

SELECT PASTURE & SPECIAL PURPOSE GRASSES

(Irrigated and Non-Irrigated Varieties)

PASTURE SEED PLANTING INSTRUCTIONS

Take soil samples of the field and have them tested to determine fertilizer and lime requirements.

Apply fertilizer according to the results of the soil tests.

Cultivate the soil to a depth of at least six inches by plowing, discing or rotovating. Prepare a good seed bed; level, with relatively fine soil particles.

Generally speaking, sow 20 to 25 pounds per acre if drilling and 40 pounds per acre of broadcasting. Drill the seed to a depth of 1/4 inches, or if broadcast, cover the seed to this depth. Firm the seed bed to insure good contact of seeds and soil. Straw mulching at this point would be a plus.

Irrigate as needed to maintain soil moisture. The new seeding should not be allowed to dry until the seedlings are well rooted. Even one day of dryness will have a major impact on your young seedlings.

Do not graze the pasture until the plants have become established.

. . . and remember the 'Phases of Growth' you learned about in our class.

Follow these steps and you will be off to a great start in truly making the grass greener on your side of the fence.



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Orchardgrass (*Dactylis glomerata*) cool-season, tall, long-lived, rapidly growing bunchgrass. It is adapted to well-drained soils, and has the ability to stand relatively poor soils – so long as they are well drained. Develops rapidly in spring. If adequately fertilized, production is distributed well through the growing season. Withstands both heat and drought, depending on cultivar, and is shade tolerant. Prefers neutral to higher pH, needs lime on acid soils. It is suited for hay, pasture and erosion control. Adapted to areas from eastern Great Plains to New England, and to irrigated areas and high-rainfall mountains of the Pacific Northwest. Responds well to nitrogen fertilizer. Becomes very competitive when nutrients are available. Generally needs a minimum of 16 inches of annual effective precipitation.

Common Cultivars: Latar, Pauite, Potomac, Profile

Seed Count: 420,000 to 590,000 per pound

Seeding Rate: 18 to 25 lbs/acre

Seeding Time: March 1 to May 15 and September 1 to November 1

Germination: 10 to 21 days

Mature Height: 28 to 50 inches

Effective annual precipitation needed: 16-20 inches

Perennial Ryegrass (*Lolium perenne*) An important cool-season bunchgrass well adapted in the Pacific Northwest. Relatively short-lived perennial grass often used on lowlands, soils with poor drainage, and on acid soils. Adapted to a wide range of soil conditions west of the Cascades and Sierras. Can be grown under irrigation or on dryland areas with a minimum of 15 inches effective annual precipitation. Does best in cool-moist regions with mild winters; grows well on heavy soils; tolerates heavy grazing. Widely used in mixtures for pasture, hay, erosion control and for rough lawns. Tends to go dormant in summer months. Nutritious and palatable. Germinates very rapidly. Newly seeded pastures may be grazed within two months of seeding. Yield, protein and digestible organic matter improve with nitrogen applications of 25 to 100 lbs per acre.

Common Cultivars: Linn, various Diploid and Tetraploid Cultivars (Tetraploid is usually preferred)

Seed Count: 210,000 to 250,000 per pound

Seeding Rate: 20 to 25 lbs/acre

Seeding Time: March 1 to June 15 and September 15 to November 1

Germination: 7 to 14 days (less with optimum conditions)

Effective annual precipitation needed: 15 inches

TALL FESCUE (*Festuca arundinacea*): cool season, deep rooted, long lived perennial bunchgrass. Thick stands will produce a tough sod if mowed or grazed. Vigorous, grows well on wet and dry soils, does best on heavy soils. Tolerant of poor drainage and clay, is also drought resistant; tolerant of both strongly acid and strongly alkaline soils. Excellent for summer pasture and hay, also for erosion control. Yields well in areas of at least 18 inches of annual effective precipitation. Produces abundantly with irrigation and high fertility. Best seeded with legume for added palatability and nutrition levels. Some palatability loss as plants mature and become more coarse. While a vigorous plant, new seedlings are somewhat slow to establish. Should not be grazed too soon, and not the first winter. Adapted to wide range of climatic conditions. Widely used in South eastern U.S, Western Oregon, California and Washington, and in irrigated areas of most other states. Responds readily to high rates of nitrogen. In mixtures with legumes, liming phosphate and potash applications are recommended.

