



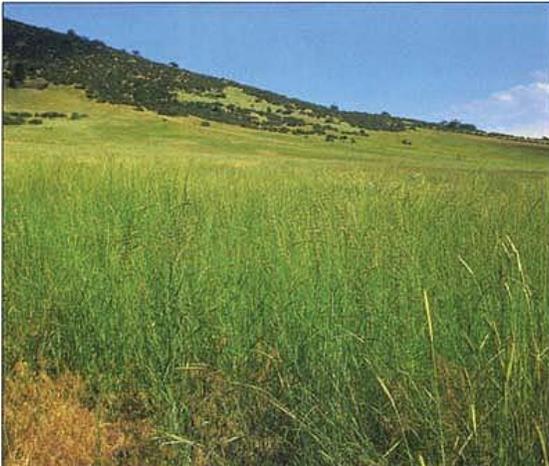
United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

'Luna'

pubescent wheatgrass

Thinopyrum intermedium (Host) Barkworth &
D.R. Dewey

A Conservation Plant Release by USDA NRCS Los Lunas Plant Materials Center



'Luna' Pubescent Wheatgrass

'Luna' pubescent wheatgrass (*Thinopyrum intermedium* (Host) Barkworth & D.R. Dewey) was released in 1963 by the NRCS Los Lunas Plant Materials Center in cooperation with the New Mexico State University Agricultural Experiment Station in Los Lunas.

This cool-season perennial grass has the following qualities:

- Excellent forage production
- Vigorous seedling development
- Most drought resistant of the taller growing wheat grasses
- Long-lived, rhizomatous

Description

Luna pubescent wheatgrass is a cool-season, perennial, long-lived, rhizomatous grass like intermediate wheatgrass (*Thinopyrum intermedium*) in appearance except having varying degrees of pubescence throughout the plant. Some seed heads appear glabrous, but all basal leaf blades are hairy. It is less pubescent than other strains tested. The leaves are wide, lax, and dark green. Plants stem height averages 48 inches, and leaf height averages 30 inches.

Luna is considerably superior in leafiness and herbage production compared to the average of other tested accessions. Under irrigation, herbage production averaged 7,190 lbs per acre, air-dried. This amount was determined by taking one clipping per year at a stubble height of 6 inches from the seed production block; two years of data.

Source

Collected in 1934 by the Westover-Enlow expedition to the former USSR and Turkey. Introduced as *Agropyron popovii* Drobov, Pl 106831. Identified by J.R. Swallen as *A. trichophorum* (Link) Richter, now *T. intermedium*. It was received at the former Albuquerque Soil Conservation Service Nursery under the number P.I. 106831 via Turkestan. Carried and tested as A-1115-R₂-B.

Conservation Uses

Luna pubescent wheatgrass produces an abundance of dark green palatable forage. It produces more forage than other wheatgrass strains. It is a good pasture grass. Because it spreads by rhizomes, it is a good soil-stabilizing grass for use on ditch banks, riparian zones and general erosion control.

Area of Adaptation and Use

Luna pubescent wheatgrass is an excellent dry-land pasture grass on the deeper soils of the upper big-sagebrush area and the scrub oak zone. It grows best in loamy and sandy soils. It also produced more forage and seed than other strains and species on shallow, infertile soils at these elevations. Luna needs an area where an effective portion of the annual precipitation occurs as accumulated snow. Being taller and producing more forage than crested wheatgrass (*Agropyron cristatum*), Luna pubescent wheatgrass requires a little more moisture, but it persists and grows on less than does intermediate wheatgrass. Luna becomes dormant during periods of drought. Unless the growing area receives at least 18" of annual precipitation, Luna will require irrigation.

Establishment and Management for Conservation Plantings

Luna pubescent wheatgrass has excellent seedling vigor that results in fast establishment which is an outstanding characteristic of this variety. Field tests show Luna to be superior in seedling vigor to other tested accessions. Pubescent wheatgrass tends to become "sod-bound" under irrigation because of its rhizomatous propagation and vigorous rooting. This characteristic will reduce production after three years. To rectify this, a sod-bound field should be deep ripped at a depth of 4-6" to break up the root mat and release nutrients.

Ecological Considerations

Luna pubescent wheatgrass is virtually free of diseases. It may be infested in the spring with a light population of red spider mites that can be effectively controlled by dusting with sulfur.

Seed and Plant Production

Seed can be planted in late summer or early fall and established under dryland conditions if precipitation occurs during this time. Otherwise, the seed will need to be irrigated to ensure germination.

Plant in rows for ease of cultivation and irrigation. Spacing can be from 32 to 42 inches apart to accommodate conventional equipment. Best stands are obtained by planting 10 lbs PLS/ac. Planting depth should be 0.5" on a loamy soil and 1" on a sandy soil.

The best time to seed in irrigated fields is the late summer or early fall.

Apply nitrogen fertilizer on established stands, typically with the first irrigation in early spring, and at rates of 80 to 120 lbs of available nitrogen per acre, depending on inherent fertility of soil.

Broadleaf weed management should be by cultural control as the first option, by mowing in spring as the first weeds appear or by using a sweep to clear weeds from between rows. If the weeds are in the crop and it is green and close mowing cannot be done, because the growing point would be damaged, then 2, 4-D or another broadleaf herbicide should be used as early as possible.

This variety, like other wheatgrasses, is cross-pollinated and must have adequate isolation in the production of certified seed.

Availability

For seed or plant increase: Foundation seed of Lunapubescent wheatgrass is available from the Upper Colorado Environmental Center in Meeker, Colorado.

For more information, contact:
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Phone: 505-865-7340
Fax: 505-865-5163
<https://www.plant-materials.nrcs.usda.gov/nmpmc>

Citation

Release Brochure for 'Luna' Pubescent wheatgrass (*Thinopyrum intermedium*). 1964. USDA- Natural Resources Conservation Service Los Lunas Plant Materials Center, Los Lunas, NM 87031. Edited: 9MAR2021.

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