

HORT-FACTS

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FRUIT VARIETIES

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INTRODUCTION

Over the years many varieties of fruit have been introduced to Saskatchewan. Some have received very localized testing while others have been widely tested. Many have been perpetuated simply because they have not been tested against other varieties to determine their relative value. Many of the varieties discussed in this publication have never been included on the recommended list, prepared by the Saskatchewan Horticultural Advisory Council and found in the **Guide to Farm Practice in Saskatchewan**, because they have not been widely tested previously.

TREE FRUITS

APPLES, APPLE-CRABS, CRABAPPLES, PEARS, PLUMS AND CHERRY-PLUM HYBRIDS

Based on continuing observations in the orchard at the Department of Horticulture Science and a completed project by the Extension Division, involving test orchards at 20 sites scattered in the various hardiness zones (Fig. 1), broad recommendations are made. The hardiness classification is based on visible winter injury classified by amount of dead wood: a trace—up to 6 inches; moderate—from 6 to 18 inches; and severe—over 18 inches. Success in most areas depends upon shelter and topography supplying the proper microclimate.

APPLES

In the tree fruits, apples have been more widely tested than the others. The origin of the varieties and their suitability for the various hardiness zones are discussed individually. To aid further comparisons, the general fruit characteristics are tabulated and an attempt has been made to evaluate their fireblight susceptibility (Table 1).

Adanac—Selected by Mr. J. Lloyd in the Wilkie area of Saskatchewan, this variety was first known as Jack's No. 1. Considered promising for Zones 3B, 4, and 4A and should be used on a trial basis.

Battleford—Believed to be selected from Russian seedlings growing near Battleford, Saskatchewan, this variety was removed from the recommended list because of lack of hardiness, but would appear to be satisfactory for Zone 3B and possibly very sheltered locations in Zone 4.

Breakey—Originated at the Research Station, Morden, Manitoba, this variety lacks hardiness and should only be used on a trial basis in Zone 3B.

Edith Smith—Selected by Mr. L. W. Smith at Lucky Lake, Saskatchewan, this variety has shown varying degrees of injury in test orchards and should be used only on a trial basis in well-protected locations in Zone 3B and possibly Zone 4.

Exeter—A University of Saskatchewan introduction that appears suitable for Zones 3B and 4.

Goodlands—Developed by the Research Station, Morden, Manitoba, this variety lacks hardiness and should only be used on a trial basis in Zone 3B.

Harcourt—Introduced by the University of Alberta, it has not been as hardy as expected and should be used on a trial basis in well-protected locations in Zone 3B and possibly Zone 4.

Heyer 12—Selected by Mr. A. Heyer, Neville, Saskatchewan, this cooking apple is hardier than most, although it will sometimes show moderate to severe injury in Zone 5.

Heyer 20—Same origin as Heyer 12 and at least as hardy.

McLean—A University of Saskatchewan introduction that is very similar to **Patterson**. It appears hardy in Zones 3B and 4, but has shown moderate to severe injury in Zones 4A and 5.

Mystery—Introduced by Mr. A.J. Porter, Parkside, Saskatchewan, this variety appears to be one of the hardiest varieties and has shown only a trace of injury in Zone 5 to date.

Rutherford—A University of Saskatchewan introduction that is very similar to **Heyer 12** and **Heyer 20**, but possibly a little hardier, showing less injury than those varieties in Zones 5 and 6A.

Patterson—Another University of Saskatchewan introduction of excellent quality that appears suitable for Zones 3B, 4 and 4A, but has shown moderate to severe injury in Zone 5.

