

**CIHM  
Microfiche  
Series  
(Monographs)**

**ICMH  
Collection de  
microfiches  
(monographies)**



**Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques**

**© 1996**

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming are checked below.

- ☐ Coloured covers / Couverture de couleur
- ☐ Covers damaged / Couverture endommagée
- ☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- ☐ Cover title missing / Le titre de couverture manque
- ☐ Coloured maps / Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- ☒ Bound with other material / Relié avec d'autres documents
- ☐ Only edition available / Seule édition disponible
- ☒ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.
- ☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from filming / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- ☐ Additional comments / Commentaires supplémentaires:

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- ☐ Coloured pages / Pages de couleur
- ☐ Pages damaged / Pages endommagées
- ☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- ☒ Pages discoloured, stained or foxed / Pages décolorées, tachetées ou piquées
- ☐ Pages detached / Pages détachées
- ☒ Showthrough / Transparence
- ☐ Quality of print varies / Qualité inégale de l'impression
- ☐ Includes supplementary material / Comprend du matériel supplémentaire
- ☐ Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image / Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.
- ☐ Opposing pages with varying colouration or discolourations are filmed twice to ensure the best possible image / Les pages s'opposant ayant des colorations variables ou des décolorations sont filmées deux fois afin d'obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below /  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10x		14x		18x		22x		26x		30x	
	12x		16x		20x		24x		28x		32x

The copy filmed here has been reproduced thanks to the generosity of:

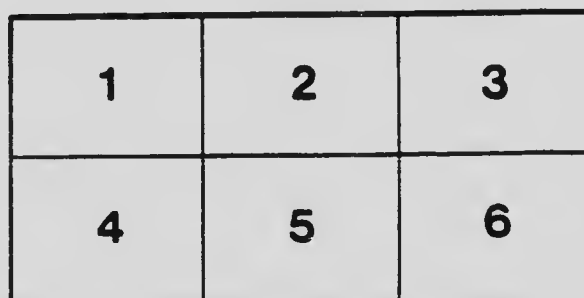
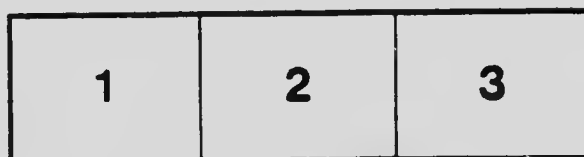
National Library of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol ➡ (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

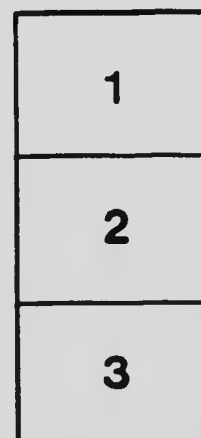
Bibliothèque nationale du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

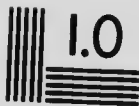
Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole ➡ signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.



# MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



1.0



1.1



1.25



1.4



1.6



1.8



2.0



2.2



2.5



2.8



3.2



3.6



4.0



APPLIED IMAGE Inc

1653 East Main Street  
Rochester, New York 14609 USA  
(716) 482 - 0300 - Phone  
(716) 288 - 5989 - Fax

MANITOBA AGRICULTURAL COLLEGE

---

# Beautifying the Farm Home



F. W. BRODRICK, B.S.A.,  
Professor of Horticulture and Forestry,  
Manitoba Agricultural College,  
Winnipeg, Manitoba.

## Beautifying the Farm Home

---

ONE of the most important portions of any farm, and particularly a Western farm, is the farmstead or farm home. This, obviously, should be the most attractive place on the farm, for it is there that the greatest portion of the life about the farm is spent. Success in making farm life more attractive depends largely on success in making the farmstead or farm home surroundings more attractive.

It has been said that the building of a nation can be effected only by the development of comfortable and attractive homes. It is within the home, and influenced by the home environment, that the life of the nation is moulded and developed. A great nation is essentially a nation of homes.

