SMALL GRAIN VARIETIES
For Oregon

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Agricultural Experiment Station • Oregon State University • Corvallis

Small Grain Varieties for Oregon

INTRODUCTION

The Oregon Agricultural Experiment Station maintains a research program for the development of improved varieties of small grains and for testing and evaluating these and other varieties at various locations in Oregon. Results of these trials form the basis for determining the best varieties to be recommended to growers for planting. Development of new varieties, changes in cropping practices, changes in markets, and the constantly changing hazards of diseases bring about the need to revise this list of varieties almost every year.

In order to simplify the variety recommendations, the state has been divided into nine distinct crop regions or zones. Within these areas there is usually sufficient similiarity to permit uniformity of varieties. However, there may be sufficient variation in other conditions, such as soil moisture or extremes in temperature, to make it necessary to modify these general recommendations. Information on varieties for special conditions within any area is available from the county Extension office or the nearest local Experiment Station.

Varieties which have been outstanding in production and quality, and in most cases are resistant to disease, are **recommended.** Experimental results or previous farmer trials have indicated that these varieties are the best ones available to growers. Varieties which are generally satisfactory but deficient in one or more characters are listed as **acceptable.** There is usually an advantage in growing the recommended variety, but specific characteristics of an acceptable variety may make its production desirable under special local conditions. Production of certified seed of recommended varieties is promoted to assure farmers of a supply of good clean seed.

Brief descriptions of the varieties given here are intended to convey essential information concerning adaptation, outstanding botanical characteristics, and desirable agronomic traits. Additional information will be furnished by the Oregon Agricultural Experiment Station upon request.

Recommendations for small grain varieties are prepared by Experiment Station agronomists with the assistance of county Extension agents and specialists. This circular was written by Wilson H. Foote, Farm Crops Department, Oregon State University, Corvallis, Oregon

Wheat Varieties

Baart 46

A tall, weak-strawed, awned, white-chaffed spring wheat. The kernels are white, long, and hard. Baart 46 is moderately resistant to some races of bunt and stem rust, but susceptible to stripe rust.

Beaver

A new, mid-season, tall, fairly strong strawed, awned, white-chaffed spring wheat variety. Beaver is resistant to stripe rust and to some races of leaf and stem rust. It is recommended to replace Zimmerman and Henry in the Willamette Valley. A new variety in 1964, the supply of seed is limited.

Brevor

A short, strong-strawed, awnless, white-chaffed winter wheat. Brevor has the characteristic of slow seedling emergence and only moderate winter hardiness. It is susceptible to leaf and stem rust, moderately resistant to stripe rust, and resistant to nearly all races of bunt. The kernels are white and soft. Brevor is classed as only a fair milling wheat but produces a good multiple purpose flour.

Burt

A short, strong-strawed, awned, white-chaffed winter wheat. The kernels are mid-long, white, and semi-hard. Burt is susceptible to leaf, stem, and stripe rust but resistant to the prevalent races of bunt. Burt is moderately winter hardy.

Columbia

A brown-chaffed, awned hard red winter wheat with short, red kernels. Columbia is resistant to the prevalent races of bunt but susceptible to leaf, stem, and stripe rust. Columbia equals Rio in winter hardiness and has good quality. The flour has a long mixing time.

Druchamp

A short, strong-strawed, awnless, high yielding winter wheat with soft white kernels. Druchamp is highly resistant to stripe rust.

Federation

An early, short-strawed, awnless, brown chaffed spring wheat. The kernels are white, soft, and usually short. Federation is moderately winter hardy and can be fall planted where the winters are mild or snow cover adequate to give protection from winter injury. Federation has moderate resistance to smut, but is susceptible to stem, leaf, and stripe rust. Federation has good soft wheat milling and baking quality.

Gaines

A high yielding short (semi-dwarf) awned, white winter wheat. The kernels are white, midlong, and soft. Gaines is susceptible to stem rust, moderately resistant to leaf and stripe rust, and highly resistant to the prevalent races of bunt. Gaines has better milling characteristics than Brevor but not as good as Omar. The flour has soft wheat baking quality.

Galgalos

A tall, weak strawed, awnless, brown-chaffed spring wheat with soft white kernels. Galgalos is an old wheat variety but still grown to some extent in the Klamath Basin.

