

VARIETY SELECTION

ALFALFA VARIETY SELECTION

All forage varieties (and especially alfalfa) change frequently, so specific alfalfa variety recommendations are not included in this manual. For the latest on available varieties, contact your seed retailer and ask for comparative information on the varieties being sold. Important considerations when selecting an alfalfa variety include winter hardiness, disease resistance and yield. This information is available for all certified varieties.

GRASS VARIETY RECOMMENDATIONS

Grass varieties do not change as quickly as alfalfa, so the following information is relevant, but may not include the most recent varieties.

GRASS VARIETY RECOMMENDATIONS

| Species | Varieties | Winter ¹ Hardiness | Maturity ² | Comments |
|-------------------------------|---------------------------|----------------------------------|-----------------------|--|
| Bromegrass, Smooth | Carlton, | 5 | Medium | Hay types. |
| | Baylor, Bravo, | 5 | Medium | Hay types. |
| | Magna, | 5 | Early | Pasture type, early spring growth. |
| | Manchar Rebound | 5 | | Good re-growth |
| Bromegrass, Meadow | Regar Fleet Paddock | 5 | Medium | Suitable for irrigated pasture and hay; early spring growth, better fall growth than smooth brome. |
| Orchardgrass | Amba | 3 | Medium | Good maturity when grown with alfalfa. |
| | Chinook | 4 | Early | Matures too early in alfalfa mix. |
| | Dactus | 3 | Medium | |
| | Frode | 3 ⁺ | Medium | |
| | Kay | 3 ⁺ | Medium Late | Offers good combination of maturity, yield and winter hardiness. |
| | Mobite | 3 | Late | Very late maturity, inadequate data to fully evaluate winter hardiness. |
| | Napier | 3 ⁺ | Medium | Performs well here. |
| | Potomac | 2 | Early | Marginal winter hardiness. |
| | Arctic AC Splendour | 3 ⁺ 3 ⁺ | Medium Late | |
| Tall Fescue | Festorina | 3 | Intermediate | Good yields, not as hardy as Courtenay |
| | Barcel | 3 | Intermediate | Good disease resistance, palatable |
| | Montebello | 3 ⁺ | | Good winter hardiness |
| | Courtenay | 3 ⁺ | Late | High Yields, good winter hardiness. The standard to which others are compared |

¹ Grass Winter Hardiness Estimates for Kamloops: 1 – 5 (5 most winter hardy)

² Maturity – refers to time required to reach early heading, estimated relative to medium,. Maturity alfalfa varieties:

- Early - heads before first flower of alfalfa
- Medium - heads approximately same as first flower of alfalfa
- Late - heads at full blossom alfalfa

Order seed varieties early. With the numerous varieties available not all are in stock at seed retailers.

GRASS VARIETY RECOMMENDATIONS CON'T.

| Species | Varieties | Winter¹ Hardiness | Maturity² | Comments |
|---------------------------------|------------------|---|-----------------------------|---|
| Timothy | Bottnia II | 5 | Late | High yielding, single cut, hay. |
| | Champ | 5 | Med | Early medium maturing variety, short seed heads, good re-growth; pasture type. |
| | Climax | 5 | Med – Late | High yielding hay type; long seed heads. |
| | Farol | 5 | Late | Latest maturing variety; hay type. |
| | Richmond | 5 | Med | Hay or pasture, intermediate maturity between Toro and Climax. |
| | Salvo | 5 | Early | Pasture type, good re-growth. |
| | Timfor | 5 | Med – Late | High yielding hay type. |
| | Toro | 5 | Early | Pasture type, good re-growth. |
| | Glenmor | 5 | Med – Late | Hay type. |
| | Winmor | 5 | Med – Late | Good disease resistance, hay type. |
| | Colt | 5 | Early | Moderate re-growth; excellent hardiness |
| Grindstad | 5 | Medium | Good re-growth | |
| Wheatgrass crested | Fairway | 5 | Early | Adapted to range and dryland seedings. Short, fine stems; less productive than Nordan or Summit. |
| | Nordan | 5 | Early | Tetraploid type, erect growth, good yield. |
| | Parkway | 5 | Early | Diploid type, erect; establishes quicker than Nordan or Summit. |
| | Summit | 5 | Early | Tetraploid; good yield. |
| Wheatgrass, Intermediate | Chief | 3 | Late | High yielding, good mix with alfalfa. |
| | Clarke | 3 | Late | Similar yield to Chief, slightly better hardiness. |
| Wheatgrass, Pubescent | Greenleaf | 3 ⁺ | Late | Similar to intermediate wheatgrass, better adapted to drought and alkaline soils. Palatable to livestock. |

