



EXTENSION SERVICE NORTH DAKOTA AGRICULTURAL COLLEGE AND U.S. DEPARTMENT OF AGRICULTURE COOPERATING E.J. Haslerud, Director, Fargo, N to ta

# Fruit Varieties for North Dakota

The growth of woody plants in North Dakota is strongly influenced by soil conditions, available moisture, and both winter and summer temperatures. Under natural conditions, soil and moisture seem to influence the growth of woody plants more than the temperature differences within the limits of the state. The map (page 1) is based largely upon observed growth response of woody plants. Zone A is considered as the most favorable and Zone C the least favorable. Many variations occur within each zone and a poor site in Zone A, for example, may be less favorable for a given tree than a good site in Zone C. The zones should be considered as general, not as hard and fast guides.

- 1. <u>Varieties</u> Varieties first of all must be hardy or reasonably so. This is especially important in new fruit plantings. After gaining some experience, you may branch out and try some semi-hardy things. Beginners should start with a few trees that are not only hardy but practical. The Dolgo crabapple, Haralson apple and Opata sandcherry are examples.
- <u>Rootstocks</u> A fruit tree is no hardier than its rootstock. For apples, only Siberian crabapple and related rootstocks are hardy in North Dakota. Hardy plums and cherry-plums are usually on the hardy native wild plum rootstocks. No satisfactory hardy rootstock is available for the sour cherries.
- 3. <u>Site</u> (a) Soil: Well-drained soil suitable for gardening should be satisfactory. The proposed planting should have been in garden, row crop, or fallowed the season previous to planting.

(b) Location: Northeast slope desirable, otherwise planting should have windbreak protection from north, west and south

4. <u>Spacing</u> - Growers tend to crowd all fruit plants. A good single spacing for all trees fruits is 20 by 20 feet. The following spacing is recommended.

<u>APPLES AND CRABAPPLES</u>: 16 by 20 feet, minimum, 20 by 20 feet better, 24 by 24 feet not too great for large apples.

<u>PLUMS AND SANDCHERRY HYBRIDS</u>: 10 by 20 feet; Sandcherries 6 by 20 feet. (The 20-foot space between rows is to permit easy cultivation with field equipment.)

RASPBERRIES: Rows 8 to 10 feet apart. Plants in rows 4 feet

apart. (Raspberries usually grown in hedge rows rather than hill or tepee system in North Dakota.)

<u>GOOSEBERRIES</u>: 8 to 10 feet between rows, 6 to 8 feet in row, would be better because of interference from thorns and spreading habit of bush.

<u>CURRANTS:</u> 8 to 10 feet between rows, 6 to 8 feet in rows. <u>GRAPES:</u> Rows 8 to 10 feet apart. Plants set 8 feet apart in row.

STRAWBERRIES: Rows 4 feet apart at planting time - plants 18 inches apart in row.

- 5. <u>Size of Trees to Buy</u> Young fruit trees have a much better chance to survive. They are much cheaper for the nurseryman to produce and are sold at lower retail prices than trees several years old. Many growers prefer one-year whips. Twoyear trees are also quite satisfactory. When these young trees are planted, cut them back to 18 to 20 inches. This will result in a low headed bush-type tree. Bush-type trees bear younger, resist sunscald better and are generally hardier.
- 6. <u>Rodent Control</u> Two of the worst enemies of fruit plants are rabbits and mice. Mice are especially bad in years when snow lies deep in the orchard. Repellents, 1/2 x 1/2 inch mesh hardware cloth about the individual trees, or wrapping the trunks and lower branches with aluminum foil are some of the control recommendations.

# Suggested Home Fruit Plantings

#### APPLES

- 1. Yeager's Sweet . . . (2 trees) A pleasant, mild, early August apple. Short season, still green when ripe.
- 2. <u>Red Duchess</u>... (2 trees) Similar to common Duchess but has red fruit, Season late August and September. Medium sized fruit. Fair quality out of hand. Good cooking apple.
- 3. <u>Haralson</u> . . . (2 trees) The best winter apple for the Northern Great Plains. Keeps until March in good storage. Outstanding for sauce and pie. Fairly hardy.

## CRABAPPLES

1. <u>Florence</u>... (2 trees) A good general purpose crab. Yields an amber colored jelly, good for sauce and pickles. Hardy.

- <u>Dolgo</u>... (2 trees) The best red jelly crabapple. Very hardy, resistant to fireblight, ornamental.
- 3. <u>Red River</u> . . . (2 trees) A large dark red crab. Came from a cross of Dolgo x Delicious. Good keeper, excellent out of hand after one month storage, resistant to fireblight. Good for sauce and general purpose use.

#### PLUMS

- 1. <u>Tecumseh</u> . . . (2 trees) One of the earliest plum varieties. Does very well at the Mandan Station.
- Underwood . . . (2 trees) an introduction from the Minnesota Fruit Breeding Farm. Generally hardy on the Northern Great Plains.
- South Dakota . . . (2 trees) Formerly known as South Dakota No. 27. Very valuable as a pollenizer for other plum varieties. In addition, it is a worthwhile plum variety in its own right.
- <u>Waneta</u>... (2 trees) One of Dr. Hansen's hardy, large-fruited plums. Stands drouth well, good out-of hand. Fair for cooking. Very good yielder. Early September.

