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THE HOME VEGETABLE GARDEN AND A PATRIOTIC GARDENING COMPETITION

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THERE is practically no part of Canada in which there are settlements where at least some kinds of vegetables cannot be grown and the great variety which it is possible to grow successfully even in the coldest districts is a surprise to many.

There is a growing demand for fresh well grown vegetables, and a call for them in greater variety, but in many parts of Canada the people do not yet get a plentiful and varied supply.

If more vegetables were eaten there would not be the same need for the more expensive kinds of food, and if the vegetables were grown at home the saving would amount to a considerable sum at the end of the year.

While this bulletin is written mainly for the use of amateurs, it may be that the market gardener will find some information that will be of use to him.

THE HOME GARDEN.

While it is not possible for some persons to grow their own vegetables there is a large proportion of the population who could easily raise an abundance of these palatable, delicious and nutritious food products if they cared to do so.

In the country there is plenty of room for a good vegetable garden and even in cities, towns and villages there is usually a sufficient area on the lot at the back of the house to grow enough vegetables to supply a large family during the summer months and to give away some to other people.

Situation of the Garden:—In cities and towns there is, of course, no choice in regard to the situation of the garden as one has usually no alternative, but the back of a lot. If large trees surround this lot or are even along one side of it, gardening will be more difficult, and much less satisfactory than where there are none. Trees exhaust the soil of moisture and plant food and their shade often affects the crop adversely. Even where there are trees, however, fair success may be obtained with short season crops such as lettuce, radish, and spinach which can be grown early in the spring or in the autumn when the growth of the trees is not very active. In the country the garden should be as near the house as possible and warm well drained soil should be chosen if there is such. It is usually the women of the household who look after the garden in the country, hence things should be made as convenient for them as possible. How-

ever, it is better to cultivate a few rows of garden vegetables in the fields with the root crops than to have no garden at all.

Preparation of the Soil:—To get the best results the soil should be brought into good tilth. When beginning gardening in cities and towns it is often found that many difficulties have to be overcome before the soil is in really good condition. Old cans, stones, bricks, pieces of wood, broken toys and many other things must be removed or buried so deep that they will not be troublesome. Then it often happens that the subsoil from the cellar of the house has been thrown over the yard in order to level the ground. This is sometimes of great depth. This subsoil is usually either a stiff clay or sand. Clay, while it will give more hard work, is usually a much better material to start with than sand. If there is much coal ashes in the yard most of them should be removed altogether or buried in one corner of the yard. A little ashes mixed with the clay will help to make it more friable or more open, but there is little plant food in coal ashes and there should be a minimum of them in good garden soil. A mixture of sand and clay will help to make the soil of a better consistency than is either one of these alone. An application of lime to clay at the rate of about two tons per acre or about 100 pounds to a garden 25 x 40 feet in size, or even half that quantity and thoroughly mixed with the clay, will help in breaking it up, but the most important thing of all is the manure, preferably rotted manure if it can be obtained. Fifty tons per acre is none too heavy a dressing. When spread on the ground before digging in it can be from three to four inches thick without there being too much. This should be well worked through the upper foot of ground whether it be good soil, clay, or sand. If the manure is strawy it should be well dug in so that the straw will not be pulled out when the soil is raked. With a heavy annual

application of manure even the poorest soils can be made to give good returns providing there is sufficient moisture in the soil which in many cities and towns can be applied artificially. Where no water is available very strawy manure applied to light soils is apt to make them too loose and they dry out easily and seed does not germinate well, hence well rotted manure is much better for such soils if it is available. The rolling of light soils where strawy manure has been used will be found useful in bringing the moisture to the surface and hastening the rotting of the straw. The great aim should be to eventually get the soil into such a condition that it will neither bake nor become hard in a dry time nor dry out readily and both of these conditions will be brought about by the liberal use of manure which adds plant food in an easily available form and helps to form humus which is so essential to a good physical condition of the soil. Clay soils should not be dug when they are very wet as they will bake badly, but by waiting until they are fairly dry they can be worked much better.

