

# Forage Varieties

## Recommended for Oregon

Circular of Information 617

March 1963

Agricultural Experiment Station  
Oregon State University  
Covallis

# Forage Varieties Recommended for Oregon

## CONTENTS

Variety Descriptions .....	3- 8
Area Recommendations .....	9-15
Oregon Coast .....	9
Willamette Valley .....	10
Southern Oregon .....	11
Columbia Basin and Blue Mountains .....	12-13
Central Oregon .....	14
Snake River Valley .....	15

*This circular was prepared by W. S. McGuire, R. V. Frakes, N. R. Goetze, and R. S. MacLauchlan, Department of Farm Crops, Oregon State University.*

**R**ECOMMENDATIONS for forage varieties for Oregon are based on trials conducted by the Farm Crops staff, the branch experiment stations, and the U. S. Department of Agriculture (Agricultural Research Service and SCS Plant Materials Centers).

It is recognized that this list does not include all forage varieties now being grown. Some of the varieties now being grown will be replaced soon by others proved to be superior. The recommended varieties list will be revised as necessary.

To simplify the recommendations, Oregon has been divided into forage regions where climate is sufficiently similar to permit general uniformity. There may be sufficient variations in soil characteristics and moisture to cause modification of recommendations. Such information is available from your County Extension Agent.

Certified seed of improved varieties should be used whenever it is available.

This circular supersedes Circular of Information 577, "Forage, Seed, and Specialty Crop Variety Recommendations for Oregon."

## Alfalfa

Alfalfa varieties are numerous, each having specific characteristics for a given purpose. In general, those that are very winter hardy show less regrowth after cutting. Alfalfa varieties used in eastern Oregon should be winter hardy and resistant to bacterial wilt. Moderately winter hardy varieties are adequate for western Oregon. As yet, bacterial wilt is not a problem in western Oregon.

**Du Puits.** Vigorous growing variety with quick recovery after cutting. Upright in growth; rather stemmy; moderately resistant to certain foliar diseases, but susceptible to crown rots and bacterial wilt; moderately winter hardy.

**Ladak.** Yields well in first cutting of season, with relatively lower yields in succeeding cuttings. Recovers slowly after cutting. Moderately wilt resistant; very winter hardy.

**Lahontan.** Upright habit of growth with quick recovery after cutting. Resistant to bacterial wilt, stem nematode, and alfalfa aphid, but susceptible to foliar diseases. Sufficiently winter hardy for eastern Oregon.

**Narragansett.** Vigorous, wide crown, variable growth habit, very susceptible to bacterial wilt, and very winter hardy.

**Nomad.** Variable growth habit. Some plants have well-developed rhizomes, spreading under some conditions. Yields relatively low under good alfalfa growing conditions. Susceptible to bacterial wilt.

**Orestan.** Vigorous; upright in growth habit. Yields well in certain areas of eastern Oregon. Resistant to bacterial wilt and very winter hardy.

**Rambler.** Creeping rooted under some conditions. Most forage obtained in first cutting. Moderately resistant to bacterial wilt, but very winter hardy.

**Ranger.** Variable growth habit. Makes a moderately quick recovery after cutting. Susceptible to leaf spot diseases, resistant to bacterial wilt, and very winter hardy.

**Rhizoma.** Variable growth habit, spreading under some conditions. Susceptible to bacterial wilt and very winter hardy.

**Talent.** Vigorous. Makes a quick recovery after cutting. Upright in growth habit, moderately winter hardy, susceptible to bacterial wilt, and moderately resistant to stem nematode.

**Vernal.** Vigorous, high yielding, fine-stemmed, and with broad crowns. Resistant to bacterial wilt and very winter hardy.

## White Clover

White clover is the most important of the pasture legumes. It is also suitable for dual purpose in hay or silage. It requires medium to high fertility and adequate moisture, and does not tolerate very acid or alkaline soil. Good response can be expected with irrigation.

