



Forage Varieties *for Oregon*

Circular of Information 617

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Agricultural Experiment Station

Oregon State University

Corvallis

Forage Species and Varieties for Oregon

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SUGGESTED forage species and varieties for Oregon are based on results of experiments and demonstrations and on opinions of the staff of the Farm Crops Department, the branch experiment stations, the Agricultural Research Service, the Soil Conservation Service, and the Cooperative Extension Service.

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 variety list will be revised as necessary.

For simplicity, 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. In addition, the regions illustrated do not follow county lines.

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

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.

Flemish varieties. Vigorous early growing varieties with rapid regrowth 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. Relatively low yielder under good alfalfa growing conditions. Susceptible to bacterial wilt.

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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.

Washoe. Upright habit of growth, similar to **Lahontan** in winter hardiness, selected for resistance to pea aphids, spotted alfalfa aphids, bacterial wilt, and stem nematodes. Susceptible to leaf and stem diseases.

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.

Common. Nondescriptive as to variety and often refers to **White Dutch** which is still less descriptive. Generally of the intermediate type. Seed of this description should have been produced in an area of similar or colder climate to obtain winter-hardiness and persistence.

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

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-flowering 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

Common vetch, *Vicia sativa*, variety Willamette. Will survive winter cold to nearly zero degrees. Useful as a winter cover crop and as forage, primarily with grain for hay or silage.

Woolly-pod vetch, *Vicia dasycarpa*, variety Lana. A self-perpetuating, winter-active, annual legume adapted to southwestern Oregon. Easy to establish, matures early, and reseeds consistently if permitted to mature; most palatable to livestock when dry.

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** and **Fawn** are adapted to both acid and alkali soils, and are tolerant to both dry (under 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. **Clatsop**, **Akaroa**, **S-143**, **Pennmead**, **Sterling**, and **Masshardy** are intermediate in maturity. **Potomac** is the earliest variety.

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. Especially valuable for forage in the coast area and for short rotation pastures inland.

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 mild 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, 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.

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. It 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. It 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.

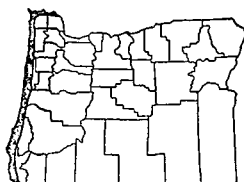
Sudangrass

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** and **Trudan** are relatively low in prussic acid, good yielders, and early in production. Sudan-sorghum hybrids are good yielders, have larger stems, and are higher in prussic acid.

Corn Silage

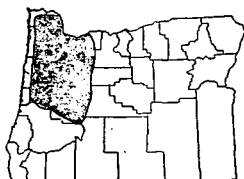
In those areas with high summer temperatures (southern Oregon, Columbia Basin, and Snake River Valley) commercial varieties of corn are available for silage production. New varieties are tested each year. Local recommendations are available according to the latest results.

Oregon Coast



CROP	VARIETY
White clover	New Zealand
Big trefoil	
Red clover	Kenland Pennscott
Alsike clover	
Subterranean clover	Tallarook Nangeela Mt. Barker
Common vetch	Willamette
Tall fescue	Alta Fawn
Orchardgrass	
Intermediate	Akaroa S-143 Clatsop
Late	Pennlate Latar
Annual ryegrass	
Perennial ryegrass	H-1 Linn
Meadow foxtail	
Reed canarygrass	
Corn silage (lower coast)	Oregon 355 and commercial varieties

Willamette Valley



CROP	VARIETY
Alfalfa	
Flemish varieties	Alfa Cardinal DuPuits Flandria Resistador WL-302 (Gold 'n Pure)
Light soils with irrigation	Vernal
Nonirrigated pasture	Rhizoma
White clover	Ladino New Zealand
Birdsfoot trefoil	Granger Cascade
Red clover	Kenland Pennscott
Alsike clover	
Subterranean clover	Mt. Barker Tallarook Nangeela
Common vetch	Willamette
Austrian and Romack peas	
Rape	Dwarf Essex
Tall fescue	Alta Fawn
Orchardgrass	
Early	Potomac
Intermediate	Akaroa Pennmead S-143
Late	Pennlate Latar

Annual ryegrass

Perennial ryegrassLinn
H-1

Meadow foxtail

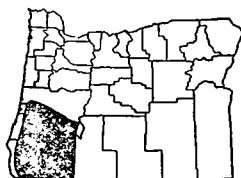
Reed canarygrass

Timothy (hay and silage)Drummond
Climax

SudangrassPiper
Trudan
Sorghum hybrids

Corn silageCommercial varieties
Oregon 355

Southern Oregon



CROP	VARIETY
Alfalfa	Vernal Lahontan Talent
Short rotation	Du Puits and other Flemish alfalfas
White clover	Ladino New Zealand
Birdsfoot trefoil	Granger Cascade Narrowleaf
Red clover	Kenland Pennscott
Alsike clover	
Subterranean clover	Nangeela Mt. Barker Tallarook
Common vetch	Willamette
Woolly-pod vetch	Lana
Austrian field peas	
Rape	Dwarf Essex
Tall fescue	Alta Fawn
Orchardgrass	
Early	Potomac
Intermediate	Pennmead Sterling Boone
Late	Latar
Annual ryegrass	
Perennial ryegrass	Linn