We are creatures of environment and are influenced to a marked degree by the surroundings in which we are placed. This is particularly true of child life, which is influenced to a great extent by its environment. Impressions gained at home or in the school during youth are lasting, and greatly affect the development in after life. A writer who has studied child-life, in writing on this subject, has said, "If children are daily surrounded by those influences that elevate them, that make them clean and well ordered, that make them love pictures and flowers and proper decoration, they at last reach the degree of culture when nothing else will please them. When they grow up and have homes of their own, they must have them clean, neat, brightened by pictures, and fringed with shade trees and flowers; they have been brought up to be happy in no other environment." Under conditions of this kind, the effects of attractive home surroundings are permanent and lasting, and productive of much good.

L. H. Bailey, late Dean of Agriculture at Cornell University, who has done much to stimulate a love for country life and rural life conditions, has written and said much in support of the improvement of surroundings around the home and the school. In speaking on this subject he has said, "The surroundings are more potent than we think, and they are usually neglected. It is probable that the antipathy to farm life is formed before the child is able to reason on the subject. Attractive surroundings will do more than a profitable wheat crop to keep the child on the farm." It is really pathetic that around so many of our Western farm homes there is so little that tends to make the home attractive to the younger people.

Realizing, then, the importance of the improvement of the farm surroundings, it is necessary to consider the many ways in which that improvement can be effected.

### **Location and Development of the Farmstead**

**Location.**—The location of the farmstead or farm home is a matter worthy of careful consideration. Unfortunately, careful thought is too frequently neglected, and, as a result, many farmers find, when too late, that buildings are poorly located, from which much inconvenience results.

In the development of more attractive farm surroundings, the best results are obtained if the work is done according to some well defined plan. Such a plan need not be carried on along elaborate lines. In fact, naturalness and simplicity should be the keynote of any work that is done in the improvement of surroundings of Western homes. In a country like Western Canada, which is characterized by wide expanses and the natural landscape surroundings, the work of improvement should, if possible, be so developed as to be in keeping with those surroundings.

In the development of a farmstead plan, consideration should be given to such matters as site, water supply, windbreak protection, location of drives and walks, size and arrangement of farm garden, and ornamental planting.

In the selection of a site probably the most important consideration is that of convenience. The farmstead should be so located that other parts of the farm can conveniently be reached from it. It should, if possible, be located so that it is convenient to the church, school, post office and other outside places that are frequently visited. The farmstead should also be located as conveniently as possible to the main road that leads to an adjoining town or city.

**Drainage.**—The question of drainage for the farmstead and farm buildings, relating as it does to the health of the household, is a matter worthy of careful consideration. Farm buildings should not be located near a spot where stagnant water is likely to collect, unless spots of this kind can be remedied by natural or artificial drainage. Moderately light sandy soil, with a fairly open subsoil, is the most desirable for a farmstead site. Heavy clay soils, particularly if underlaid with a hard subsoil, are difficult to drain, and may in time develop unfavorable conditions around a farm home.

**Water Supply.**—Related to the question of drainage is the question of the farm water supply. Good water is invaluable to any farm household, and, on many Western farms, is difficult to get. Impure water is not only a menace to the health of the household, but is a source of great discomfort and inconvenience. Farm water

supplies are frequently contaminated with seepage from barnyards or sloughs where vegetable matter is allowed to collect. This should be avoided, if possible, as the germs of many dangerous human diseases are spread in this way.

**Roads and Walks.**—An attractive feature in connection with any well developed farmstead scheme is the presence of good roads and walks. There is frequently a danger of getting too many roads and walks, particularly around places of small extent. The roads and walks should be direct, and of sufficient width to accommodate teams or carriages passing from one part of the grounds to another. The appearance of walks and drives is very much improved if they are so planned as to have graceful natural curves, and if the edges are kept trim and neat.

