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HORT-FACTS

Apple Cultivars - 1985

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Introduction

Over the years numerous cultivars (varieties) of tree fruits have been developed and made available to prairie gardeners. Some have withstood the rigors of our climate while others have perished from cold damage or fireblight and many have been discarded because of poor quality. Even though the perfect cultivar of apples, pears or plums may not yet have been developed for the prairies there are a number with excellent qualities for special purposes such as jams, jellies, sauces, pies and fruit juice. The purpose of this fact sheet is to provide a brief description of recommended apple cultivars and to illustrate their unique virtues and shortcomings.

Cold hardiness, micro-environment and site selection

Most of the high quality, large fruited apples with good handling and storage properties, such as McIntosh, will not survive very long in Saskatchewan because they lack resistance to severe, winter low temperatures. In general -40° C is about the coldest mid-winter temperature even hardy apples will endure without some damage, therefore, it is imperative to plant only hardy recommended cultivars.

Micro-environment can play an important role in avoiding winter damage to fruit trees. Sometimes the choice of a planting site is limited, but if there is a choice the following should be considered:

- Trees on a north or east-facing slope will escape sunscald damage compared to a south or west-facing slope;
- (2) A shelterbelt from the north-west and north-east will help prevent wind damage, improve pollination and help build up heat units to mature fruit in the fall;
- (3) Fruit trees grow best in a loam or clay loam subsoil with at least one meter of soil which has no salinity or evidence of a high water table. Grey layers in the subsoil within one meter of the soil surface are not suitable for fruit trees;
- (4) A planting site on an upland ridge or plateau adjacent to a low area is preferable to a flat low area. A low spot is often a frost pocket, also, often with poor subsoil drainage, and should be avoided.

Pollination

Apples are self-incompatible and will not set a crop of fruit unless two different cultivars which overlap in bloom time are planted close together or grafted into the same tree. Two trees of the same cultivar will not suffice.

Apples (2" to 3" diameter)

- ADANAC A medium-sized, green-red striped good dessert quality apple, moderately hardy.
- BATTLEFORD A medium to large, green-red striped apple with only fair dessert quality but good for cooking. This cultivar should be grown in sheltered locations as it lacks some hardiness.
- BREAKEY A medium to large, green-red blush apple with good dessert quality but only average hardiness.

- CARLOS QUEEN A large, green-red blush apple with good dessert and cooking quality. It has been moderately hardy and the fruit stores well.
- EDITH SMITH A medium size cream-red blush, good fresh eating and cooking quality apple with average hardiness.
- EXETER A large cream-red blush apple with good hardiness, produces excellent quality apple juice.
- GOODLAND A large, green-red blush apple with excellent dessert quality. This cultivar lacks hardiness and should only be grown in sheltered locations.
- HARCOURT A fair quality apple. It has not been hardy in northern Saskatchewan and should only be planted in well-protected areas.

HEYER 12 - Very hardy, but soft, tart, green to yellow and with very poor keeping qualities. Useful only for cooking.

HEYER 20 - Similar to Heyer 12, hardier, and a more robust tree.

- NORLAND A medium-sized, green-red striped summer eating apple, moderately hardy, susceptible to fireblight.
- PARKLAND A good cooking apple of medium size, greenish-yellow with a striped red blush, moderately hardy.
- PATTERSON A hardy, medium-sized apple, cream-coloured with a red-orange blush; excellent quality for cooking and good quality for eating out of hand.
- SUNNY BROOK A moderately hardy, medium-sized apple, yellow with bright red blush, good cooking and storage quality.
- WESTLAND A large cooking apple, ripens in mid to late August, yellowish with light red stripes; stores moderately well and has moderate hardiness.

<u>Apple-Crabs (1-1/2" to 2") and Crabapples (less than 1-1/2")</u> DOLGO - A red, jelly-crabapple cultivar with good hardiness.

- KERR A hardy, good storage crabapple, dark red in colour, crisp and juicy.
- RESCUE A very hardy, bright red striped, productive crabapple with crisp, tasty fruit; good for fresh use or canning. Susceptible to fireblight.
- ROSY BROOK A good quality crabapple, hardy and productive, with small reddish fruit, very tasty, fresh use or for preserving.

Table 1. Cold hardiness of prairie apples, apple crabs and crabapples. HARDINESS RATING IN SASKATCHEWAN

<u>Very Hardy</u>

Dolgo, Heyer 12, Heyer 20, Rescue

Hardy

Adanac, Exeter, Kerr, McLean, Patterson, Rosy Brook*,

Moderately Hardy

Battleford, Breakey, Carlos Queen*, Edith Smith, Norland*,Parkland*, Sunny Brook, Trail, Westland*

Marginal Hardiness

Goodland, Harcourt

* Cultivars which are relatively new in Saskatchewan and need further testing.

- Table 2. Fireblight rating of prairie apples, apple crabs and crabapples.
 - Good Resistance

Adanac, Breakey, Goodland, Harcourt, Heyer 12, Heyer 20, Kerr, McLean, Patterson

Moderately Resistant

Battleford, Carlos Queen*, Exeter, Parkland*, Westland*

Susceptible

Dawn, Dolgo, Edith Smith, Mystery, Norland*, Rescue

No Rating

Rosy Brook*, Sunny Brook*

* Need further testing.