerius Maximianus. "The fates of the Apostles" is a list of the twelve with a short indication of the work and death of each. "The Phoenix," "The Whale," "The Swallow's Nest," and at least a dozen other poems are contained in the Exeter Book. There is one called "The Ruin," an elegy on a ruined city, with its fallen walls and departed glories. It is thought to refer to the city of Bath, the Aquae Solis of the Romans, and though the poem is mutilated and the meaning often uncertain, enough remains to show the passionate regret of the writer. "Wondrous is this wall-stone; broken by fate, the castles have decayed; the work of giants is crumbling. Ruins are fallen, ruinous are the towers, despoiled are the tow-

ers with their gates; frost is on their cement, broken are the roofs, cut away, fallen, undermined by age. The grasp of the earth, stout grip of the ground, holds its mighty builders, who have a hundred generations of men have died. Often this wall, grey with lichen and stained with red, unmoved under storms, has survived Kingdom after Kingdom; its lofty gate has fallen, (M.S. imperfect) here the bold in spirit bound the foundation of the wall wondrously together with their hands. Bright were the castle-dweller, many the bath-houses. . . . till fate the mighty overturned that. . . . Days of pestilence came; death swept away all the bravery of men. . . . the city-fell to ruin. The multitudes who might have built it anew lay dead on the earth. . . . The place in times past to ruin. . . . The place of light and bright with gold, adorned with splendor, proud and flushed with wine, . . . gazed on silver, on treasure, on costly gems, on this bright castle of the broad Kingdom, the baths were hot in its centre; that was spacious. . . . The "wires" in the foundations were dowels and clamps (or cramp-irons), much used by the ancient Romans to bind stonework. In the piers of a bridge over the North Tyne at "the Chesters" (Cilnurnum) the stones have been joined in this manner. The iron rods have perished, but the grooves in the stones, and in some cases the lead which fixed the ends of the rods into sockets, still are discernible.

It is pleasing to note that the municipal authorities of Bath have excavated the core containing the great public bath first made by the Romans, and re-erected the stone-work into something like its former glory. The stream, a warm mineral spring, "with its great gush springs forth hotly" still. The Anglo-Saxons called this city Ake-ri, the schilling man's mancester, the schilling man's camp, and rheumatic subjects and others sought health in its hot springs. It is interesting to read that its desertion and ruin were caused by pestilence, because I had always blamed the Teutonic invader for the catastrophe. The poem (of which the above quotation is but a fragment) almost rises to the level of the old Hebrew poetry. (Continued on 13)

A Perennial Garden From Seed

CAREFUL STUDY OF PLANT HABITS AND CHARACTERISTICS BRINGS SUCCESS.

GROWING HARDY FLOWERS AT HOME WILL SAVE THE COST OF PLANTS.

The competent perennial border is a work of art which many a gardener strives to achieve. This may be hard work or a pleasant pastime, costly or inexpensive, depending upon how he goes about it, but in any case the job needs much careful study.

Without the sturdy border is likely to be a helter-skelter arrangement with little sequence in height, color or season of bloom. It is possible to get data on the way flowers grow before beginning operations. It is found for the most part in seed catalogs, and usually this information about local conditions and what will grow best in the community. When the choice of flowers is made, a scale plan on paper should be drawn and each subject located on it according to its height and color.

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Such a Perennial Border Can Form a Part of Any Garden With a Little Thoughtful Planning.

This effect. Annuals can be used to fill in during the dull periods, and furnish color foliage.

Plants which range from a few inches to several feet in height should be fitted into the picture so that all can be seen to advantage. It is manifestly foolish to plant a tall delphinium in front of some small plant, and the general rule is a gentle graduation from the low-growing types in front to the taller ones in the background, without, however, presenting a monotonous sky-line. There must be an interesting pattern of peaks and

ANIMAL HUSBANDRY

The aim of the herdsman now in mind is to keep his breeding herd in good thrifty condition, and each year to fit a group of about fifteen calves for the show circuit. He seems to be able to fit his cattle and have them in good bloom for all the leading exhibitions held in Canada.