**Protection.**—Protection and ornamentation of the homestead are worthy of the fullest and most careful consideration. No effective farmstead scheme can be developed on a Western farm before proper protection is afforded in the nature of a windbreak or shelter belt. The belt should be located at a reasonable distance from the farm buildings, should be heaviest on the north and west sides, and should be of such density as effectively to protect the buildings from the strong winter winds. Wind-break trees, properly planted and given reasonably good care, make a very satisfactory growth under prairie conditions. Trees for this purpose should be planted only in well prepared soil, planting in rows four feet apart and setting the trees four feet apart in the rows. Best results are obtained in tree planting by mixing the varieties, i.e. by planting rapidly growing varieties as well as trees of slow growth. The advantage of mixing varieties is mainly in the mutual benefit that the trees derive from each other, and the fact that not all varieties are so likely to be destroyed by insect or fungus attack. Of the quick growing varieties to be recommended are the Golden and Laurel-leaved Willow and the Cottonwood, while among those of slower growth might be included the Manitoba Maple, the Green Ash, the Basswood and the White Elm. The Willows and the Cottonwoods can be started quite successfully from cuttings, while the others are grown with greatest success from seed. From general experiences in the West, the best results are obtained by planting deciduous trees in the spring, and by using small trees.

Windbreaks of coniferous trees have not as yet been very extensively planted in the West, due, no doubt, to the difficulty experienced in growing stock of this class. A well-grown windbreak of Scotch Pine or White Spruce would not only add very much to the attractiveness of a farm home, but would prove to be a very desirable protection against the wind.



**Ornamentation.**—Much can be done to add to the attractiveness of the farm home by the development of a lawn and by the planting of a few trees, flowering shrubs, and herbaceous perennials. In fact, no farm home is complete without a lawn which has received some degree of ornamentation. The development will require some time to complete, and, in order to get satisfactory results, the work of lawn-making should be thoroughly done. The soil for lawns should be well prepared and thoroughly enriched before the seed is sown. A finely pulverized surface will facilitate the germination of the finer grass seeds, and on a good lawn only the finer grasses should be sown. Such grasses as Kentucky and Canadian Blue grass, and Red Top, which make a compact growth and have a creeping habit induced by the running root-stock, are the most reliable grasses for lawn-making purposes. Sowing the grass seeds during the early summer, covering the seed with a garden rake, and thoroughly firming the soil about the seed with a garden roller, will induce quick germination and hasten the development of a good lawn.

The planting of trees and shrubs should be in keeping with the size of the grounds, and the varieties used will be influenced by climatic and soil conditions. The attractiveness of any ornamental scheme of this kind will depend on the quality and the variety of the material that is planted. In a country with a rich natural flora, like our Canadian West, liberal use should be made of the hardier types of native flowering shrubs and trees. Planting in groups of various sizes, depending upon the location and extent of the grounds; massing to give pleasing contrasts or combinations of foliage or flowers; and restricting the planting largely to the outside or convenient places throughout the grounds are suggestions which may be followed in the planting of trees or shrubs on a lawn. Herbaceous perennials, with their great profusion of bloom, wealth of color, and extended season of blooming, are strongly recommended for ornamental purposes. The perennials are best planted in properly prepared beds or borders, with a thoroughly enriched soil, and in quantity to give a massing of color. A wise selection of varieties will give a continuity of bloom throughout the entire growing season. Opportunities for the exercise of good taste in the improvement of home grounds are many, and much can be accomplished by the proper arrangement and combination of planting to make the home a place of great beauty.

In the improvement of farm surroundings, the practical and useful features should not be lost sight of, and the farm garden with its variety of succulent vegetables should be conveniently located and so arranged that it can be cared for with the minimum amount of effort.

The process of farm home improvement is necessarily slow; but the opportunities for making it beautiful and attractive, that are given in Western Canada, cannot be excelled in any other part of the North American Continent.

## Lawns

The beautifying of residence grounds by means of a handsome lawn is becoming more and more general. Not only in the cities, but on the farms are velvety lawns being sought for. There was a time when such a thing as a well-kept lawn on a farm was hardly dreamed of. Now there are many beautiful farm residence grounds in the West, but, of course, they are very few in comparison to the number of farm homes where there is not even a pretence at having a lawn.

In the cities lawns under the care of a practical gardener are a thing of beauty and a joy throughout the summer, but lawns under the care of people with no practical knowledge are often very much of a failure.