Short-rotationH-1

Meadow foxtail

Reed canarygrass

Tall oatgrassTualatin

Timothy (hay)Drummond
Climax

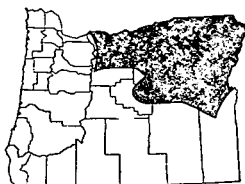
Hardinggrass

Intermediate wheatgrass
(dryland only)Greenar

SudangrassPiper
Trudan
Sorghum hybrids

Corn silageCommercial varieties

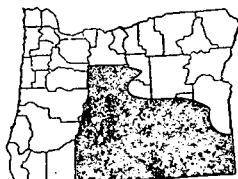
Columbia Basin and Blue Mountains



CROP	VARIETY
Alfalfa	
Irrigated or subhumid	Washoe Vernal Ranger
Dryland or when irrigation is limited	Ladak Rambler Nomad
White clover	Ladino Common
Birdsfoot trefoil	Granger Narrowleaf Cascade
Red clover	Kenland Pennscott
Sweet clover (green manure)....	Spanish Madrid Hubam
Alsike clover	
Strawberry clover	
Austrian field peas (not in commercial pea areas)	
Tall fescue	Alta Fawn
Orchardgrass	
Early	Potomac
Intermediate	Masshardy Pennmead Sterling
Late	Latar Pennlate
Meadow foxtail	
Reed canarygrass	

Tall oatgrass	.....Tualatin
Timothy (hay)	.....Climax
Crested wheatgrass	.....Nordan
Siberian wheatgrass	
Beardless wheatgrass	.....Whitmar
Intermediate wheatgrass	.....Greenar
Pubescent wheatgrass	.....Topar
Tall wheatgrass	.....Alkar
Slender wheatgrass	.....Primar
Big bluegrass	.....Sherman
Streambank wheatgrass	.....Sodar
Hard fescue	.....Durar
Sudangrass	.....Piper Sweet
Corn silage	
Columbia Basin	.....Commercial varieties
Blue Mountains	.....Oregon 355

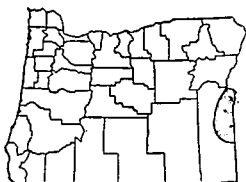
Central Oregon



CROP	VARIETY
Alfalfa	
Irrigated	Vernal Ranger Narragansett (wilt susceptible)
Dryland or where irrigation is limited	Ladak Nomad Rambler
White clover	Ladino Common
Birdsfoot trefoil	Granger Cascade
Red clover	Kenland Pennscott
Sweet Clover (Special use)	Spanish Madrid
Alsike clover	
Strawberry clover	
Tall fescue	Alta Fawn
Orchardgrass	
Early	Potomac
Intermediate	S-143
Late	Latar
Kentucky bluegrass (with white clover in Klamath Basin)	
Meadow foxtail	
Reed canarygrass	

Tall oatgrass	Tualatin
Timothy (timbered areas)	Climax
Crested wheatgrass	Nordan
Siberian wheatgrass	
Beardless wheatgrass	Whitmar
Intermediate wheatgrass	Greenar
Pubescent wheatgrass	Topar
Tall wheatgrass	Alkar
Slender wheatgrass	Primar
Big bluegrass	Sherman
Streambank wheatgrass	Sodar
Hard fescue	Durar

Snake River Valley



CROP	VARIETY
Alfalfa	
Irrigated	Lahontan Orestan Ranger Vernal
Dryland or where irrigation is limited	Ladak Nomad Rambler
White clover	Ladino
Birdsfoot trefoil	Granger Cascade
Red clover	Kenland Pennscott
Sweet clover (special use)	Hubam
Alsike clover	
Strawberry clover	
Austrian and Romack peas (green manure)	
Tall fescue	Alta Fawn
Orchardgrass	
Early	Potomac
Late	Latar
Meadow foxtail	
Smooth brome grass	Manchar
Crested wheatgrass	Nordan
Siberian wheatgrass	

Beardless wheatgrass	Whitmar
Intermediate wheatgrass	Greenar
Pubescent wheatgrass	Topar
Tall wheatgrass	Alkar
Big bluegrass	Sherman
Streambank wheatgrass	Sodar
Hard fescue	Durar
Sudangrass	Piper
	Sorghum hybrids
Corn silage	Commercial varieties
