VARIETY REGISTRATION

competitive ability, the variety is well suited for growth in mixtures with Flamande and other early, aggressive alfalfa varieties. Ratings on disease reactions made at several locations indicate that its resistance to leaf streak, Sceletocirichum graminis, is similar to the varieties Pennlate and Potomac and it has a rust reaction similar to Pennlate.

Pennmead was widely tested under the designation Pennsylvani­a Medium Synthetic II prior to its release in 1963. It has been included in NE-28 Regional Forage Breeding trials in New York, Maryland, and West Virginia as well as in Pennsylvania. In each state it has performed better than other commercial varieties regardless of maturity.

Pennmead will be restricted to a three generation seed increase program. Breeder seed is maintained by the Pennsylvania Agricultural Experiment Station. It is a composite of equal amounts of viable seed from each of the parental clones which have interpollinated in isolation. Foundation seed is the first generation increase of breeder seed. Certified seed is produced from foundation seed. No registered seed class will be permitted.

REGISTRATION OF CACHE WHEAT
(Reg. No. 470)

Wade G. Dewey

‘CACHE’ (Triticum aestivum L. em. Thell.), C. I. 11599, originated from the cross ‘Ridit’ × ‘Utah Kanred’ made by D. C. Tingey at the Utah Agricultural Experiment Station, Logan, Utah, in 1927. A single smut-resistant F_4 plant was selected in 1931 and was increased and tested in subsequent years as ‘54a-40’. This breeding line was released to growers on a trial basis in 1937 but was not officially named until 1944.

Cache was bred specifically for dwarf bunt resistance and contributed significantly to the decline of the bunt problem in the Intermountain area, particularly in the late 1930’s and the 1940’s. It possesses only intermediate resistance to several of the newer bunt races, however. It is moderately resistant to stripe rust.

Cache is a hard red winter wheat with relatively weak mixing properties. It is generally rated inferior to newer varieties such as Itana, Delmar, and Tendoy in baking quality. It remains popular with the farmers, however, because of its combination of smut resistance, resistance to shattering and its ability to yield well over a wide range of conditions.

Morphological characteristics of Cache have been described as follows: plant winter habit, midseason, midtall; stem white, midstrong; spike awnleted, fusiform, large; glabrous, white, midlong, midway; shoulders moderately rounded; beaks midwide, acute, 0.5 mm. long; awnlets several, 0.25 mm. long; kernels red, midlong, hard, ovate; germ narrow, shallow; cheeks rounded; brush small, short.

Pure seed is maintained by the Utah Agricultural Experiment Station and the Utah Crop Improvement Association.

REGISTRATION OF LUNA PUBESCENT WHEATGRASS
(Reg. No. 6)

Glenn C. Niner

‘LUNA’ pubescent wheatgrass (Agropyron trichophorum Link) was developed by mass selection of plants following intense roguing through two generations at the Soil Conservation Service Nursery, Albuquerque, New Mexico. Luna was cooperatively released by the New Mexico Agricultural Experiment Station and Soil Conservation Service, U. S. Department of Agriculture. During the period it was designated A-1115. The original source was a collection made by Westover-Enlow in Turkey.

Luna produces seed heads which may appear almost glabrous and may resemble those of A. intermedium, but leaves are always hairy, particularly on margins. It is lax, and dark green. Herbage production is considered by many growers to be more palatable than the pubescent wheatgrass.

The outstanding characteristics of Luna are seedling vigor and ease of establishment.

Luna is best suited for dryland pasture on areas further south than most other accessions of pubescent wheatgrass planted in test plots on shallow soils of the upper big-sagebrush areas and the scrub-oak zone of the Rocky Mountain and Intermountain region. At an altitude where an effective portion of the annual precipitation occurs as accumulated snowfall. It is well adapted to the high rainfall at elevations of 7,000 to 8,500 feet, and areas with rainfall of 17 to 20 inches; in western Colorado and areas further north, it does well at lower elevations with less rainfall. Luna has proved to be less disease-resistant than most other accessions of pubescent wheatgrass planted in test plots on shallow soils of the Intermountain region.

Genetic identity and purity are maintained from one generation to another by roguing in agricultural fields. Luna is maintained by the SCS Plant Materials Center, Los Lunas, New Mexico. Foundation seed is available from the SCS Plant Materials Center and from the New Mexico Crop Improvement Association. Luna is in commercial production in Arizona, Colorado, and New Mexico.

1 Registered by the Crop Science Society of America. Received Aug. 21, 1967.
2 Plant Materials Technician, SCS Plant Materials Center, Los Lunas, New Mexico.
4 Registered by the Crop Science Society of America. Received Nov. 19, 1967.