Other Introductions—The varieties, **Carroll**, **Collet**, **Luke** and **Miami** introduced by the Research Station, Morden, Manitoba, lack sufficient hardiness for general conditions in Saskatchewan. **Dr. Bill**, an introduction from the Research Station, Lethbridge, Alberta and **Haralson**, an introduction

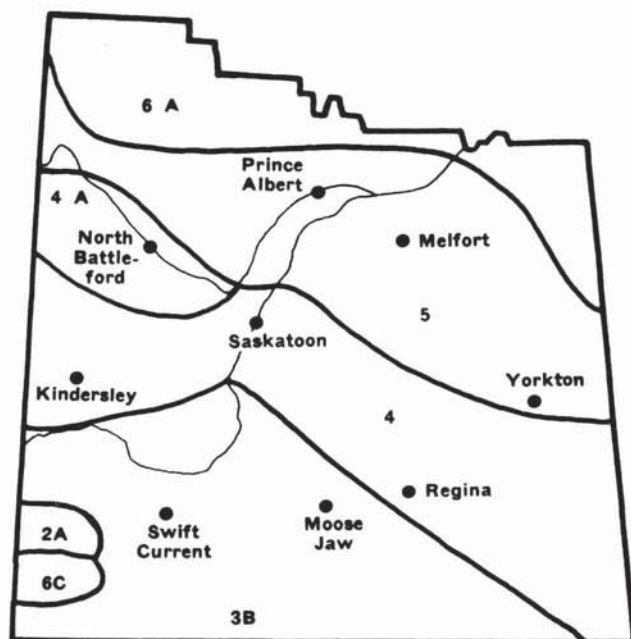


Fig. 1—Zones for Fruit Varieties, from the 1975 Guide to Farm Practice in Saskatchewan. This is an adaptation from a Prairie Province zonation map comprised of 6 major zones and various subdivisions.

from the University of Minnesota would also appear to lack hardiness, although they have not been widely tested. **Brooks 27**, an introduction of the Horticultural Research Centre, Brooks, Alberta, is an older variety that has been dropped from the recommended list because of lack in quality and **McCloy**, an introduction by Mr. P. Wright from the McCloy orchard at Meskanaw, Saskatchewan, lacks hardiness. Two new introductions from near Esterhazy, Saskatchewan, **Francis** and **Hermansky**, have not been sufficiently tested to make recommendations. Most of the testing has been done in Zone 5 where they have shown variable injury, but further testing is needed.

Of the University of Saskatchewan introductions, **Advance** was discarded from the plantations because of severe fireblight. **Anderson**, **Barrie**, **Beauty Blush**, **Brightness**, **Harvester**, **Harvest Special**, **Kingscourt**, **Lambton**, **Prolific**, and **Yellow Beauty** lack size and/or quality compared to other varieties. **Park** apparently lacks sufficient hardiness, while **Chipman** and **Winter Queen** are too late for Saskatchewan.

APPLE-CRABS AND CRABAPPLES

The origin of the varieties and their suitability for various hardiness zones are discussed individually. To aid further comparisons, the general fruit characteristics are tabulated (Table 1).

Dawn—A University of Saskatchewan introduction, this is a very early crabapple. Apparently hardy in Zones 3B, 4 and 4A, but has shown moderate to severe injury in parts of Zone 5 and 6A in some years.

Dolgo—An old variety introduced by the Experiment Station, Brookings, South Dakota. This crabapple variety is relatively hardy, although it did show moderate to severe injury in the two northern zones one year.

Kerr—Originated by the Research Station, Morden, Manitoba, it is apparently hardy in Zones 3B and 4, but moderate to severe injury has been reported at some locations in Zone 5.

Rescue—Introduced by the Experimental Farm, Scott, Saskatchewan, it has proved to be one of the hardier apple-crabs, showing only a trace of injury in Zones 5 and 6A in most years.

Trail—An old introduction from the Central Experimental Farm, Ottawa, Ontario, that lacks sufficient hardiness except for the extreme southern portions of the province.

PEARS

There are no pears on the recommended list for Saskatchewan. In general, the pears that are available to Saskatchewan still lack somewhat in quality and are difficult to harvest at the proper maturity. They should be harvested while immature (just starting to lose their deep-green color) and ripened indoors; otherwise they will brown in the core. The flesh of these pears has a number of stone cells near the core area.