Some intermediate types of clover (commons) are useful at higher elevations and colder areas when seed produced in similar areas is used.

**Ladino.** Giant type of white clover regarding height, leaf size, and other characters. Very suitable in interior areas away from the coast, especially where hay or silage is made. Can be lost in winter or early spring in the Klamath Basin. Susceptible to slug damage.

**New Zealand.** Intermediate type in regard to height and leaf size. Very useful where slugs are a problem on the coast and some interior parts of western Oregon. Persistent and productive.

## Birdsfoot Trefoil

Birdsfoot trefoil is deep rooted and drought resistant, but it will respond to irrigation. It does not create a bloat problem and is very winter hardy.

**Broadleaf.** Generally more vigorous than narrowleaf trefoil. Can be used in moderately alkaline or acid soil and at higher elevations. **Granger** and **Cascade** are more persistent when used for silage and hay.

**Narrowleaf.** Produces well on heavier soils in southern Oregon. No improved varieties available.

## Big Trefoil

**Beaver.** A hairy variety suitable for very acid soils or poorly drained soils as it will tolerate considerable winter submergence. No bloat problem. Not sufficiently winter hardy for eastern Oregon use.

## Red Clover

**Kenland, Pennscoff.** Both varieties are adapted for use in Oregon in short rotation pastures (2-3 years), for inclusion with other legumes in long rotation or permanent pastures for added production in the first two years, and for hay production.

## Sweet Clover

Tall-growing, erect, stemmy species, not very palatable. Annual or biennial. Sweet clovers can cause scours in grazing or livestock loss in spoiled hay or silage. They are, therefore, more suitable as green manure crops because of high production and high nitrogen fixation. They can be used as forage with care and experience. Sweet clovers need at least 15 inches of rainfall.

**Biennial (2-year).** **Madrid** is yellow-flowered, earlier maturing than white-flowered clover and more suitable on coarse textured soils or at lower rainfall. **Spanish** is white-flowered and more productive where more moisture is available.

**Annual.** **Hubam** is a white-flowered summer annual useful for green manure and late season honey production.

## Alsike Clover

Alsike is useful on poorly drained and acid soils, especially in cool areas. Also tolerates moderate alkalinity. Short lived. No improved varieties available.

## Strawberry Clover

For moist or seepy areas or under irrigation on alkaline soil east of the Cascades. A spreading pasture-type clover, but less productive than white clover where the latter can be grown.

## Subterranean Clover (Subclover)

Subclover volunteers freely for many years. Avoid use in rotations with low-growing and row crops such as strawberries. Use only in nonirrigated pasture in western Oregon where rainfall is more than 15 inches.

**Nangeela, Mt. Barker.** Medium-late varieties more useful in areas of lower rainfall, shallow or droughty soils, or milder winters.

**Tallarook.** Late-maturing variety with more total production where longer growing seasons occur. Flowers about one week later than midseason varieties.

## Vetch

**Willamette.** A variety of common vetch. It will survive winter cold to nearly zero degree. It is useful as a winter cover crop and as forage, primarily with grain for hay or silage.

## Field Peas

**Austrian Winter** and **Romack.** Useful green manure crops and of some forage use.

## Rape

**Dwarf Essex.** Of value in western Oregon as a biennial (spring sown) or winter annual (fall sown) for fattening lambs or for general purpose pasture in summer and fall.

## Tall Fescue

A long-lived, high-producing grass suitable for use under a wide range of soil and climatic conditions. **Alta** is adapted to both acid and alkali soils, and is tolerant to both dry (over 15" rainfall) and moist land.

## Orchardgrass

A long-lived, high-producing grass suited for pasture, hay, or silage. Shade tolerant and widely adapted to well-drained soils throughout Oregon where the rainfall is at least 15 inches. **Latar and Pennlate** are later in maturity and are very compatible for use with legumes for silage and hay. **Potomac, Akaroa, and S-143** are earlier maturing and are suitable for pasture.