A spade, a hoe, a garden rake, and a digging fork are the four chief tools needed in gardening. Narrow hoes and rakes are best for small gardens, or well made children's tools but with long handles. In stiff clays it may be found necessary to use the hoe after the soil has been dug in order to break it down, so that the rake can be used advantageously. The rake is now used to level the soil and to pulverize it still more. The surface soil should be made as level smooth, and as fine as possible. If the soil for two or three inches down is in good condition a quick germination of the seed will usually be assured.

Planning the Garden:—It is desirable to plan the garden some time in advance in order to be able to lay it out to the best advantage. It should be planned to provide for

a good assortment of vegetables, for a regular and continuous supply, and for the greatest quantity from the land available. The appearance of the garden should also receive some consideration. Certain kinds of vegetables only take a comparatively short time in which to mature; some kinds succeed best in the cooler parts of the season, either in the spring or late summer; others need the hottest weather to reach their greatest perfection. While others require both the cool weather of spring and the warm weather of summer to complete their growth. The seed of some kinds may be sown as soon as the ground is dry enough in the spring, while the seed of others should not be sown until danger of frost is past; and in order to get the best results the seed of others must be started in a hot-bed, greenhouse, or ordinary house and the plants well advanced before they are set outside. Warm soil is just as essential to the success of some vegetables as freedom from frost and even if protected from frost they will not do well unless the ground is warm. Some vegetables, such, for instance as, celery, require considerably more moisture than others.

Seed to be Sown:—

(early in spring), beets, carrots, lettuce, onions, parsnips, peas, radishes, kohlrabi, garden cress, salsify, spinach, parsley, and leeks.

Seed sown:—

(in hot-beds, but plants will stand some frost), cabbage, cauliflower, celery.

Seed to be sown:—

(after danger of frost is over, unless protected), beans, corn, cucumbers, melons, potatoes and squash. Seed of late cabbage is not sown until May but the plants will endure frost and seeds of Swede turnips should be sown late, though turnips will stand frost.

Seed sown:—

(in hot-beds, but plants will not stand frost), melons, egg-plants, peppers.

Some plants require a much longer season than others, hence in planning the garden this should be taken into consideration.

As previously stated, a small vegetable garden should be arranged with a view to having a good assortment and a continuous supply. It should be planned so that vegetables having a long growing season, such as beets, carrots, parsnips and onions, would be grown at one side or end of the garden so that there will be no rows scattered here and there to make the garden look patchy during late summer. A small bed of asparagus and some rhubarb roots are desirable if the garden is to be permanent and these should be put about a foot and a half from one of the boundaries so that they will not interfere with the vegetables planted every year.

Vegetables can be planted much closer in a garden than under field culture where most of the work is done with horses, hence a foot or fifteen inches is far enough apart for the rows of a good many kinds.

Following is a suggested arrangement of a small garden about 33 x 30 feet, but many other plans could be made. No provision is made for paths but if a narrow path is found necessary it can be put in where it seems most convenient. The seeds of the kinds to be sown earliest are sown in one part of the garden and the later sowings and plantings in the other so that the ground can be newly worked if necessary for the later sowings. For best results, the surface soil should be kept loose and free of weeds, by means of the rake and hoe, during the summer months.

PL. N OF A HOME VEGETABLE GARDEN (33 x 30 Feet).