In preparing land for lawn making it should be put in a special state of cultivation. The soil should be finely pulverized, and, if possible, the surface should be enriched with some well decayed manure or some rich garden loam.

In obtaining good results in lawn making, the surface should be made perfectly level, or the seed bed put in any desired grade before the grass is sown. The proper time for seeding is during the early part of the summer, before the summer rains have begun.

The best method of seeding is to scatter the seed broadcast on the surface, and rake it in with a fine-toothed garden rake. Where different kinds of seed are sown some recommend the sowing of the different kinds separately in order to get an even distribution of the seed. After sowing the seed and raking it in, the surface should be well firmed with a garden roller to firm the soil around the seed and ensure quick germination.

Good grasses for lawn making purposes are: Kentucky and Canadian Blue grass, 35 per cent. each; red top, 20 per cent.; Rhode Island bent, 5 per cent., and white clover, 5 per cent. These are all fine grasses and will make a compact lawn. If fineness of grass is not so important a consideration, the amount of blue grass and red top can be reduced and say 25 or 30 per cent. of the mixture be made of Western rye grass, although this is a very difficult grass to clip with the mower.

The  
befo  
tion  
goo  
heav

root  
bala  
ceiv  
shou  
driy

with  
surfa  
thoro

proce  
varie  
the C  
seed

suita

Box  
Am  
Gre  
Bas  
Col

Scot  
Whi  
Colo

Tart  
Ginn  
Com  
Char  
Roue

Coto  
Flow  
Gold  
Van  
Gold

## Trees and Shrubs

Trees and shrubs do best when planted in well prepared soil. The land should be deeply broken and thoroughly cultivated before being planted to trees or shrubs. Thorough cultivation for two successive seasons is none too much to put such land in good condition for tree planting. The soil should be enriched by heavy manuring with well rotted manure before trees are planted.

In preparing trees or shrubs for planting, broken or injured roots should be removed, and the top of deciduous trees cut back to balance with the reduced root system. Evergreen trees should receive great care during the process of transplanting. The roots should never become dried while they are out of the soil, as severe drying is likely to result in the death of the tree.

In planting trees, dig a hole sufficiently large to take the roots without crowding. Spread out the roots with the hand, place fresh surface soil below and immediately on top of the roots, and pack thoroughly.

A great deal of emphasis may be placed upon the advantage of procuring home-grown trees, where at all possible. Some of the varieties, while perfectly hardy when grown from seed procured in the Canadian West, are not to be depended upon when grown from seed produced in the south or east.

The following trees and shrubs are the most hardy and most suitable for planting in Manitoba:

### Deciduous Shade and Windbreak Trees

Box	er or Manitoba Maple.	American Mountain Ash
Ame	n or White Elm.	Paper or Canoe Birch.
Green Ash.		Acute Leaved Willow.
Basswood.		Laurel Leaved Willow.
Cottonwood.		Russian Golden Willow.

### Coniferous Shade Trees

Scotch Pine.	Balsam Fir.
White Spruce.	Arbor Vitae.
Colorado Blue Spruce.	Larch or Tamarack.

### Large Flowering Shrubs

Tartarian Honeysuckle.	Josikea Lilac.
Ginnalian Maple.	Caragana Arborescens.
Common Lilac.	High Bush Cranberry.
Charles X Lilac.	Siberian Dogwood.
Rouen Lilac.	

### Small Flowering Shrubs

Cotoneaster.	Billardi Spirea.
Flowering Currant.	Woody Cinquefoil.
Golden Elder.	Rosa Rugosa.
Van Houtii's Spirea.	Caragana Pygmea.
Golden Spirea.	

# Flowers

## HERBACEOUS PERENNIALS

No flower garden is complete without perennials. Even though the plot of ground be small, some of the space should be devoted to this useful and varied class of plants. Few flowers require as little care as hardy herbaceous perennials, if given the proper conditions to start with.

The soil should be a good loam which will not bake, and should be well drained, for thorough drainage is very essential.

When planted, most perennials should be left undisturbed for a long time, hence the soil should be well prepared in the beginning by trenching and digging under a liberal supply of well-rotted stable manure.