The cows are usually fed the following:

- 20 lbs. corn ensilage.
- 7 lbs. pulped turnips.
- 10 lbs. cut out straw.
- 2 lbs. rolled oats.

They are fed this mixture twice a day, making this quite a substantial ration. These quantities of ensilage and pulped turnips should be excellent feed for cows in milk, and the oat shops should keep their bodies in good repair.

This feed mixture has some salt added to give it an agreeable taste, and a mineral mixture is always kept in the yard, which all the cows may eat. It is composed of:

- 100 lbs. salt.
- 40 lbs. charcoal.
- 20 lbs. bone meal.

The cows are turned out every day from 11 a.m. to 1 p.m. except when it is very stormy. Hay is fed twice a day and every third day one feed of straw is substituted for that of hay, by way of a change. The hay fed is a very satisfactory mixture for cattle. The mixture of seed sown to produce it consists of 6 lbs. of alfalfa, 4 lbs. of alsike, 4 lbs. of red clover, and 4 lbs. of timothy, making 18 lbs. for the acre, which is good seeding.

The calves are fed by their mothers and milk regarded as the most desirable feed for show calves. They could not be carried over the long show circuit without this refreshing and nourishing diet. The very young calves are left in box stalls with their mothers for a while. The supply of box stalls is limited, however, and the calves have to find their way to a large loose box, where a group of them have a common feeding place, and are let out for their milk ration twice a day.

Young calves are encouraged to eat a little clover hay and some oats as soon as they will nibble at food of this kind.

When about three or four weeks old the calves are fed rolled oats. When the calves get along to about three or four months they are fed, along with milk they get, the following mixture:

- 300 lbs. rolled oats.
- 100 lbs. wheat bran.
- 20 lbs. oil cake.
- 3 lbs. salt.

This is mixed with pulped mangels and the whole is dampened with diluted molasses to give it a sweet taste. This is usually fed twice a day as well as good mixed clover hay.

Nurse cows are furnished for the show calves. It is considered that the best milk to keep them fresh, hot and soppy, is the best fresh feed can be provided for calves than fresh milk, and that in abundance.

The good calves are thought to be well worth their feed, even when they dine luxuriously on warm milk, and no feed will supply the bone and muscle so necessary in beef cattle, and keep them fresh and soppy, in the same satisfactory manner that whole milk will.

A somewhat stranger meal mixture is fed the yearlings:

- 100 lbs. rolled oats.
- 100 lbs. rolled barley.
- 50 lbs. wheat bran.
- 15 lbs. oil cake.
- 2 lbs. salt.
- 1 lb. molasses.

The molasses is diluted and the mixture dampened with it.

Like many other feeders, this herdsman favours rolled barley for finishing his show cattle. One difficulty, however, is that during the show circuit no rolled feed is available, so it is necessary to stop the rolled feed for a few weeks before leaving home, so as not to have a feed change coincide with

Good fresh hay is fed on the show circuit and when the herdsman can obtain it, prairie hay is highly prized, for there are healthful conditioning qualities in good prairie hay that only those who have fed it fully realize.

These show cattle, which, by the way are Shorthorns, while at the exhibitions are exercised every morning before being fed. This morning exercise keeps the cattle alert on their feet. He is not afraid of walking the flesh of them, but regards it as imperative that all show animals will be able to parade in good form before the judges.

The calves that are not selected for exhibition run with their mothers in the pasture. Many of them are wrong age for showing, but are some of the best cattle in the herd.

A creep is built among the trees, in the wooded part of the pasture, where these calves are fed rolled oats and a little oil cake. A few old sacks are hung around this creep so the calves, by walking under these flapping pieces of canvas, can brush the flies off themselves.

Heifers for the breeding herd, that are not fitted for show are wintered well, so as to grow them out and build up the strength required by breeding cows. The aim is not to have overgrown females but rather to produce compact, deep-ribbed cows of good shorthorn type.

The heifers are wintered on mixed clover hay, oats, straw, silage and a little meal. Cut out straw is mixed with the ensilage and a little meal.

The oat straw fed in this way

Formal Design Good for Small Home Plantings

ITS UNIFORMITY HARMONIZES BEST WHERE BUILDINGS AND STREETS ARE NEARBY, AND STRAIGHT LINES GIVE APPEARANCE OF SPACIOUSNESS.