## Annual Ryegrass

Annual ryegrass is a vigorous, winter active, short-lived grass, tolerant to a wide range of soil conditions west of the Cascades. A good grass for winter cover crops or for use with red or alsike clover in short rotation hay crops. Becomes established rapidly, is competitive, and can retard the establishment of other grasses and legumes if seeded heavily as a component of a long-lived mixture.

## Perennial Ryegrass

A palatable grass adapted to a wide range of soil conditions west of the Cascades. Good spring recovery. Medium high in forage production. Has a tendency to go dormant in the summer. Well adapted for use in short rotations with clover, but if seeded too heavily in a long-lived pasture mixture, it may retard the establishment of other grasses and legumes. **H-1** ryegrass is a leafy, vigorous, short-lived perennial that closely resembles annual ryegrass but is longer lived. It is especially valuable for forage in the Coast area. **S-23** is more persistent on some hill sites, but is less productive than **Linn** or **Oregon Perennial** under higher fertility.

## Meadow Foxtail

Meadow Foxtail is a long-lived perennial grass well adapted to wet soils and land subject to winter and early spring flooding. Also well adapted to high altitudes, tolerant of prolonged snow cover, and well suited for moist mountain meadow plantings. Has a long season of use and no dormant period except in freezing weather. Tolerant to alkali and salt conditions, but responsive to high soil fertility.

## Reed Canarygrass

Reed Canarygrass is a long-lived perennial well suited for use on extremely wet land. Because of conditions under which it is used, utilization is frequently a problem. Recommended for forage and erosion control on wet land subject to prolonged flooding in all zones of Oregon.

## Timothy

**Climax** and **Drummond**. Short-lived perennial grasses for forage and erosion control at high elevations or in areas where the moisture ranges between 24 and 40 inches annually. Special value for re-vegetation on forest lands in the Columbia Basin, Blue Mountains and central Oregon areas, the eastern portion of the Willamette Valley, and southern Oregon.

## Tall Oatgrass

Drought resistant and performs well on low fertility soils. Best suited for silage and hay production on well drained soils. When used in a pasture mixture, it will not persist under heavy grazing. **Tualatin** has good vigor and is fairly resistant to seed shatter.

## **Mountain Bromegrass**

**Bromar.** Short-lived perennial bunch grass well suited for green manure or in short term rotations with sweet or red clover at high elevations in eastern Oregon.

## **Smooth Bromegrass**

**Manchar.** Adapted to well drained soils at elevations above 2,500 feet. A high forage producer, palatable and well adapted for use as pasture, silage, or hay with irrigation or where rainfall is 15 inches or more annually in the Snake River Valley areas.

## **Hardinggrass**

A drought resistant, winter active, long-lived perennial grass adapted for use on heavy soils or medium textured soils with restricting clay layers in southwestern Oregon.

## **Crested Wheatgrass**

A long-lived drought resistant bunch grass. **Nordan** is one of the best adapted grasses for use in the 6- to 15-inch rainfall areas for range improvement in eastern Oregon.

## **Siberian Wheatgrass**

Siberian wheatgrass generally has the same characteristics as Nordan crested wheatgrass. Is considered slightly more drought resistant than crested, especially on the light textured soils.

## **Beardless Wheatgrass**

**Whitmar.** The recommended variety. A long-lived, drought resistant bunch grass in the 12- to 18-inch rainfall area. Provides later summer grazing than crested wheatgrass.

## **Intermediate Wheatgrass**

**Greenar.** A late maturing, long-lived, mild sod former suitable for hay or pasture, alone or with alfalfa under irrigation or dry land in areas receiving 15 to 20 inches of precipitation. Requires good drainage and moderate to high soil fertility.

## **Pubescent Wheatgrass**

**Topar.** The recommended variety. A long-lived sod former adapted to low fertility sites and shallow soils in the 12- to 15-inch rainfall areas. Will stand more alkali and less moisture than intermediate wheatgrass. Better adapted for pasture than for hay.