Row	Kind of Vegetable.	Seed required for 30 foot row.	Distance apart of rows.	Depth to sow seed.	Distance to thin plants.	Time required to develop for use. Based on results at Ottawa.	Yield per 30 foot row.
	<i>Sown or planted early.</i>						
1.	Parsnip.....	1 pkt.	18 ins. from boundary.	½ inch.	2 ins. apart.	107 to 112 days.	60 to 80 lb.
2.	Beets.....	1 oz.	12 ins. from Row 1.	½ inch.	2 ins. apart, or thinned as ready.	53 to 70 days.	50 to 60 lb.
3.	Carrots.....	1 pkt.	12 ins. from Row 2.	½ inch.	1½ ins. apart or thinned as ready.	64 to 76 days.	65 to 75 lb.
4.	Onions.....	¾ oz.	12 ins. from Row 3.	½ inch.	1 in.	53 to 120 days.	40 to 60 lb.
5.	Onion Sets.....	1½ lb.	12 ins. from Row 4.	2 ins.	Plant 2 ins. apart.	56 days.	40 to 60 lb.
6.	Early Cabbage and Cauliflower.....	12 plants of each.	15 ins. from Row 5.	Roots well covered.	Plant 15 ins. apart.	102 to 121 days.	3 to 5 lb. per head.
7.	Spinac, Mustard and Cress.	1 pkt. of each.	15 ins. from Row 6.	¼ inch	4 to 6 ins. apart.	60 days.	Weight varies much.
8.	Lettuce and Radish, followed by Squash and Melons, (3 hills of each, 5 feet apart).....	1 pkt. of each.	12 ins. from Row 7.	¼ and ½ inch.	Lettuce 6 ins. Radish, thinned as ready.	50 to 70 days. 21 to 36 days. Muskmelons, 110 to 144 days. Watermelons, 96 to 161 days. Squash, 66 to 104 days. 49 to 51 days.	Weight varies much.
9.	Dwarf Early Pea.....	4 oz.	12 ins. from Row 8	2 ins.	1 in. apart.	52 to 56 days.	6 to 7 qts. in pod.
10.	Second Early Pea.....	4 oz.	18 ins. from Row 9.	2 ins.	1 in. apart.	52 to 56 days.	"
11.	Late Pea (semi-dwarf).....	4 oz.	18 ins. from Row 10.	2 ins.	1 in. apart.	63 to 71 days.	6 to 9 qts. in pod.
12.	Lettuce and Radish (second sowing of this. Might be a path).....	1 pkt. of each	18 ins. from Row 11.	¼ to ½ inch.	As before for these.	As before.	Weight varies much.
	<i>Sown or planted after danger of frost is over.</i>						
13.	Early Beans, ½; Late Beans, ½.....	2 oz. of each.	18 ins. from Row 12.	2 ins.	Plant 2 ins. apart.	(Early), 47 to 53 days. (Late), 66 to 76 days.	10 to 20 qts.
14.	Late Cabbage and Cauliflower.....	10 plants of each.	18 ins. from Row 13.	Roots well covered.	18 ins. apart.	107 to 123 days.	4 to 6 lbs. per head
15.	Celery (start plants early).....	1 pkt.	24 ins. from Row 14.	¼ inch.	Plant 5 ins. apart.	5 months.	12 to 19 ozs. per head.
16.	Swede Turnips, sow June 15 to July 1.....	1 pkt.	24 ins. from Row 15.	½ inch.	Thin to 5 to 7 ins. apart.	60 to 90 days.	60 to 80 lbs.
17.	Peppers and Egg Plant, or third sowing of lettuce and radish or more late cauliflower, or early sowing of parsley.....	1 pkt. of each.	18 ins. from Row 16.	Roots well covered.	Plants 15 ins. apart.	Peppers, 132 to 178 days. Egg Plants, 150 to 162 days.	Yield varies much.
18.	Tomatoes, trained to single stems and tied to 5 foot stakes or wires.....	1 pkt. or 15 plants.	24 ins. from Row 17.	Roots well covered.	Plants 2 feet apart.	108 to 179 days, depending on when started, and season.	100 to 150 lb.
19.	Early Corn, followed by late sowing of lettuce and radish.....	1 pkt.	36 ins. from Row 18.	2 ins.	Hills 3 feet apart, thin to 5 kernels per hill.	66 to 94 days.	40 to 50 ears.
20.	Later corn, about 2 feet from boundary.....	1 pkt.	36 ins. from Row 19.	2 ins.	"	77 to 112 days.	

(Estimated cost of seeds and plants, \$2.30; estimated value of crop, \$25.00, or more.

In addition to these, Cucumbers would be grown over wire netting tacked to one of the fences.

Melons, Cucumbers and Squash should be thinned from two to six plants per hill.

LIST OF BEST VEGETABLES

Asparagus:—Palmetto is proving a better variety than Conover Colossal for general planting, as it is not so subject to the disease known as Asparagus Rust. Argenteuil is also a good variety.