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| Species | Varieties | Winter¹ Hardiness | Maturity² | Comments |
|---|--------------------------------|---|-----------------------------|--|
| Reed canarygrass | Palaton | 5 | Late | Lower alkaloid content and better palatability than Vantage. Low tryptamine; alkaloid content less likely to poison animals than past varieties; high yield. Lower alkaloid, higher palatability than Vantage. |
| | Vantage | 5 | Late | |
| | Venture | 5 | Late | |
| Ryegrass, perennial | Numerous varieties | 1-2 | Early to Late | No reliably winter hardy varieties yet available. Established quickly, high quality forage. |
| Ryegrass, Italian Italian types 2N = diploid 4N = tetraploid | Lemtal (2N) | N/A | Early | Leafy; excellent pasture variety. |
| | Maris Ledger (4N) Barmultra | N/A | Early | More susceptible to over grazing than Lemtal or Barmultra. More erect than Lemtal. Satisfactory grazing tolerance. |
| Ryegrass, annual Westerwold (Not recommended as they set seed very early and have become a weed problem. | | | | |

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SEEDING RATE RECOMMENDATIONS

One of the most frequent questions that is asked is "How much should I seed?" Although seeding rates are important, especially as they normally represent a significant cash outlay, the ultimate success of a seeding is much more dependent on other factors such as irrigation, fertility and harvest or grazing management.

Seeding rates are expressed in units of weight per unit of area (e.g. kg/ha or lb./acre) but the number of seeds in a given unit of weight varies tremendously (for example alfalfa contains approximately 440,000 seed per kg, timothy 2,700,000 seeds per kg). If alfalfa is seeded at 10 pounds per acre this is a density of 46 seeds per square foot; timothy at 10 pounds per acre would have over 270 plants

per square foot. A medium seeding density is 50 seeds per square foot. Obviously, not all seeds germinate and grow, but in an established alfalfa field, 4 to 5 plants per square foot is normal. It is apparent that following good management practices at seeding time and throughout the establishment year is important to obtain a good stand.

The following seeding rates assume a good seed bed and adequate irrigation and weed control during the establishment season. Higher seeding rates may result in a greater establishment year yield, but research has shown that yield differences are not significant in subsequent years.

Dryland seeding rates are typically lower as fewer plants can be supported by the available moisture.

Kamloops - Forage Seeding Rate Recommendations

| <u>Precipitation Range</u> | <u>Species</u> | <u>Seeding Rates</u> <u>(lb./ac)</u> | |
|--|--|---|----------------|
| | | <u>Silage or Hay</u> | <u>Pasture</u> |
| Non-irrigated | | | |
| Under 330mm | Crested wheatgrass | 5 | 5 |
| 300-375mm | Crested wheatgrass + alfalfa | 6 + 5 | 6 + 2 |
| Over 375mm | (a) Crested wheatgrass + brome-grass + alfalfa | 0 + 0 + 10 | 3 + 5 + 2 |
| | (b) Bromegrass + alfalfa | 0 + 10 | 8 + 2 |
| Over 450mm sub-irrigated or high water table | (a) Bromegrass + orchardgrass + white clover (low) | 4 + 16 + 1 | 4 + 12 + 1 |
| | (b) Perennial ryegrass + white clover (tall) | 15 + 1/2 to 1 | |
| | (c) Timothy + Alsike clover + white clover (tall) | 6 + 4 + 1/2 to 1 | |
| Areas subject to flooding | (a) Reed canarygrass + Alsike Clover | 10 + 2 | |
| | (b) Meadow foxtail | 10 to 15 | |

| <u>Precipitation Range</u> | <u>Species</u> | <u>Seeding Rates (lb/ac)</u> | |
|----------------------------|---|----------------------------------|---------------------|
| | | <u>Silage or Hay</u> | <u>Pasture</u> |
| Irrigated | | | |
| | (a) Meadow brome grass + alfalfa | | 10 + 2 |
| | (a) Orchardgrass + white clover (tall) | | 10 to 15 + 1/2 to 1 |
| | (b) Perennial ryegrass + white clover (tall) | | 20 + 1/2-1 |
| | (c) Alfalfa | 10 | |
| | (d) Alfalfa + smooth brome grass | 8 + 4 | |
| | (e) Alfalfa + orchardgrass | 8 + 4 | 2 + 12 |
| | (f) Alfalfa + intermediate wheatgrass | 6 + 8 | |
| | (g) Alfalfa + pubescent wheatgrass | 6 + 8 | |

Horse Pasture

| | |
|---------------------------------------|---------------------|
| (a) Orchardgrass + white clover | 10 to 15 + 1/2 to 1 |
| (b) Kentucky bluegrass + white clover | 10 + 1/2 to 1 |

Annual Crops For Hay, Pasture or Silage

| <u>Species</u> | <u>Seeding Rates (lb./ac)</u> |
|---|-----------------------------------|
| (a) Oats, barley or wheat (alone or mixed) | 100 |
| (b) Double Crop Barley | 100 |
| (c) Barley/Annual Ryegrass | 80 + 20 to 30 |
| (d) Annual or Italian ryegrass | 20 to 25 |
| (e) Field corn (silage only) for var. see field corn recommendations | 75,000 to 90,000 seeds/ha |
| (f) Sorghum or sorghum-sudangrass hybrids - 18 to 35 cm rows | 15 to 30 |
| (g) Faba beans (silage only) 15 to 20 cm rows | 125 to 150 |
| (h) Fall rye (pasture only) | 100 |
| (i) Spring planted winter wheat | 80 |

Note: (lbs/acre x = kg/ha