## **Tall Wheatgrass**

**Alkar.** A tall, long-lived perennial bunch grass having greater tolerance to alkali than any other forage grass cultivated in Oregon. It is late maturing and has special adaptation to moist, heavy alkali soils. Used for both hay and pasture, but does not endure continuous close pasturing.

## Slender Wheatgrass

**Primar.** Adapted for short rotations with sweet or red clover or for green manure on light textured or droughty soils. Moderately alkali tolerant.

## Big Bluegrass

**Sherman.** The recommended variety. A long-lived improved native bunch grass used for early spring grazing where annual rainfall is 10 inches or more. Is easily destroyed by over grazing.

## Streambank Wheatgrass

**Sodar.** An improved variety. A long-lived drought-tolerant creeping sod former. Has excellent seedling vigor and is particularly well adapted for erosion control in the 6- to 18-inch rainfall areas in eastern Oregon. It has little value as a forage producer, and is used primarily on roadsides and canal banks.

## Hard Fescue

**Durar.** Used as an understory grass with alfalfa in the Columbia Basin, Blue Mountains, central Oregon and Snake River Valley areas. Seedlings are stronger than those of sheep fescue. Has a dense root system. The leafy plants provide surface protection to the soil. Low forage producer, but gives excellent erosion control.

## Bulbous Bluegrass

Makes little forage, but is an early grower. Useful under arid conditions on steep or rocky terrain where seedbeds cannot be prepared, and as an understory grass for erosion control. A good competitor with cheatgrass. Natural reseeding is required for perpetuation. Forage and erosion control at elevations below 4,000 feet in the Blue Mountains and Snake River Valley areas.

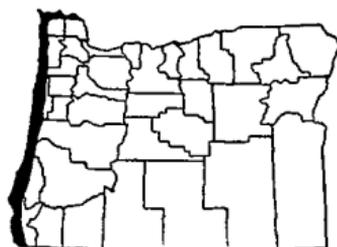
## Sudangrass

A warm-season, summer-annual grass and a high yielder in summer under warm conditions. Requires irrigation where rainfall is less than 30 inches. **Piper** is relatively low in prussic acid, a good yielder, and early in production. **Evergreen** is similar to **Piper** with a safe level of prussic acid when in active growth. **Sweet** has good production and is more palatable.

## Corn Silage

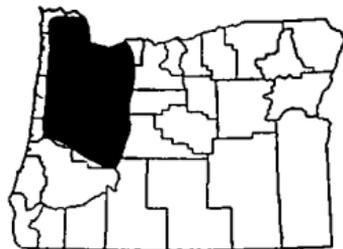
In those areas with high summer temperatures (southern Oregon, Columbia Basin, and Snake River Valley) commercial varieties of corn are available for silage production. New varieties are tested each year. Local recommendations are available according to the latest results. **Oregon 150** in western Oregon requires high fertility and irrigation for good production.

# Oregon Coast



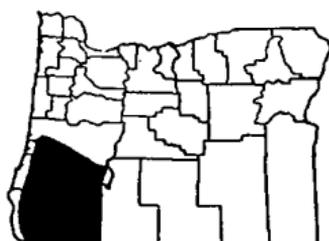
CROP	VARIETY
White clover .....	New Zealand
Big trefoil .....	Beaver
Red clover .....	Kenland Pennscott
Alsike clover	
Subterranean clover .....	Tallarook Nangeela Mt. Barker
Vetch .....	Willamette
Tall fescue .....	Alta
Orchardgrass .....	Akaroa S-143
Annual ryegrass	
Perennial ryegrass .....	H-1 Oregon Perennial Linn
Meadow foxtail	
Reed canarygrass	
Corn silage (Lower coast).....	Oregon 355 Oregon 150