Beans:—Round Pod Kidney Wax and Wardwell Kidney Wax are two of the best yellow-podded or wax bush beans, and are both early. Stringless Green Pod, Early Red Valentine and Early Refugee are three good, green-podded varieties. Refugee or Thousand to One is one of the best later sorts. Among Lima beans, the dwarf or bush forms are the most satisfactory.

Beets:—Meteor, Early Model, Crosby, Egyptian and Eclipse are some of the best.

Borecole or Kale:—Dwarf Green Curled Scotch.

Broccoli:—White Cape.

Brussels Sprouts:—Improved Dwarf. The dwarf varieties have been found more satisfactory than the tall-growing ones.

Cabbage:—Early Jersey Wakefield, Copenhagen Market (early), Succession (medium), Danish Ballhead and Drumhead Savoy (late), Red Dutch (red) is a good list. Houser has been found freer from disease than most. For extra early use, Paris Market is desirable, being nearly a week earlier than Early Jersey Wakefield.

Cauliflower:—Early Dwarf Erfurt and Early Snowball.

Carrots:—Chantenay is one of the best, but if a good extra early sort is required, the Early Scarlet Horn can be planted with advantage. It is a small variety.

Celery:—Golden Self-Blanching (Paris Golden Yellow) (early), French Success, Noll Magnificent, Perfection Heartwell, Triumph, Winter Queen are all good late varieties. London Red is a good red one. White Plume is desirable for the prairies.

Corn:—Malakoff, Peep O'Day (extra early), Early Fordhook, Early Cory (early), Crosby Early, Golden Bantam, Metropolitan (second early) Perry Hybrid, Early Evergreen and Black Mexican (medium) Stowell Evergreen, Country Gentleman (late). In planting the Country Gentleman should not be omitted, as it lengthens the season very considerably and is of fine quality. Golden Bantam is the best second early for home use. It is of excellent quality.

For the prairie provinces and other parts of Canada where the nights are cool, Squaw and Extra Early Adams, though not sweet varieties, develop better than others.

Cucumbers:—Peerless White Spine or White Spine, Davis Perfect, Cool and Crisp, and Giant Pera are some of the most satisfactory. Boston Pickling and Chicago Pickling are good pickling sorts.

Egg Plant:—New York Improved and Long Double Purple succeed best.

Lettuce:—Grand Rapids, Black-seeded Simpson (early curled), Iceberg, New York, Giant Crystal Head, Crisp as Ice, and Improved Hanson (curled cabbage), Improved Salamander (uncurled cabbage). Grand Rapids is the best variety for forcing. Iceberg remains headed longest in summer, and should always be planted. Trianon and Paris are two of the best Cos varieties.

Melons, Musk:—Long Island Beauty and Hackensack are two of the earliest and best of the Nutmeg type. Montreal is later, but of larger size and finer flavour. Emerald Gem and Paul Rose are two of the best yellow fleshed melons.

Melons, Water:—Cole Early, Salzer Earliest, Ice Cream, Phinney Early are some of the most reliable.

Onions:—Yellow Globe Danvers and Large Red Wethersfield are two of the best and most reliable. Australian Brown is also good. Prize

Taker is a good variety for transplanting.

Parsley:—Double Curled is as good as any.

Peppers:—Cayenne, Chili, Cardinal. The Early Neapolitan is one of the earliest of the large peppers.

Peas:—Gregory Surprise (extra early), Thos. Laxton, Gradus, American Wonder, Nott Excelsior, Sutton Early Giant (early), Sutton Excelsior, Premium Gem (second early), McLean Advancer, Heroine and Stratagem (medium to late). The foregoing varieties, not being tall growers, may be grown without supports. Quite Content, Telephone and Champion of England are three of the best tall-growing sorts.

Potatoes:—Early: Rochester Rose, Early Ohio (pink), Irish Cobbler, Eureka Extra Early, Early Petoskey, New Early Standard (white), Bovee, (pink and white). Main crop: Carman No. 1, Gold Coin, and Green Mountain (white).

Radishes:—Early: Scarlet White-

tipped Turnip, Rosy Gem, French Breakfast, Red Rocket (red), Icele (white) Late: White Strasburg, Long White Vienna. Winter: Long Black Spanish, Chinese Rose-coloured, New White Chinese or Celestial.

Rhubarb:—Linnæus, Victoria.