Perhaps most gardening beginners, asked whether they prefer a formal or a naturalistic planting, will favor the natural. To them the charm of gardening is associated with enjoyment of the country and nature landscape beauty.

Even in a small city or suburban home grounds, they may be inclined to attempt a naturalistic planting, hoping to reproduce in a limited area, shut in by houses, streets and fences, a picture of untrammeled nature. And here they may encounter difficulty.

It is a principle of design that a garden must harmonize with its surroundings; and it is obviously difficult to create a naturalistic picture in a location where there are so many buildings, barriers, and artificial objects intruding upon the background.

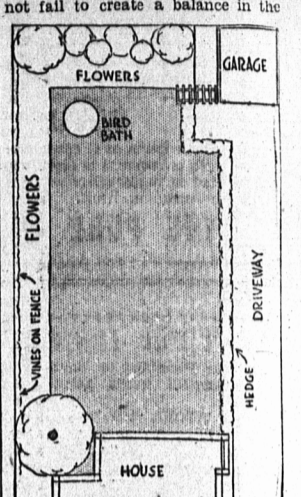
For this reason, formal layouts should always be considered for small home grounds; and in most cases they are likely to be most satisfactory. A formal layout does not require that flowers shall be arranged in carpet beds, or trimmed out of the natural grace and beauty. Formal gardens in which flowers are arranged informally are preferred these days.

The design is concerned with the paths, beds and borders; and with the accents and focal points. It should be related to the house design. The entrance to the house to the garden is important and important windows should look out upon attractive vistas.

Points which must always be considered in aspect; that is, the relation of each part of the garden to the sunshine which falls upon it. A design which provides for flower beds in the deep shade, and a terrace in the full sun, will hardly

satisfy. Symmetrical layouts will often do this, and there should be no hesitancy in departing from symmetry even in a formal garden, in order to give the flowers the full sun and provide for one border of generous size rather than two skimpy ones.

But in discarding symmetry, do not fail to create a balance in the



A Good Example of Simple Formal Treatment on a Small Lot.

garden picture. The rules for garden design are the same as for other forms of pictorial composition. A simple design, harmonizing with its surroundings, with one principal focal point, and two or more secondary accents, with the flowers growing in the sun and a place where visitors can sit in comfort in the shade—this will provide a framework which you may fill in with formal beauty to your heart's content.

loading the cattle for a long and somewhat uncomfortable ride on the railway. The boiled feed ration is made up in this way:

- 50 lbs. rolled oats.
- 50 lbs. rolled barley (dry weight).
- 50 lbs. rolled clover (dry weight).
- 50 lbs. rolled oats.
- 50 lbs. bran.
- 30 lbs. oil cake.
- 2 lbs. salt.
- 1 lb. molasses.

The molasses is poured on the feed when it is boiling and so becomes thoroughly mixed. This is a combination of feed that can be used in very substantial quantities, particularly when roots or ensilage, or both, are being fed. To full-grown animals as much as 20 lbs. a day is given, the water used in boiling will almost double that weight. If this mixture is wet, ensilage, pulped turnips, or cut hay would be added to take up the moisture.

The ration is graded in amount according to the age of the animal and their capacities for feed. Good mixed hay is fed twice a day.

When the boiled feed has to be abandoned because the cattle are going on the show circuit, a new mixture takes its place:

- 125 lbs. rolled oats.
- 30 lbs. rolled barley.
- 20 lbs. cracked corn.
- 20 lbs. wheat bran.
- 15 lbs. oil cake.
- 10 lbs. cut alfalfa.
- 10 lbs. dry beet pulp (soaked).

The beet pulp is soaked in water before being added to the grain. Beet pulp is very appetizing feed, has a good deal of succulence, and in a dry state is easily transported with the cattle. To the above feed is added salt and charcoal, both of which are necessary to young growing cattle on a trip. The above quantities would make a day's ration for fifteen heads of show cattle, fed in two feeds, giving them a little over an average of 15 lbs. (dry weight) of meal and pulp per day.

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