Most perennials thrive best in full sunlight, and, where possible, they should be planted where they will get the most favored conditions. A southern aspect is the most suitable, and where there is protection from the cold winds the plants do best.

Planting may be done either in spring or autumn, but spring planting is best for most kinds.

In making and planting a border it is most important to plant those kinds which will give a continuity of bloom from early in the spring until late in the autumn, and to arrange them so that they will be most effective. The dates of blooming, heights of the plants and colors of the flowers should be given very careful consideration by those who desire to make the most of their materials. In large borders the best effects are obtained by massing several plants of one color, or several varieties of one species, and also arranging for a continuity of bloom, but in smaller borders and where the number of plants is limited it is often not possible to get this, and sometimes one part of the border will be without bloom.

During the growing season the surface soil should be kept loose and free from weeds, and, in the summer, the taller growing plants will need staking, as fine specimens are liable to be broken by storms if this is neglected.

When the plants have ceased blooming the old stalks should be cut off near the ground. Just before permanent frost sets in, the border or bed should be given a dressing of about four inches of strawy manure or leaves. This will form a good mulch for the protection of the plants in winter and at the same time enrich the soil. The mulch should not be removed too soon in the spring, as often most of the damage done to perennials is done at the season of the year when much thawing and freezing takes place. After raking off the coarse material in the spring, the shorter manure may be dug in to enrich the soil.

## LIST OF HARDY PERENNIALS

**Achillea Ptarmica Flore Pleno**, the Pearl Hardy, producing quantities of showy double white flowers from June to October. Grown from plant division.

**Althea Rosea** or **Common Hollyhock**. An old-fashioned hardy perennial easily grown from seed. Grows from six to eight feet high, flowers white to almost black. Should be planted in variety.

**Aquilegia** or **Columbine**. An easily grown perennial which does well in a variety of situations. Easily grown from seed or plant division, in many named varieties.

**Aster, Starwort, or Michaelmas Daisy**. A hardy late-flowering perennial of a great variety of colors. Easily grown from seed. Plant in variety.

**Campanula** or **Bell-Flower**. A showy perennial in blue, purple and white, blooming during midsummer, very attractive for borders.

**Centaurea Macrocephala** or **Knapweed**. A hardy and attractive perennial suitable for borders and easily grown.

**Delphinium** or **Larkspur**. A well-known hardy perennial, making fairly rank growth and producing blue and bluish-white flowers. Easily grown from seed and plant division. Should be in every collection. In many named varieties.

**Dianthus** or **Perennial Pink**. Showy, attractively flowered perennial which needs winter protection. May be grown from plant division.

**Dicentra Spectabilis** or **Bleeding Heart**. An old-fashioned hardy perennial blooming during June and July, and producing quantities of crimson and white flowers.

**Gaillardia Aristata** or **Blanket Flower**. A hardy showy perennial in shades of crimson and yellow, blooming during midsummer. Grown from seed or plant division.

**Gypsophila Paniculata** or **Chalk Plant**. A hardy, finely branched, delicately flowered perennial, flowers white, suitable for planting in mixed borders. Flowers very desirable for bouquets.

**Hemerocallis** or **Day Lilies**. Hardy showy perennials which do well under a great variety of conditions, in mixed borders, flowering during June. Grown from plant division.

**Iris** or **Flag**. A short showy perennial in shades of yellow and purple, German and Siberian forms particularly desirable. Does well in a variety of situations. In many named varieties. Should be in every collection.

**Lychnis, Chalcedonica** or **Maltese Cross**. Brilliantly flowered perennial, producing masses of scarlet bloom which appears during midsummer. Does well in a variety of situations.

**Myosotis Alpestris** or **Forget-me-not**. Dwarf perennial producing masses of delicate blue flowers. Hardy, and a persistent bloomer. Grown from plant division.

**Paeonia** or **Paeony**. One of the best known and most hardy herbaceous perennials, which should be in every collection. Bloom large and showy, appearing during midsummer. Should be planted in deep, well prepared soil, and in a somewhat protected situation. Many desirable sorts which should be planted extensively. Grown from roots.

