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# ALFALFA VARIETIES FOR IDAHO

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# ALFALFA VARIETIES FOR IDAHO

**Howard Roylance and John J. Kolar**

Alfalfa is the most widely grown crop in Idaho and occupies the greatest area of cultivated land. It occupies nearly one million acres which is approximately one-tenth of the cultivated area of the state.

For many years Idaho farmers had to be content with a very limited number of improved alfalfa varieties. These were Grimm, Ranger, Orestan, Ladak, and "common". During the past several years plant breeders have been improving alfalfa with respect to yield, resistance to diseases and insects. Many new improved varieties have been released giving Idaho farmers a wide choice of various uses. The problem is determining which variety is best for each particular situation.

## **Recommended Varieties**

Many alfalfa varieties have been tested by the University of Idaho on a limited basis at various locations throughout the state. Differences have been found among varieties in yield, disease and insect resistance. There were no important differences among varieties in the ratio of leaves to stems.

Suggested varieties for various growing areas and climatic conditions are:

### **I. Southern Idaho—(irrigated)**

#### **A. Long rotation**

**Ranger**

**Lahontan**

**Washoe**

#### **B. Short rotation**

**DuPuits**

**Alfa**

## **II. Southern Idaho—(non-irrigated)**

**Ladak**

**Vernal**

## **III. Northern Idaho—(non-irrigated)**

**Alfa**

**DuPuits**

**Ladak**

**Vernal**

## **Plant Certified Seed**

Plant Idaho-grown certified seed of an improved, adapted variety. Idaho certified seed has been field inspected by the Idaho Crop Improvement Association to see that the variety is true to type and meets high standards of purity and germination. Certified seed is your best buy.

## **Variety Descriptions**

A short summary of origin, merits and weaknesses of some principal varieties is presented. These descriptions are based on published information by public and private organizations and on varietal performance in tests conducted in Idaho.

Many private companies marketing alfalfa today have their own private brands, blends and varieties, in addition to the regular standard varieties developed by public agencies. A private variety has a definite seed source and its identity is maintained by the company in much the same manner as publicly developed varieties. Private brands, on the other hand, are merely trademarks and usually refer to a specific line or to a blend. A blend is a mixture of varieties or seed sources and may or may not be the same from year to year.

Results in Idaho and in other states show no advantage for mixtures over the varieties which make up the mixture. The mixture or blend will be inferior to recommended varieties if inferior varieties are included in the mixture.

Much of our alfalfa seed is marketed as "common" alfalfa. "Common" alfalfa refers to alfalfa whose original identity has been lost, or to seed lots failing to meet certification because of improper isolation or other requirements of certification. Hence the characteristics of "common" alfalfa may vary widely.

## Improved Varieties Useful in Idaho

**Ranger** has consistently been one of the better yielding varieties in tests in southern Idaho and a fair performer in northern Idaho. Ranger is winter hardy, resistant to bacterial wilt and is a heavy seed producer. It is somewhat susceptible to foliar diseases and leafhopper yellowing. Flower color is mostly purple with less than five percent yellow flowers.

**Lahontan** is moderately winter hardy, resistant to bacterial wilt, stem nematodes, and the spotted alfalfa aphid and shows some resistance to the green pea aphid. It is very susceptible to foliar diseases and the root rot nematode. In southern Idaho Lahontan has yielded slightly less than Ranger in the absence of stem nematodes. Where stem nematodes are a problem Lahontan is the best available variety for planting. It is not adapted to northern Idaho.

**Washoe** is resistant to bacterial wilt, stem nematodes and the spotted alfalfa and green pea aphids. It is susceptible to most leaf diseases. Washoe has slightly better winter hardiness than Lahontan and a higher yield, primarily because of higher yields at first cutting. It should be used in preference to Lahontan wherever stem nematodes are a problem or pea aphids are likely. Seed will become available in the fall of 1966.

**DuPuits** is a private variety developed in France. It is moderately winter hardy and is vigorous growing with quick recovery after cutting. It is moderately resistant to certain foliage diseases, but susceptible to crown rots and bacterial wilt. In three years of testing it yielded slightly less than Ranger at Aberdeen and Twin Falls, and more than Ranger at Parma. It is not suited for long term rotations in southern Idaho irrigated areas because of the presence of bacterial wilt and crown rots. DuPuits has predominately dark purple flowers.

**Alfa** is a private variety, developed in Sweden. It is somewhat more winter hardy than DuPuits.

It is similar to DuPuits in that it is a vigorous growing variety, quick to establish and quick to recover after cutting. It is susceptible to bacterial wilt and, therefore, is not suitable for planting in the southern Idaho irrigated areas where a stand is expected to be maintained for longer than three years. Alfa yielded less forage than Ranger and DuPuits at Twin Falls and Aberdeen. It is one of the higher yielding varieties in northern Idaho.

**Ladak** is an old variety. It yields very well in the first cutting but not as well as most varieties in the second cutting. It is slow to recover after the first cutting and becomes dormant during prolonged drought periods in summer and early fall. Ladak is winter hardy, somewhat resistant to bacterial wilt, but susceptible to leaf spot diseases. Ladak does not yield well in southern Idaho under irrigation, primarily because of low yields in the second and third cuttings. Ladak is best suited to areas in northern and southeastern Idaho where rainfall is normally sufficient to produce only one cutting plus limited regrowth.

**Vernal** is winter hardy and resistant to bacterial wilt. The plants are broad crowned and fine stemmed. Vernal has some tolerance to leaf diseases but is susceptible to the green pea aphid. Vernal did not perform well in tests at Aberdeen and Twin Falls, primarily because of its slow recovery after cutting. Vernal is one of the better varieties at Teton and in northern Idaho.

**Table 1. Alfalfa hay yields under irrigation in southern Idaho\***

Variety	Aberdeen	Parma	Twin Falls
Ranger	100	100	100
Ladak	92	—	96
Lahontan	98	95	95
DuPuits	97	111	99
Alfa	93	—	104
Vernal	89	—	91
Washoe	—	103	98

\*Yields are expressed as percent of Ranger.

**Table 2. Alfalfa hay yields on dryland at Tetonia\***

Variety	Tetonia
Ranger	100
Ladak	109
Lahontan	72
DuPuits	84
Vernal	137

\*Yields are expressed as percent of Ranger.

**Table 3. Alfalfa hay yields in northern Idaho\***

Variety	Moscow	Sandpoint
Ranger	100	100
Ladak	109	100
Lahontan	77	—
DuPuits	108	114
Alfa	109	—
Vernal	114	105

\*Yields are expressed as percent of Ranger.

## The Authors

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