# Willamette Valley



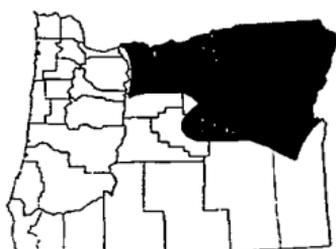
CROP	VARIETY
<b>Alfalfa</b> .....	Du Puits Vernal Talent Rhizoma
<b>White clover</b> .....	Ladino New Zealand
<b>Birdsfoot trefoil</b> .....	Granger Cascade
<b>Red clover</b> .....	Kenland Pennscott
<b>Alsike clover</b> <b>Subterranean clover</b> .....	Mt. Barker Tallarook Nangeela
<b>Vetch</b> .....	Willamette
<b>Austrian and Romack peas</b>	
<b>Rape</b> .....	Dwarf Essex
<b>Tall fescue</b> .....	Alta
<b>Orchardgrass</b> .....	S-143 Akaroa Potomac Pennlate Latar
<b>Annual ryegrass</b> <b>Perennial ryegrass</b> .....	Oregon Perennial Linn H-1 S-23
<b>Meadow foxtail</b> <b>Reed canarygrass</b> <b>Timothy (Hay)</b> .....	Lorain Drummond Climax
<b>Sudangrass</b> .....	Piper Greenleaf
<b>Corn silage</b> .....	Oregon 150

# Southern Oregon



CROP	VARIETY
<b>Alfalfa</b> .....	Lahontan Talent Du Puits
<b>White clover</b> .....	Ladino New Zealand
<b>Birdsfoot trefoil</b> .....	Granger Cascade Narrowleaf
<b>Red clover</b> .....	Kenland Pennscott
<b>Alsike clover</b>	
<b>Subterranean clover</b> .....	Nangeela Mt. Barker Tallarook
<b>Vetch</b> .....	Willamette
<b>Austrian field peas</b>	
<b>Rape</b> .....	Dwarf Essex
<b>Tall fescue</b> .....	Alta
<b>Orchardgrass</b>	
Pasture .....	Akaroa S-143
With alfalfa .....	Latar Potomac
<b>Annual ryegrass</b>	
<b>Perennial ryegrass</b> .....	Oregon Perennial Linn S-23 H-1
<b>Meadow foxtail</b>	
<b>Reed canarygrass</b>	
<b>Tall oatgrass</b> .....	Tualatin
<b>Timothy (Hay)</b> .....	Drummond Climax
<b>Hardinggrass</b>	
<b>Intermediate wheatgrass</b> (Dryland only) .....	Greenar
<b>Sudangrass</b> .....	Piper Greenleaf
<b>Corn silage</b> .....	Commercial varieties

# Columbia Basin and Blue Mountains

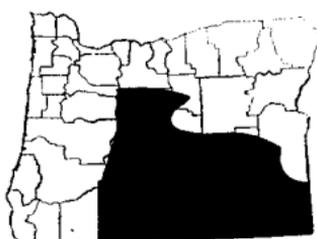


CROP	VARIETY
<b>Alfalfa</b>	
Irrigated or subhumid .....	Vernal Ranger Narragansett (In wilt-free areas) Ladak (Limited irrigation)
Dryland grazing .....	Rambler Nomad
<b>White clover</b> .....	Ladino Common
<b>Birdsfoot trefoil</b> .....	Granger Narrowleaf Cascade
<b>Red clover</b> .....	Kenland Pennscott
<b>Sweet clover</b> (Green manure)....	Spanish Madrid Hubam
<b>Alsike clover</b>	
<b>Strawberry clover</b>	
<b>Austrian field peas</b> (Not in commercial pea areas)	
<b>Tall fescue</b> .....	Alta
<b>Orchardgrass</b> .....	Latar S-143 Potomac
<b>Meadow foxtail</b>	
<b>Reed canarygrass</b>	
<b>Tall oatgrass</b> .....	Tualatin
<b>Timothy</b> (Hay) .....	Drummond Climax
<b>Mountain brome</b> grass .....	Bromar
<b>Crested wheatgrass</b> .....	Nordan Siberian
<b>Beardless wheatgrass</b> .....	Whitmar