Salsify:—Long White, Sandwich Islands.

Spinach:—Victoria, Thickleaved.

Squash:—White Bush Scalloped, Long White Bush, Summer Crook Neck. Late: Delicious, Hubbard.

Tomatoes:—Early: Sparks Earliana, Chalks Early Jewel, Bonny Best, Dominion Day (scarlet). Medium: Matchless, Trophy (scarlet), Livingston Globe, Plentiful (purplish pink).

Turnips:—Early: Extra Early Milan, Red Top Strap Leaf. Early turnips are usually bitter to the taste and not desirable.

Swedes:—Champion Purple Top, Skirving Improved.

A PATRIOTIC VEGETABLE GARDENING COMPETITION

The following description of "A Patriotic Vegetable Gardening Competition" is presented as a suggestion to Municipalities, Horticultural Societies, Fair Boards and other organizations, for the planning of such competitions.

TO THE CITIZENS OF

A COMPETITION PLANNED TO AID THE EMPIRE AND TO HELP YOU

The British Empire will need all the food that can be made available in 1915. Everyone in cities and towns with vacant land can produce some food if he will. By growing vegetables for your household you will release food for someone else, that would have been sold to you. By growing vegetables for your own use, you will also save most of the money that you would otherwise have paid for them, which you can give to the many needy war funds should you care to do so. Vegetables fresh from the garden are much more appetizing than those which have been gathered for some time.

You will, if you grow your own, find that you will eat more vegetables than you have been accustomed to, and will have less desire for the more expensive kinds of food.

RULES OF THE COMPETITION

The rules governing the competition have been made as simple as possible, so that everyone whether he knows little or much about gardening has a chance of winning a prize.

It is presumed that many will enter who never gardened before and whose yards are at present in a very

rough condition, and this has been taken into consideration when the rules were made.

Size of Gardens:—Gardens entered for the competition are to be 1000 square feet in area. In other words, they should be 50 x 20, 40 x 25, 30 x 33½, or any other shape that will give the required area. Potatoes are excluded from the general garden but may be grown alongside, and, if possible a special prize or prizes will be given based on the same points as for the general garden. There is no restriction as to size of plot in the case of potatoes.

Times of Judging:—The gardens will be visited six times by the judge, or judges, once before any work is done and then once a month in May, June, July, August and September.

Score of Points:—Each month, after the first visit, there will be a possible maximum of the following points, a total of 500 points for the season. At the first visit the points for difficulties (to be) overcome will be the only ones considered, full notes being taken on the condition of the land. A score will be made at the second visit from the notes taken at the first and from the improvements that have been made.

Quantity and Value of Vegetables	20 points
Quality of Vegetables	20 "
Assortment of Vegetables	20 "
Difficulties overcome	20 "
Cleanness and neatness	20 "
	100 "

Quantity and Value:—The quantity of vegetables grown will be decided both from the observations made by the judge, and by a signed statement from the householder showing how much of each kind of vege-

table was gathered and the approximate value of the same.

Quality:—By quality is meant condition of development and uniformity, and any other factor that affects the value of the product, except that of palatability, for the judge will not be expected to test the eating quality of the vegetables.

Assortment:—By assortment is meant the number of kinds of vegetables grown. There should be a fair proportion of each kind.

Difficulties overcome:—The judge will take into consideration the difficulties which each competitor faces when beginning his garden operations. If one competitor has many difficulties to overcome he will receive a high score under this head, but another competitor with fewer difficulties will get compensation in other ways.

Cleanness and Order:—Freedom from weeds, insects, and diseases, good cultivation and straight lines come under this head, or in other words, the general appearance of the garden will be considered.

HOW TO GET INFORMATION IN REGARD TO VEGETABLE GARDENING

The judge, or judges, will furnish pamphlets free giving information on the best varieties of vegetables to plant, the general preparation of the soil, a suggested arrangement of vegetables in the garden (which need not necessarily be followed), directions for controlling injurious insects and diseases, and cultural directions for the different kinds of vegetables. It is expected also that information not covered by the pamphlets will be cheerfully supplied by the committee.

PRIZES: 1st, 2nd, 3rd, or more.