# CHERRY-PLUMS

- 1. <u>Opata</u>...(2 trees) Perhaps the best of the cherry-plums when you consider both hardiness, dependability and quality of fruit. Green fleshed, purplish skinned fruit is tasty out of hand, preserves well.
- 2. <u>Dura</u>... (4 bushes) Bush low and spreading. Hardy, productive. Flesh red, juicy, sweet, quality good. Fruit hangs on tree in good condition for over a month.
- 3. <u>Compass</u>... (2 trees) Very hardy, fruit has merit for sauce. One of the oldest cherry-plum hybrids. Desirable to have in the planting because of its abundance of good pollen.

# RASPBERRIES

- <u>Ruddy</u>... (50 plants) A product of the NDAC Department of Horticulture. Fruits purplish-red in color, sauce tangy. Hardy, slightly later than Chief.
- 2. <u>Chief</u>...(50 plants) Hardiest of the Minnesota introductions. Fruit red, very good quality, season early. Chief is widely

planted on the Northern Great Plains. See Circular A-38 Raspberries.

### STRAWBERRIES

- Gem . . . (100 plants) Most popular everbearing variety for the Upper Midwest. Flavor considered a bit sharp by some for fresh use; but dependable yielder.
- Senator Dunlap . . . (100 plants) Hardy June bearing variety. Generally recognized as the best June bearer for northern gardens. Large, good quality fruit in late June and early July. See Circular A-16, Strawberries.

# GOOSEBERRIES

 Pixwell . . . (3 plants) High quality fruit borne on long stems. Quite free from thorns. Additional plants can be layered from the original bushes in a few years. An abundant yielder.

## CURRANTS

 <u>Red Lake</u>... (6 plants) Most desirable currant for North Dakota gardens. High yields of good quality red fruits are the rule. Currants can also be propagated quite easily by mounding or layering. See Circular A-75. Currants and Gooseberries.

Recommended Fruit List

R - Recommended for general planting

T - Recommended for trial D - Top work on hardy stock

• APPLES	Zone	Zone	Zone				
Haralson	R	R	R	Minjon	D		
Yeager's Sweet	R	R	R	Prairie Spy	D	D	D
Red Duchess	R	R	R	Fireside	D	D	D
Charlamoff	R	R	R	Redwell	D		
Wealthy	R T	or D	T or I	D Custer	Т	Т	Т
Hibernal*	R	R	R	Stevens	Ť	T	Ť
Beacon Mantet	R R	T R	T R	• <u>CRABAPPLES</u>			
Mortof	R	R	R	Florence	R	R	R
Erickson	R	R	R	Dolgo*	R	R	R
Oriole	R	Т	Т	Red River	R	R	R

	Zone	Zone	Zon	e			Zone 2 B		No.
Whitney Chestnut Cranberry Prairie Gold Heart River Rescue	R R R R R R	R R R R R R	R R R R R R		<ul> <li>(All stone fruits bear better is another vari is grown nearby as a pollenizers)</li> <li><u>RASPBERRIES</u></li> </ul>				1
Trail • PEARS	R	R	Ř		Chief (red) Ruddy (purple) Latham (red)	R R T	R R T	R R T	
Tait - Dropmore Golden Spice	R T	R	R		Durham (red ever- bearing) (All Durham canes show				
<u>PLUMS</u> Tecumseh     Underwood	R R	R R	R		ground each spring. fall crop) STRAWBERRIES	neb	end on	Lue	A
South Dakota, pollenator Waneta Redcoat Pembina Radisson	R R R R	R R R R R	R R R R R		Gem (everbearer) Evermore (everbearer) Progressive (everbearer) Dunlap (June bearer) Premier (June bearer)	r)R R	R R R T	R R R R	
Fiebing La Crescent Grenville CHERRY-PLUMS	T T T	T T T	T T T	•	CURRANTS Red Lake Cascade	R R	R R	R R	
Opata Dura Compass, pollenizer Sapalta	R R rs R R	R R R	R R R T	•	GOOSEBERRIES Pixwell GRAPES	R	R	R	
Heaver SANDCHERRIES	T	Т	T		Alpha Beta Blue Jay	R R R	R R R	R R R	
Brooks Sioux Hansen Bush Cherri	R R ies R	R R R	R R R		Blue Bell Moonbeam Red Amber North Dakota #11	R T T	T	Ţ	1
<ul> <li><u>CHERRIES</u></li> <li>Meteor (sour)</li> <li>North Star (sour)</li> </ul>	T T		-		(white) VALUABLE NATIVE FRUITS	T	T	Т	
Drilea (Nanking) Orient (Nanking) <u>APRICOTS</u> Scout (use seedling)	R R	R R	T		Juneberry Missouri Currant Wild Plum Buffalo Berry High Bush Cranberry	R R R R R R	R R R R	R R R R R	- China - Chin
apricots as pollenizers)	T		Г	T					

"Recommended as desirable stock for topworking

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