**Papaver or Perennial Poppy**—Hardy, early blooming perennials, Iceland and Oriental Poppies best known forms. Oriental particularly attractive in shades of scarlet and crimson. May be grown from seed or plant division.

**Perennial Phlox**—Very attractive late blooming perennials. Should be grown in masses which present attractive displays of color. Many attractive named varieties which should be planted extensively.

**Rudbeckia Lacinata or Golden Glow**—One of the tall growing, late flowering perennials. Produces masses of showy yellow flowers. Does well in a variety of situations, and should be planted fairly extensively.

**Spiraea**—Some of the herbaceous spiraeas do well and make attractive perennials. The Spiraea Filipendula, Palmata and Almaria are particularly good forms.

## ANNUAL FLOWERS

The following short list of some of the best annuals will be useful:

### Some of the Best Low-growing Annual Flowers

California Poppies, Candytuft, Mignonette, Pansies, Petunias, Portulaca, Pinks (annual), Phlox Drummondii, and Verbenas.

### Some of the Best Annual Flowers of Medium Height

Acrocliniums or Everlastings, Balsams, China Asters, Coreopsis, Clarkias, Gaillardia, Godetias, Larkspurs, Love-in-a-mist, Marigolds, Marigold (pot), Nemesis, Pin-cushion Flower, Poppies, Stocks, Scarlet Sage, Snap-dragon, Sweet Sultans, Zinnias.

### Some of the Best Tall-growing Annual Flowers

Cosmos, Everlastings, Larkspurs (annual), Painted Tube-tongue, Sunflowers, Tobacco Plant.

### Some of the Best Climbing Annual Flowers

Morning Glories, Nasturtiums and Sweet Peas.

---

## Fruits

Every Western farmer should aim to have a small garden of hardy fruits. With reasonable care they will give good returns, and are valuable in that they give a pleasing variety to the farm menu.

Fruit trees and plants will do well on almost any soil, provided it is well drained and well prepared. The lighter soils, particularly those of sandy texture, are preferable.

An important factor in the production of fruits is the selection

of the stock to be used for planting. Only hardy varieties should be chosen, and the stock should be vigorous and, if possible, locally grown.

The fruit trees or plants may be planted either in the spring or fall when they are in a dormant condition. General experience, however, has demonstrated that spring planting is most successful.

Sufficient room should be allowed for the proper development of the trees and fruits. Tree fruits should be planted at a distance of from sixteen to twenty feet apart each way, while bush fruits, such as currants and gooseberries, or the bramble fruits, such as the raspberry, should be planted in rows which are at least five or six feet apart. Planting one or two rows of bush fruits between the rows of tree fruits is a very successful arrangement, as it tends to utilize the land to good advantage.

An important factor in the production of fruits is the protection afforded the plantation from strong winds. Where a double break of trees has been planted a very satisfactory arrangement is to locate the fruit garden between the double planting of trees.

The following is a list of hardy fruits for Western planting:

**Strawberries**—Bederwood, Senator Dunlap, Everbearing, Dakota

**Raspberries, Red**—Turner, Loudon, King, Shipper's Pride, Minnetonka, Sunbeam.

**Raspberries, Black**—Older, Ohio.

**Raspberries, Golden**—Caroline.

**Currants, Red**—Raby Castle, Stewart's, London Market, Red Dutch

**Currants, Black**—Black Naples, Lee's Prolific, Climax.

**Currants, White**—White Grape, White Dutch.

**Gooseberries**—Carry, Houghton, Smith's Improved, Downing.

**Cape**—Beta, for South-eastern Manitoba.

**Plums**—Cheney, Aitkin, Mammoth.

**Cherry**—Compass Cherry, for South-eastern Manitoba

**Crab Apples and Hybrids**—Transcendent, Hyslop, Virginia, Tony, Elsa, Silvia

**Standard Apples for Testing**—Hibernal, Duchess, Patten's Greening, Charmoff, Anisette, Blush Colville, Antonovka