The University of Saskatchewan introductions and one other variety, **Jubilee**, were the only pears included in the test orchards. In general, they lack the degree of hardiness expected of them and should only be tested on a trial basis in the home garden. It should be noted that fireblight can be a severe problem.

Andrew—A 2-inch pear that is not recommended because of inferior quality and severe core browning.

David—A 2½- to 2¾-inch pear of medium quality when ripened off the tree. This variety has shown severe injury in the north and should be limited to a trial basis in home gardens in Zones 3B and 4.

John—The largest of the University of Saskatchewan introductions, this 3-inch pear has good quality. Unfortunately, except for the very southern portions of the province where no injury has been reported, its hardiness performance has been erratic in all of the zones. It should be planted only in a well-sheltered location on a trial basis.

Jubilee—Originated near Melfort, this medium-large pear is reported to be suitable for cooking only. Information is lacking as to hardiness, but this variety could be planted on a trial basis in Zones 3B and 4.

Peter—A medium-sized, 2¼-inch pear of excellent quality when ripened properly. Although not widely tested, it appears to be sufficiently hardy for home gardens in Zones 3B, 4, and 4A, but has shown severe injury at some locations in Zone 5.

Philip—A larger pear, about 2¾ inches in diameter, it also has fair quality when ripened properly but generally lacks hardiness in the six scattered locations from Zone 3B to Zone 5. It is possibly the most tender of the introductions.

Simon—This is a small pear that lacks quality and hardiness and is not recommended.

Thomas—The most recent introduction, this variety is not fully tested. It is one of the medium-sized pears, but would appear to lack hardiness except for Zone 3B.

PLUMS

Many plum varieties have been planted in Saskatchewan orchards; unfortunately their early blooming habit is subject to the unfavourable climatic conditions of early spring. As a result, the fruit set is often low and this has made varietal evaluation difficult in many years. The University of Saskatchewan's plum orchard, where most of the varieties have been observed, is relatively exposed. Only a selected few varieties were planted in the test orchards and accordingly, only limited observations in hardiness throughout the province have been made. The general fruit characteristics of some of the better varieties are included in Table II.

Acme—A University of Saskatchewan introduction that is smaller and considered inferior to **Elite** and **Prairie**, but worthy of trial. Limited observations on hardiness would suggest it is suitable in well-sheltered locations in Zones 3B, 4, and 4A.

Bounty—An introduction of the Research Station, Morden, Manitoba, this red variety is used primarily as a pollinator, which is essential for the red hybrids, which do not act as good pollinators. (This inter-sterility of the red hybrids may be a factor in the low set of fruit where no additional pollinator varieties are grown.) The fruit of **Bounty** is used mostly for canning and the variety appears hardy up to and including Zones 4 and 4A.

Dandy—Developed by Boughen Nurseries, Valley River, Manitoba, this is another pollinator for red hybrids. In quality and hardiness, **Dandy** is similar to **Bounty**.

Elite—A University of Saskatchewan introduction, it is considered one of the better varieties. Unfortunately, it would appear to be limited in hardiness to Zone 3B and possibly the central portion of Zone 4. It has shown considerable injury in the eastern portion of Zone 4.

Ivanovka—A small plum introduced by the Research Station, Morden, Manitoba. Appears hardy at Saskatoon, but not at Prince Albert. Needs further testing in the southern half of the province.

Parkside—Introduced by Mr. A. J. Porter, Parkside, Saskatchewan, it is a small plum that might not be considered where other plums can be grown well, but it is extremely hardy, having shown very little injury even in Zone 6A.

Patterson Pride—This variety is an interesting University of Saskatchewan introduction with a dwarf pendulous habit. Although very compact under non-irrigated conditions, it tends to be very sprawling under watered conditions in backyards. Unfortunately, this variety lacks somewhat in hardiness and, although showing little injury at Saskatoon, it has shown moderate injury at scattered locations in the province. It is recommended that planting be limited to well-protected locations in Zone 3B and possibly Zone 4. Because of the dwarf habit, this plum may find a place in urban gardens where space is at a premium.