Common Cultivars: Fawn, Martin, Barolex, Bariance (do not use KY-31 as it is not Endophyte free)

Seed count: 200,000 to 230,000

Seeding rate: 20 to 25 pounds per acre

Seeding time: September 15 to November 1 and March 15 to May 15

Germination: 7 to 14 days

Mature height: 30 to 72 inches

Effective annual precipitation needed: 18 inches

SHEEPS FESCUE (*Festuca ovina*): Durable turfgrass on sandy soils, used for erosion control. Cool season bunchgrass, cold and drought tolerant. More drought tolerant than other fine leaved fescues. Succeeds on sandy, gravelly soils. Not for wet areas. Not widely used for pastures. Clumpy, dense tufted grower, heavy root system. Adapted to dry sites and high altitudes.

Common Cultivars: Covar

Seed count: 670,000 to 690,000 seeds per pound

Seeding rate: 6 to 8 pounds per acre

Seeding time: April 15 to May 15

Germination: 7 to 14 days

Mature height: 8 to 16 inches.

Effective annual precipitation needed: 10-14 inches

STREAMBANK WHEATGRASS (*Agropyron Riparium*): A sod forming, very drought tolerant low growing coarse, perennial grass. A Western native which grows in the area from British Columbia and Alberta through most of the Western states, except Arizona and New Mexico. Strong rhizomes aid rapid spread to form a dense sod which is highly resistant to erosion. Irrigation during the first year will greatly increase success of your plantings. Valuable for ground cover, airports, roadside seedings, and is especially useful for controlling erosion of ditch, stream banks and road cuts. Very effective weed barrier once completely established, but can be crowded out by competition, if site is too wet.

Common Cultivars: Sodar

Seed count: 156,000 to 170,000 seeds per pound

Seeding rate: 10 pounds per acre

Seeding time: March 15 to May 15 (slightly higher success with a Spring planting vs Fall)

Germination: about 14 days

Mature height: 12 to 20 inches

Effective annual precipitation needed: 10-14 inches

TALL WHEATGRASS (*Agropyron elongatum*): A tall, coarse, long lived, late maturing bunchgrass used for hay and pasture primarily in the northern Great Plains and the intermountain region. Can be grown on wet, alkaline and saline soils; is used extensively for reclamation of these soils; has good seedling vigor. Not as drought resistant as crested wheatgrass. Produces high yields, but not as palatable as most Wheatgrasses. Makes fair hay, can be used for silage. Does not withstand close grazing. Seedlings may require one full year of protection before grazing. Makes excellent wildlife cover, food and nesting habitat. Established fields can even withstand extended periods of flooding.

Common Cultivars: Alkar, Largo, Jose, Platte

Seed count: 65,000 to 79,000 seeds per pound

Seeding rate: 14 to 15 pounds per acre

Seeding times: March 15 to May 15

Germination: 12 to 18 days, can be slow to start.

Mature height: 30 to 60 inches

Effective annual precipitation needed: 12 to 14 inches

PUBESCENT WHEATGRASS (*Agropyron trichophorum*): cool season sod forming perennial grass closely related to intermediate wheatgrass. The two are similar in growth habit, period of growth, and most characteristics, differing in that the heads and seeds of pubescent wheatgrass are covered with short, stiff hairs which suggest the name "Stiff hair wheatgrass." Pubescent wheatgrass is often more drought tolerant than intermediate wheatgrass. Used for permanent seedings on rangeland. Needs a minimum of 12 inches of rainfall below 3,500 feet elevation.

Common Cultivars: Luna, Greenleaf, Manska, Greenar

Seed count: 80,000 to 100,000 seeds per pound

Seeding rate: 12 to 15 pounds per acre

Seeding time: March 15 to May 15

Germination: about 14 days

Mature height: 28 to 50 inches

Effective annual precipitation needed: 12 inches

INTERMEDIATE WHEATGRASS (*Agropyron intermedium*): An important cool season sod forming, late maturing perennial grass imported successfully in 1932 from the Caucasus region of Russia. Used for pasture and hay in the northern Great Plains, west to Washington, south to Colorado and Kansas. Adapted to areas of 15 or more inches of annual precipitation; has grown in elevations up to 10,000 feet. Good persistence drought tolerance and winter hardiness. Produces good hay yields, grows well with alfalfa, suitable for erosion control. On well drained, fertile soils with ample moisture will grow to 6 feet. Hay yields are high, makes excellent pasture from early spring to late summer. Easily established, grows rapidly. Not as winter hardy as crested wheatgrass. Difficult to maintain stands more than 6 years. Often best above 3,500ft elevation or in cooler microclimates areas.

Common Cultivars: Oahe, Rush, Reliant, Manifest

Seed count: 83,000 to 95,000 seeds per pound

Seeding rate: 12 to 15 pounds per acre

Seeding time: March 15 to May 15

Germination: about 14 days

Mature height: 30 to 60 inches

Effective annual precipitation needed: 15 inches