

# TEGMAR

## Dwarf Intermediate Wheatgrass



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## SUMMARY

1. TEGMAR dwarf intermediate wheatgrass, *Agropyron intermedium*, is generally adapted to the same soils and climatic conditions as pubescent and intermediate wheatgrass varieties.
2. Selected for its shorter growth form and vigorous sodding habit, it is suited for use as an erosion control plant.
3. TEGMAR dwarf intermediate wheatgrass produces quality foliage but yields less than the taller, more robust varieties.
4. It has shown greater resistance to injury by Banks grass mite than other varieties of pubescent wheatgrass and intermediate wheatgrass.
5. Seedling vigor is strong so that stands are easily established on good, clean seedbeds.
6. Established plants sod early and vigorously to produce a moderately dense turf. Stands have recovered from up to 4 inches of siltation.
7. TEGMAR dwarf intermediate wheatgrass is winter hardy and long-lived. It can be seeded in late fall, winter or early spring on non-irrigated soils.
8. Seed production is good when standard cultural techniques applicable to other grass varieties are used.
9. TEGMAR should be one of the grasses especially adapted to erosion control seedings requiring a rapid-developing, long-lived, turf-forming grass.

### Front Cover Photo

Excellent seedling vigor of TEGMAR dwarf intermediate wheatgrass is shown in 1-year-old waterway seeding in Teton Basin.

3½M-3-69

# TEGMAR

**Dwarf Intermediate Wheatgrass** *Agropyron intermedium* (Host) Beauv.

Harold L. Harris—Howard B. Roylance

TEGMAR is a long-lived, late-maturing dwarf strain of intermediate wheatgrass that forms a dense sod. The numerous narrow leaves are light green to blue green, and mostly smooth. Stems are fine, mostly smooth and erect. General height is about one-half that of other intermediate wheatgrass varieties.

TEGMAR equals other intermediate wheatgrass varieties in seedling emergence. Seedlings start sodding sooner, make a denser turf, and are more drouth tolerant. TEGMAR is more resistant to damage by the Banks grass mite than any other strains of intermediate or pubescent wheatgrass tested at the Aberdeen Plant Materials Center.



Heavy spring run-off fails to erode 4-year-old waterway seeding in Teton Basin.





TEGMAR stubble and dense sod protect waterways from early spring run-off in Rockland Valley.

## ADAPTATION AND USE

TEGMAR is a quality forage plant but is less productive than the taller and more robust varieties of intermediate and pubescent wheatgrasses.

Because of its strong seedling vigor, rapid sodding ability, late maturity, and short, dense growth, it is an excellent erosion-control plant. It can be used on highway rights-of-way, reservoir berms, waterways, diversions, ski slopes, and recreation areas.

TEGMAR has been evaluated as an erosion plant for waterways and diversions in numerous seedings on non-irrigated farms in

eastern Idaho. Its performance compared to the other grasses is as follows:

- a. Superior to SODAR wheatgrass in rate of establishment and turf density (SODAR is more drouth tolerant and produces less forage);
- b. Superior to crested wheatgrass in turf density, tolerance to siltation, and lateness of cureout;
- c. Superior to other intermediate wheatgrass and smooth brome grass varieties in stand density, drouth tolerance, and maintenance requirements, and equal in rate of establishment;
- d. Superior to pubescent wheatgrass in stand density, and maintenance requirements and equal in rate of establishment and drouth tolerance.

TEGMAR has shown good performance on moderately deep to deep, well drained, sandy loam to silt loam soils in areas where annual precipitation averages 13 inches or more, and where the frost-free period is less than 120 days. Good plant performance will require more moisture in areas where growing seasons are longer.



TEGMAR prevents soil erosion and weed invasion of diversions and terraces.

## CULTURE AND MANAGEMENT

Seedlings are frost tolerant. Plantings can be made in fall or spring. Spring planting is recommended for soils subject to crusting or frost-heave. Plantings in waterways and diversions should be made after spring run-off.

Seed beds should be clean, firm, and moist. Seeding directly into clean, standing stubble is preferred for waterways and diversions. A seeding rate of 10-15 pounds per acre is adequate.

After seeding, control weeds as necessary by mowing or spraying 2,4-D. Do not spray with 2,4-D until after the seedlings have 6 or more leaves. Mowing should leave a minimum of 4-6 inches of grass stubble. New seedings should not be grazed. Nitrogen applied at 20-40 pounds available N per acre will aid establishment on low fertility sites.



Two-year-old seeding of TEGMAR provides excellent erosion control with a minimum of maintenance.



## **SEED PRODUCTION**

TEGMAR is a good seed producer under irrigation with clean seed yields averaging 400-600 pounds per acre for three harvest years. Best yields are obtained when planted in rows spaced 30-36 inches apart. Fields should be cultivated as necessary for weed control and to keep the grass confined in narrow rows not wider than 4-6 inches.

TEGMAR can be directly combined. However, higher yields have resulted by swathing, allowing the crop to cure and then combining with pick-up attachment. TEGMAR holds its seed well but threshes easily when cured. Over-threshing can result in a high percentage of hull-less seed.

Normal cultural practices for irrigation, fertilization, and weed control used for seed production of other grasses are applicable to TEGMAR. Rules and regulations of the Idaho Crop Improvement Association should be followed.

## **BREEDER AND FOUNDATION SEED**

TEGMAR was accepted by the Idaho Crop Improvement Association for general use in June, 1968.

Breeder and Foundation seed is maintained by the Soil Conservation Service, Plant Materials Center, Aberdeen. Foundation seed is available to interested growers through the Idaho Crop Improvement Association and local Soil and Water Conservation Districts.

## **ORIGIN AND SELECTION**

TEGMAR was developed from accession PI-109219 collected in 1934 near Bolu, Turkey by the Westover-Enlow expedition. It was selected by open-pollination techniques at the Soil Conservation Service, Plant Materials Center, Pullman, Washington.

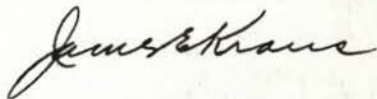
## **TESTING AND EVALUATION**

Initial and use tests have been made by the Soil Conservation Service Plant Materials Centers working in cooperation with the Idaho Agricultural Experiment Stations, and through field plantings conducted on farms of Soil Conservation District cooperators.

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JAMES E. KRAUS, *Director*