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## Pubescent Wheatgrass (*Agropyron trichophorum*)

### Plant Species

From Montana Interagency Plant Materials Handbook \*

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Pubescent wheatgrass is closely related to intermediate wheatgrass and originated in the same region. It was introduced into the United States in 1934.

Pubescent wheatgrass is similar to intermediate wheatgrass in most respects but is distinguishable by the pubescence, or presence of short, stiff hairs, on the heads and seeds. Plant types generally graduate from one species to another, and it has been suggested that only one species, *A. intermedium*, be recognized.

It is more drought tolerant and has more winterhardiness than intermediate wheatgrass. It is useful for hay and pasture. Its outstanding feature is its ability to stay green into the summer months when soil moisture is adequate.

### Description

Pubescent wheatgrass is a long-lived, sod-forming grass. It has slightly more drought tolerance and ability to spread by rhizomes than intermediate wheatgrass. The plants grow erect with a heavy growth of basal leaves. Stems grow to a height of 3 to 4 feet and produce seed heads that are 4 to 8 inches long. The plants, seed heads and seeds are somewhat hairy.

Seeds of pubescent wheatgrass and intermediate wheatgrass are frequently found as a mixture. The two species readily cross-pollinate.

### Adaptation

Pubescent wheatgrass is adapted to a wide range of conditions with respect to precipitation, temperature and elevation, and is better adapted than intermediate wheatgrass to low-fertility soils and low-rainfall areas. It has some tolerance to saline soils.

It grows well in areas that have at least 12 inches of annual precipitation. It grows well under irrigation, but its yields are not equal to intermediate wheatgrass under these conditions.

### Limitations

Under irrigated conditions it becomes unproductive in a few years. However, yields of forage depend upon total annual precipitation and the distribution of rainfall in summer.

It is not as drought resistant as crested wheatgrass, and during drought conditions, stands may kill out. It has a low tolerance of wet conditions and does not persist in areas with poor drainage.

### Use for Hay

Pubescent wheatgrass produces good yields of high-quality hay. It is higher than crested wheatgrass in total digestible nutrients, lower in lignin content and about equal in protein content. It stays green longer and matures later than crested wheatgrass.

For maximum production, pubescent wheatgrass, like intermediate wheat-grass, should be seeded in a mixture with a legume to obtain higher-quality hay and higher yield.

### Use for Pasture

It provides a nutritional pasture and is very palatable to all classes of livestock.

Yearling steers grazing irrigated pubescent wheatgrass make excellent gains. These gains are greater than those on orchardgrass, reed canarygrass or creeping red fescue. Because of its early spring growth, pubescent wheatgrass can be grazed one to two weeks earlier than most other grasses except crested wheatgrass and Russian wildrye. It generally does not provide grazing during late June-early July. It provides 25 percent less grazing time than other grasses when stocked at the same intensity.

\* The Montana Interagency Plant Materials Handbook (EB69) is no longer in print, but is available for viewing in Montana County Extension Service and National Resource Conservation Service Offices.