Golden

A tall, late, awnless, brown-chaffed white winter wheat. The kernels of Golden are white, short, and soft. Golden frequently has purple colored straw and is susceptible to bunt and moderately resistant to stripe rust.

Henry

A tall, moderately stiff-strawed, awned, white chaffed, hard red spring wheat. Henry is susceptible to stem and leaf rust and moderately susceptible to stripe rust.

Idaed 59

An early, short, stiff-strawed, awnless spring wheat with white, short, soft to semi-hard kernels. Idaed 59 differs from the original Idaed by being resistant to some races of stem and leaf rust. Idaed 59 is moderately susceptible to stripe rust. It has good milling characteristics and produces a pastry-type soft flour.

Lemhi 53

An early, short, awnless spring wheat with short, soft white kernels. Lemhi 53 differs from the original Lemhi by being resistant to some races of stem rust. It is susceptible to leaf and stripe rust.

Omar

A midtall, late, brown chaffed, white club winter wheat. Omar is susceptible to stem, leaf, and stripe rust, but resistant to the prevalent races of bunt. Omar has moderate winter hardiness and often lodges badly in areas of high fertility. Omar has excellent milling and baking qualities.

Orfed

A medium tall, white chaffed, awned, white spring wheat. It has fairly stiff and rather fine straw. Orfed is slightly more winter hardy than Federation, and is usually fall planted. It is fairly early maturing when fall planted, but very late maturing when spring planted. Orfed is resistant to most races of bunt and stripe rust.

Redmond (Alba)

A tall, late, strong strawed, white-chaffed, awnless winter wheat. The kernels are white, short, and very soft. Redmond is susceptible to leaf and stem rust but resistant to stripe rust.

Sentry

A midtall, white chaffed, awned spring durum wheat. The kernels are white (amber), long, and hard. Sentry is resistant to some races of stem and leaf rust. Sentry has high test weight and high protein and generally produces macaroni products of good quality.

White Federation 38

An early, short strawed, white chaffed, awnless spring wheat. The white kernels are short and hard. White Federation 38 is resistant to some races of stem rust and bunt.

Zimmerman

A tall, weak-strawed, white chaffed, awnless spring wheat. Zimmerman has soft, midlong white kernels. It is moderately susceptible to stripe rust.

Summary of Wheat Variety Recommendations

Crop Regions	Winter Wheat		Spring Wheat	
	Recommended	Acceptable	Recommended	Acceptable
Willamette Valley	Druchamp Gaines	Redmond	Beaver Zimmerman	Idaed 59 Henry
Southern Oregon	Gaines Omar		Lemhi 53	White Fed. 38
Columbia Basin (Dryland)	Gaines Omar	Brevor Burt Golden Orfed	Federation Idaed 59	Lemhi 53
Columbia Basin (Irrigated)	Gaines	Brevor Omar	Federation Idaed 59	Lemhi 53
Blue Mountains	Gaines Omar	Brevor Burt	Federation	Lemhi 53
Klamath Basin			Sentry	Baart 46 Galgalos Idaed 59 Lemhi 53
Central Oregon	Gaines Burt	Omar	Lemhi 53	Federation Idaed 59
Lake-Harney	Gaines	Columbia Burt	Lemhi 53	Federation
Snake River Valley	Gaines	Brevor	Lemhi 53 Federation	

Oat Varieties

Carleton

A yellow, early, midtall spring oat variety with fairly strong straw. Carleton is resistant to nearly all races of smut and a heavy yielder under many different conditions.

Cody

A short, stiff-strawed, high yielding, yellowish-white spring oat. Cody is resistant to many races of stem and crown rust and smut.

Crater

A tall, late maturing grey winter oat. Crater has slightly stronger and finer straw than Grey Winter. It does not have sufficient winter hardiness for areas with severe winters.

Grey Winter

A tall, late maturing grey winter oat with large, plump, heavy kernels.

Kanota

A tall, early-maturing, coarse, and sparsely leafed red spring oat. Kanota is often grown in areas where its early maturity gives it a yield advantage.

Overland

A short, stiff-strawed, mid-season, white spring oat variety that produces large, plump kernels of excellent quality. It is resistant to many races of smut and stem and crown rust.