<b>Intermediate wheatgrass</b> .....	Greenar
<b>Pubescent wheatgrass</b> .....	Topar
<b>Tall wheatgrass</b> .....	Alkar
<b>Slender wheatgrass</b> .....	Primar
<b>Big bluegrass</b> .....	Sherman
<b>Streambank wheatgrass</b> .....	Sodar
<b>Hard fescue</b> .....	Durar
<b>Bulbous bluegrass</b> (Understory grass in Blue Mt. area only)	
<b>Sudangrass</b> .....	Piper Sweet
<b>Corn silage</b>	
Columbia Basin .....	Commercial varieties
Blue Mountains .....	Oregon 355

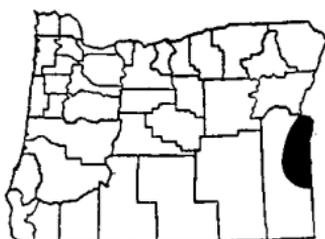
---

# Central Oregon



CROP	VARIETY
<b>Alfalfa</b>	
Irrigated .....	Ranger Vernal Ladak (Limited irrigation) Narragansett (Wilt susceptible)
Dryland grazing .....	Nomad Rambler
<b>White clover</b> .....	Ladino Common
<b>Birdsfoot trefoil</b> .....	Granger Cascade
<b>Red clover</b> .....	Kenland Pennscott
<b>Sweet Clover</b> (Special use).....	Spanish Madrid
<b>Alsike clover</b>	
<b>Strawberry clover</b>	
<b>Tall fescue</b> .....	Alta
<b>Orchardgrass</b> .....	S-143 Potomac Latar
<b>Meadow foxtail</b>	
<b>Reed canarygrass</b>	
<b>Tall oatgrass</b> .....	Tualatin
<b>Timothy</b> (Timbered areas) .....	Climax
<b>Crested wheatgrass</b> .....	Nordan Siberian
<b>Beardless wheatgrass</b> .....	Whitmar
<b>Intermediate wheatgrass</b> .....	Greenar
<b>Pubescent wheatgrass</b> .....	Topar
<b>Tall wheatgrass</b> .....	Alkar
<b>Slender wheatgrass</b> .....	Primar
<b>Big bluegrass</b> .....	Sherman
<b>Streambank wheatgrass</b> .....	Sodar
<b>Hard fescue</b> .....	Durar

# Snake River Valley



CROP	VARIETY
<b>Alfalfa</b>	
Irrigated .....	Lahontan Orestan Vernal Ladak
Dryland grazing .....	Nomad Rambler
<b>White clover</b> .....	Ladino
<b>Birdsfoot trefoil</b> .....	Granger Cascade
<b>Red clover</b> .....	Kenland Pennscott
<b>Sweet clover (Special use)</b> .....	Hubam
<b>Alsike clover</b>	
<b>Strawberry clover</b>	
<b>Austrian and Romack peas</b> (Green manure)	
<b>Tall fescue</b> .....	Alta
<b>Orchardgrass</b>	
Pasture .....	Akaroa Potomac
With alfalfa .....	Latar
<b>Meadow foxtail</b>	
<b>Smooth bromegrass</b> .....	Manchar
<b>Crested wheatgrass</b> .....	Nordan Siberian
<b>Beardless wheatgrass</b> .....	Whitmar
<b>Intermediate wheatgrass</b> .....	Greenar
<b>Pubescent wheatgrass</b> .....	Topar
<b>Tall wheatgrass</b> .....	Alkar
<b>Big bluegrass</b> .....	Sherman
<b>Streambank wheatgrass</b> .....	Sodar
<b>Hard fescue</b> .....	Durar
<b>Bulbous bluegrass (Understory only)</b>	
<b>Sudangrass</b> .....	Piper Sweet
<b>Corn silage</b> .....	Commercial varieties