

'Tegmar'

Dwarf intermediate wheatgrass

Thinopyrum intermedium (Host) Barkworth &
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A Conservation Plant Release by USDA NRCS Aberdeen Plant Materials Center, Aberdeen, Idaho



'Tegmar' dwarf intermediate wheatgrass

'Tegmar' dwarf intermediate wheatgrass was released in 1968 in cooperation with the University of Idaho Agricultural Experiment Station. It is used primarily for erosion control because of its strong seedling vigor, rapid sodding ability and short, dense growth.

Description

Tegmar is a dwarf strain of intermediate wheatgrass and grows to 1.5-2 feet tall, about half the height of non-dwarf intermediate wheatgrass varieties. It is a long-lived, introduced, cool season grass with short rhizomes and a deep feeding root system forming a dense sod. The numerous leaves are narrow, light green to blue green and mostly smooth. Stems are fine, mostly smooth and erect. The seed spikes may be up to 4 to 8 inches long. The lemmas, paleas and glumes are smooth. The glumes are acute to blunt, generally five nerved and awn-less to awn-

tipped. There are usually fewer than seven florets per spikelet.

Source

The USDA Natural Resources Conservation Service, Plant Materials Center (PMC) at Pullman, Washington received the original seed from the Westover-Enlow expedition in 1934. It was collected near Bolu, Turkey.

Tegmar was selected for dwarf size, vigorous sod forming characteristics, fine stems and narrow leaves at the Pullman, WA PMC. Extensive testing through field plantings at farms in eastern Idaho and at University of Idaho Agricultural Experiment Stations was conducted to evaluate its performance for erosion control.

Conservation Uses

Tegmar is best suited for erosion control because of its strong seedling vigor, rapid sodding ability, late maturity, and short, dense growth. Although it produces quality forage, it is less productive than the taller and more robust varieties of intermediate and pubescent wheatgrass. Tegmar is adapted to areas receiving 13 inches or more annual precipitation.

Area of Adaptation and Use

Tegmar is adapted to the Northwest and Intermountain West regions of the United States where annual precipitation is 13 inches or more. It may be adapted to the mountains of the Southwest, the Western and Northern Great Plains and the Southern Canadian Plains. Tegmar is well adapted to moderately deep, loamy to silt loam soils but also grows on sandy and clayey soils.

Establishment and Management for Conservation Plantings

Tegmar should be seeded into a firm, weed-free seedbed with a drill at a depth of ½ inch or less on medium to fine textured soils and no more than 1 inch deep on coarse textured soils. Recommended seeding rate is 10 pounds Pure Live Seed (PLS) per acre. For critical area erosion control, double the seeding rate. When used as a component of a seed mix, adjust to the percent of mix desired.

Planting should take place in very early spring on heavy to medium textured soils and in late fall (dormant) on medium to light textured soils. Irrigated lands should be seeded in spring or late summer. Late summer (August - mid September) seedings are not recommended unless irrigation is available.

Intermediate wheatgrass establishes fairly quickly. Establishment is quicker than meadow brome or smooth brome varieties. Seedling vigor is good to excellent. Under favorable conditions intermediate wheatgrass provides good weed suppression. It makes good spring growth, fair summer growth, and good fall growth, if moisture is available. Light, frequent irrigation is beneficial for stand establishment.

Protect a new seeding until it is fully established and the plants are able to withstand pulling by grazing animals without being uprooted.

Stands may require weed control measures during establishment. Application of herbicides to control broadleaf weeds should not be made until plants have reached the four to five leaf stage (be sure to read and follow label directions). Mowing the stand when weeds are beginning to bloom will reduce weed seed development. Grasshoppers and other insects may also damage new stands and pesticides may be needed for control.

Ecological Considerations

This release is from a species that was introduced to the United States in the early 1900's. Tegmar represents an incremental improvement in performance within a well documented species. Tegmar spreads very little via seed distribution. It is not considered a weedy or invasive species but can spread into adjoining vegetative communities under ideal environmental conditions. There are no known negative impacts on wild or domestic animals.

Seed and Plant Production

Seed production of Tegmar dwarf intermediate wheatgrass is generally not difficult. Row spacing of 36 inches dryland (areas with a minimum of 14 inches annual precipitation) and 24 to 36 inch row spacing under irrigation are recommended. Intermediate wheatgrass is rhizomatous and to maintain seed production it should be maintained in rows. Cultivation is required to maintain rows.

Average production of 250 to 350 pounds per acre can be expected under dryland conditions. Average production of 450 to 550 pounds per acre can be expected under irrigated conditions. Seed yields drop significantly after about four years of production. Harvesting is best completed by swathing, followed by combining of the cured rows. The seed heads will shatter when mature and if direct combining is desired the stand should be

harvested when the top of seed heads just begin to shatter. Harvested seed must be dried to 12 percent moisture before storing in bins and to 15 percent before storing in sacks. Seed is generally harvested in mid to late August.

Availability

For conservation use: Certified seed is available from commercial seed vendors.

For seed or plant increase: Breeder and Foundation seed is maintained by the Aberdeen PMC. Foundation seed is available through the University of Idaho Foundation Seed Program and the Utah Crop Improvement Association. Certification of seed is limited to not more than two generations from Foundation seed.

For more information, contact:
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Citation

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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov>>

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