Park

A short, stiff-strawed, high yielding white spring oat variety. Park has short, plump kernels with a high test weight. It is resistant to some races of stem and crown rust.

Powys

A short, stiff-strawed white winter oat variety. Powys is a high yielding variety that produces large plump, high test weight kernels. Powys is not as winter hardy as Grey Winter and may winter kill, except during extremely mild winters.

Victory

A tall, late maturing, white spring oat variety with fairly strong straw. It is susceptible to both rusts and smuts but often a high yielder under many different conditions.

Winema

A short, stiff-strawed yellow spring oat variety. Winema is not a high yielder, but its short straw makes it desirable for seeding with legumes in the Klamath Basin.

Summary of Oat Variety Recommendations

Crop Region	Winter Oats		Spring Oats	
	Recommended	Acceptable	Recommended	Acceptable
Willamette Valley ..	Crater	Grey Winter Powys	Victory	Kanota Park
Southern Oregon ..	Crater		Carleton Park	
Columbia Basin (Dryland)			Carleton	Cody
Columbia Basin (Irrigated)			Carleton	Cody
Blue Mountain			Carleton	Victory
Klamath Basin			Park Winema	Overland
Central Oregon			Park Victory	
Lake-Harney			Park	
Snake River Valley			Park	

Special equipment is used to thresh oat varieties under test at the Klamath Experiment Station.

Rye Varieties

Abruzzi

A vigorous, fast-growing weak-strawed, winter rye that has medium-sized, light brown kernels. Abruzzi has sufficient winter hardiness only for areas with mild winters. It is recommended as a pasture and cover crop.

Balbo

A vigorous, fast-growing winter rye. Balbo is used principally for pasture or as a cover crop. It is slightly more winter hardy than Abruzzi.

Rosen

A late, fairly winter hardy rye that generally produces well-filled heads of large, plump kernels. Rosen is often used for hay in areas where winter wheat will not survive.

Tetra Petkus

A winter hardy, stiff-strawed, tetraploid rye variety that produces high yields of large, plump, green kernels. It has sufficient winter hardiness to be grown as a grain crop on Columbia Basin wheat lands.

Summary of Rye Variety Recommendations

Crop Region	Rye	
	Recommended	Acceptable
Willamette Valley	Abruzzi	Tetra Petkus Balbo
Southern Oregon	Abruzzi	
Columbia Basin (Dryland)		Tetra Petkus
Columbia Basin (Irrigated)		Tetra Petkus
Blue Mountain		Tetra Petkus
Klamath Basin	Rosen	Common*
Central Oregon	Rosen	Common*
Lake-Harney	Rosen	Common*
Snake River Valley		

* Seed of this variety is a mixture of types that has been grown with success in these areas.

Barley Varieties

Alpine

A six-row, rough awned, high yielding winter barley. Alpine is moderately winter hardy but not sufficiently hardy for areas with severe winters. Alpine has a medium short, semi-club head with small kernels. It is recognized by some growers as a disagreeable barley to thresh because of the presence of an irritating fuzz. Alpine is often difficult to roll for feed.

Bonneville

A six-row, smooth awned spring barley with stiff straw. It has been a high yielding barley under irrigation, although it is often difficult to thresh.

Cascade

A six-row, rough awned winter barley with sufficient winter hardiness for the Willamette Valley and southern Oregon. It should not be spring planted.

Flynn 37

A six-row, smooth awned spring barley with moderately stiff straw. Flynn 37 is sometimes planted with fair success in the fall on Columbia Basin wheat lands.

Gem

A six-row, semi-smooth awned, early maturing spring barley with fairly stiff straw.

Hannchen

A two-row, rough awned spring barley with moderately weak straw. Hannchen is the only two-row barley grown in Oregon that is acceptable for malting.

Harlan

A six-row, rough awned spring barley with stiff straw.

Hiland

A six-row, semi-smooth awned, early maturing spring barley with moderately stiff straw. Hiland may be fall planted in the Willamette Valley.

Hudson

A six-row, rough awned, high yielding winter barley. Hudson has fairly stiff straw and has been grown with success as a replacement for Alpine in some areas of the Columbia Basin. Hudson may lodge on deep fertile soils.

Meloy 3

A six-row, hooded spring barley grown as a forage and hay crop in the Blue Mountains.