Pembina—An older variety originating from the Experiment Station, Brookings, South Dakota, it does lack somewhat in hardiness. Moderate to severe injury has been reported at scattered locations in the province and it should be well-protected in Zones 3B and 4.

Prairie—One of the better quality University of Saskatchewan introductions, it is also one of the hardiest. It would appear suitable for Zone 3B and the central portion of Zone 4. Moderate to severe injury has occurred in the north-eastern portion of Zone 4.

Ptitsin Selections—Introduced by the Research Station, Morden, Manitoba, these selections are very similar. **Ptitsin 5, 9, 10, and 12** have been observed and, although there is little to choose between them, slight preference is given to **Ptitsin 12** from observations in the University of Saskatchewan plantations. Hardiness observations have been limited but they are apparently hardy in Zones 3B, 4, and 4A, as well as most parts of Zone 5.

Other Introductions—**Norther**, an introduction from the Research Station, Morden, Manitoba, has been planted primarily as a pollinator, but now that this role has been severely questioned, it has been dropped from the recommended list.

Among the University of Saskatchewan introductions varieties such as **Eclipse, Gilman, Hoffman, Perfection, Robinson, and Saskatchewan** are deemed inferior to other introductions because of lack of size. **Excell** has a very astringent skin and the two yellow-orange colored varieties, **Geddes** and **Supreme**, are low yielding varieties.

CHERRY-PLUM HYBRIDS

Although there are a number of varieties that have been introduced to this class of fruit, the three named varieties listed in the 1975 **Guide to Farm Practice in Saskatchewan** would seem to be as suitable as any. The University of Saskatchewan selections, although lower growing and more spreading than the older varieties, have not shown that this lower growing habit has reduced the winter injury and, accordingly, they do not appear on the recommended list. The hardiness observations have been fairly scattered and not too numerous, but none of this class of fruit would appear to be extremely hardy. Any one variety could be selected from the fruit characteristics presented in Table II and grown on a trial basis in well-protected areas in Zones 3B and 4.

Dura—Developed by the Research Station, Morden, Manitoba, this variety has shown moderate injury in some locations in Zone 4.

Manor—An introduction from Morden, Manitoba, it too has shown moderate injury in some locations in Zone 4.

Opata—Developed by the Experiment Station, Brookings, South Dakota, this variety has shown considerable injury in Zone 5, but was relatively free of injury at the University of Saskatchewan, the only location where it was tested in Zone 4.

University of Saskatchewan Introductions—The varieties **Beta, Delta, Epsilon, Gamma, Kappa, Omega, Sigma,** and **Zeta** have been tested primarily in Zones 4 and 5 where they have shown moderate to severe winter injury.

SMALL FRUITS

CURRENTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES AND OTHERS

In the last few years, these fruits have not been specifically tested at the University of Saskatchewan. Accordingly, this publication contains only a brief description of the varieties listed in the 1975 **Guide to Farm Practice in Saskatchewan**.

CURRENTS

Red Lake—A hardy, vigorous variety originated in Minnesota. It is moderately productive, forming large clusters of large red fruit of excellent quality.

Stephens—A hardy red variety of moderate growth and somewhat inclined to sprawl. It bears medium to large clusters of large, low-acid fruit of good quality.

White Grape—This fairly vigorous and productive white variety produces tender, sweet, yellowish-white, translucent fruit of medium size and excellent dessert quality.

Magnus—This is an early black current variety. It is moderately vigorous and productive, with medium-sized clusters of large fruit and ripens evenly.

Willoughby—This variety was introduced by A. J. Porter, Parkside, Saskatchewan. It bears fruit equal in size and quality to other standard varieties, but is outstanding for its apparent resistance to mildew.

Missouri Selections—Many of these selections are used for ornamental purposes as well as for fruit. They are vigorous and hardy, but more than one strain should be grown if a quantity of fruit is desired. The black fruits are usually large and excellent for pies, preserves, jelly, and canned produce, but they tend to ripen very unevenly.