Olympia

A six-row, rough awned winter barley. Olympia has only moderate winter hardiness and fairly weak straw. It has been largely replaced by Alpine.

Spray

A six-row, hooded spring barley grown as a forage and hay crop in the low rainfall areas of the Columbia Basin.

Traill

A six-row, rough awned, midwestern malting barley grown to a limited extent in the Klamath Basin. Traill often shatters badly.

Trebi

A six-row, rough awned, spring barley. Trebi is a high yielding variety that often lodges badly on fertile soils. Trebi has largely been replaced by new stiff-strawed varieties.

Vale

A six-row, smooth awned, high yielding spring barley with very stiff straw. Vale is recommended to replace Bonneville and Trebi in the Snake River Valley.

Velvon II

A six-rowed, smooth awned spring barley.

White Winter (Winter Club)

A six-rowed, rough awned winter barley with moderate winter hardiness. White Winter is acceptable as a malting barley from areas where the quality is satisfactory.

Wocus

A six-row, smooth-awned spring barley with stiff straw. Recommended as a feed barley for heavier soils in the Klamath Basin and for both fall and spring seeding in southern Oregon.

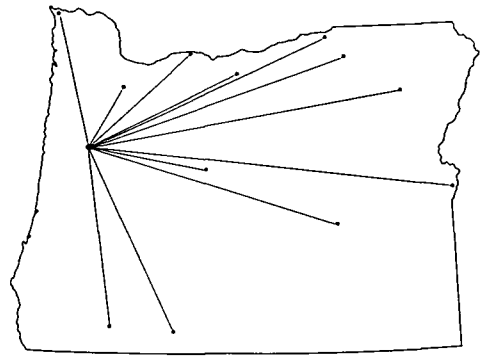
Barley varieties are constantly undergoing tests at the Malheur Experiment Station near Ontario.

Summary of Barley Variety Recommendations

Crop Regions	Winter Barley		Spring Barley	
	Recommended	Acceptable	Recommended	Acceptable
Willamette Valley ..	Cascade		Hannchen	Hiland Trebi
Southern Oregon ..	Wocus*	Cascade	Velvon II Wocus	Trebi
Columbia Basin (Dryland)	Alpine Hudson	Olympia White Winter	Flynn 37 Gem Spray	Harlan Trebi
Columbia Basin (Irrigated)	Alpine	Olympia White Winter	Harlan	Bonneville Gem
Blue Mountains	Alpine		Hannchen Vale	Trebi Meloy 3
Klamath Basin			Hannchen Wocus	Traill
Central Oregon		Alpine	Trebi	Bonneville Hannchen
Lake-Harney			Hannchen Trebi Wocus	
Snake River Valley	Alpine		Vale	Bonneville Trebi

* Wocus, Trebi, and Hiland are spring varieties but they may be planted in the fall in areas with mild winters.

"To Conduct Research on Local Problems . . ."



. . . that's the purpose of your local State experiment stations—established and supported through the efforts of our many forward-looking local citizens.

Oregon has many agricultures. Each one has different problems—each needs different kinds of research.

So that we can come up with the right kinds of information, we carry on research on local problems at 12 experiment stations strategically located in the key agricultural areas of the state. As a matter of fact, many of the results reported in this publication come out of research done at these stations.

These local experiment stations work on the problems which are unique to their areas. And, with the Central Station at Corvallis, Oregonians have put together a strong, flexible organization devoted to answering—through research—the many problems that confront all of us.

The people who do the research at these local experiment stations are interested in your problems and believe their research can be of some help to you. Why not drop in and visit with them some time?

The map above pinpoints the general location of these stations. Here's the nearest city and name of each experiment station: **Astoria,** John Jacob Astor Experiment Station; **Redmond,** Central Oregon Experiment Station; **Union,** Eastern Oregon Experiment Station; **Klamath Falls,** Klamath Experiment Station; **Ontario,** Malheur Experiment Station; **Hood River,** Mid-Columbia Experiment Station; **Aurora,** North Willamette Experiment Station; **Pendleton,** Pendleton Experiment Station; **Moro,** Sherman Experiment Station; **Medford,** Southern Oregon Experiment Station; **Burns,** Squaw Butte Experiment Station, and **Hermiston,** Umatilla Experiment Station.