GOOSEBERRIES

Pixwell—A strong growing, hardy, productive variety with few thorns and slightly drooping canes that produce small- to medium-sized, long-stemmed fruit with thin skins. They are purple when ripe.

Thoreson—This variety has medium to small, pale green fruit of fairly good quality. The bushes are hardy, vigorous, productive, and fairly free of thorns.

RASPBERRIES

Boyne—An introduction of the Research Station, Morden, Manitoba. This is a hardy, drought tolerant variety. The fruit is dark red, attractive, aromatic, sweet and sprightly. It is considered a general purpose berry rating high for the fresh, processed and frozen product.

Chief—An old dependable variety that is very hardy. It produces a light, medium-sized red fruit of good quality, but does not bear as heavily as Boyne.

STRAWBERRIES

Porter's Pride—A June-bearing type introduced by A. J. Porter, Parkside, Saskatchewan, it produces runners freely and seems to be late blooming enough to escape spring frost damage. The fruit are large, bright red, flavorful, and rated excellent for freezing.

Protem—An introduction by the Research Station, Beaverlodge, Alberta, this June-bearing type is vigorous and hardy. Fruit of good size, firm, red with medium red flesh that has a medium acid flavor.

Redcoat—A June-bearing type originating at the Central Experimental Farm, Ottawa, Ontario, this variety has performed fairly well in Saskatchewan. The fruit is of good size, medium red and very attractive. Although it is only rated as fair for quality, this variety has become one of the leading varieties in commercial producing areas.

Ogallala—An everbearing variety developed in Nebraska, it produces very vigorous plants. This variety is medium to large in size, is a rich dark red, but has a very tender skin that bruises easily. The flesh is bright red, sweet and slightly aromatic.

Parkland—Another introduction by A. J. Porter, Parkside, Saskatchewan, this everbearing-type is vigorous, productive, and hardy. The fruit is large and medium red in color.

Superfection—This is an open-pollinated seedling of **Gem** and is considered identical to **Gem**. The fruit tend to be small, light red, and soft; both are moderately attractive. The plants runner freely and are fairly productive.

Other Small Fruits—There are other fruits that can be grown in the garden or used for ornamental purposes. Although until recently only seedlings of Saskatoon (*Amelanchier alnifolia*) were generally available because of propagation problems with the named varieties, named varieties are becoming increasingly available. Admittedly the individual merits of the various varieties have not been fully assessed, but they are improved selections and their use eliminates the vast variability in the seedling populations. This is also the case with the Nanking Cherry (*Prunus tomentosa*) and Sour Cherry (*Prunus fruticosa*).

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Table 1—Fruit Characteristics of Some Apple, Apple-Crab, and Crabapple Varieties Grown in Saskatchewan

Variety	Diameter in Inches	Color	Flesh	Flavor	Dessert Quality	Storage Ability	Fireblight Rating
APPLES							
Adanac	2½	40% red streaked	greenish, juicy, slightly coarse	sub-acid	good to excellent	end of November	resistant*
Battleford	2½-3	well-covered with red streak	greenish-white, rather dry	sub-acid	fair	poor	moderately** resistant
Breakey	2½	50% red streaked	white, fine, juicy	sub-acid slightly aromatic	good to excellent	well after New Year's	susceptible*
Edith Smith	2½-3	washed with bright red	white, crisp, juicy	sub-acid slightly aromatic	good to excellent	until New Year's	susceptible*
Exeter	2½	60% red streaked	creamy white, medium coarse	sub-acid	fair	poor	susceptible*
Goodlands	2½-3	lightly washed and streaked with red	white, fine, juicy	sub-acid	excellent	not tested at Saskatoon	insufficient observation
Harcourt	2½	washed with red	white, crisp, juicy	sub-acid	good to excellent	not tested at Saskatoon	susceptible**
Heyer 12	2½	yellow	coarse	slightly astringent	poor, but good for cooking	nil	moderately** resistant
Heyer 20	2½	yellow	coarse	slightly astringent	poor, but good for cooking	nil	moderately** resistant
McLean	2-2½	yellow with light orange blush	white, fine, medium juicy	sub-acid	good	2-3 months	resistant*
Mystery	2¼-2½	well-washed and streaked with red	creamy white, fine, juicy	slightly acid	good to excellent, good for cooking	not tested at Saskatoon	susceptible*
Rutherford	2½	yellow-green	coarse	slightly astringent	poor, but good for cooking	nil	moderately resistant*
Patterson	2½	yellow with light orange blush	white, fine, juicy	sub-acid	excellent	end of November	resistant*
APPLE-CRAB AND CRABAPPLE							
Dawn	1½-1¾	almost completely washed with red	medium coarse, crisp, juicy	sub-acid	excellent	1 month	susceptible*
Dolgo	1½	almost completely washed with red	crisp, juicy	slightly acid	good for jelly	not tested at Saskatoon	susceptible**
Kerr	1¾	completely washed with red	yellowish, crisp, juicy	slightly acid	good to excellent	end of January	susceptible**
Rescue	1½-1¾	well-washed with red	white, crisp, juicy	sub-acid	excellent	1 month	susceptible**
Trail	1¾	mediumly streaked with red	white, juicy	sweet	good	not tested at Saskatoon	insufficient observation

* Ratings by Fruit Committee, Western Canadian Society for Horticulture

** Ratings from Department of Horticulture

Table II—Fruit Characteristics of Some Plum and Cherry-Plum Varieties Grown in Saskatchewan

Variety	Diameter in Inches	Color	Skin	Flesh	Flavor	Dessert Quality
PLUMS						
Acme	1 - 1½	red	tough, slightly astringent	yellow, juicy, mellow	sweet	good
Bounty	1¼-1½	red	thin, tough, astringent	yellow, juicy, mellow	sweet	fair, but good for canning
Dandy	1¼-1½	yellow with red blush	thin, tender	yellow, juicy	sweet	fair, but good for canning
Elite	1¾	red	thick, tough, slightly astringent	yellow, juicy	sweet	good
Ivanovka	1¼-1½	green with red-purple mottle	tender, thin	yellow, juicy, mellow	sweet	excellent
Parkside	1¾	red	thin, medium, tough	yellow, juicy, mellow	sweet	good
Patterson Pride	1¾ - 2	deep red	medium thin, tender	yellow, juicy	sweet	good
Pembina	1½ - 2	red	medium thick, tough	yellow, juicy, mellow	sweet	good
Prairie	1¾	red	thick, tough, slightly astringent	yellow, juicy, mellow	sweet pleasant	good
Ptitsin Selections	1 - 1½	green-yellow with brown-purple mottle	tender	green, juicy	sweet	excellent
CHERRY-PLUMS						
Dura	1¼-1½	dull green with purple blotch	medium thin, tender, slight astringency	red-purple, juicy	sweet	good
Manor	1 - 1¾	dark purple	medium thick,	red-purple, juicy	sweet	good
Opata	1 - 1¾	green with red-purple overlay	medium tender	yellow-green, juicy	sweet	good
Beta	1	dark purple	thick, tough, medium astringent	green, juicy	sweet	good
Delta	1¾	green, splotched with purple	thin, relatively tender	dark purple, juicy	sweet, but astringent just below skin	fair
Epsilon	1	light purple	medium tough, astringent	dark purple, juicy	sweet,	fair
Gamma	1 - 1¾	deep purple	medium thick, tender	dark purple, juicy	sweet	good
Kappa	1	deep purple	thick, tough, astringent	deep purple	sweet	fair
Omega	1	purple	medium thick, tough, astringent	dark purple, juicy	sweet	fair
Sigma	1 - 1¾	dark purple	medium thick, tough, astringent	purple, juicy	sweet	fair
Zeta	1 - 1¾	green with purple mottle	medium thick, tough, astringent	dark purple, juicy	astringent	poor