REGISTRATION OF PENNLINE 116 OAT GERMPLASM1
(Reg. No. GP25)

H. G. Marshall and F. L. Kolb2

'PENNLINE 116' spring oat (Avena sativa L.) germplasm line was released in 1982 by ARS-USDA and The Pennsylvania Agric. Exp. Stn. It is short in plant height and has excellent lodging resistance. The line should be useful as a parent to produce commercial cultivars with these traits.

Pennline 116 was derived from a 'James'/C.I. 8447 cross (XW69G373) made in 1969. The C.I. 8447 parent is a dwarf winter oat (NC 2469-3) from the North Carolina Agricultural Experiment Station with a club-type panicle and the Dw-7 dwarfing gene. Pennline 116 traces to an F3 plant row selected in 1974. In tests in Pennsylvania in 1975 and 1976, it averaged 36 and 26 cm shorter plant height than 'Mariner' and 'Otee,' respectively. Grain yield and bushel weight are low because grain filling tends to be incomplete. Pennline 116 has shown no lodging at N levels up to 134 kg/ha.

Juvenile plants of Pennline 116 are erect. Adult plants have short, thick culms with relatively erect flag leaves. The panicle is equilateral, short, narrow, and does not appear ovate. The rachis branches are very short, and during some years, a few rachis branches break causing spikelets to senesce prematurely. The lemma is short, yellow, and glabrous except for several to numerous short basal hairs. Spikelet separation occurs by fracture, and separation is by imperfect disarticulation. The secondary floret rachilla segment is hairy. Kernels are plump but frequently do not fill completely. They have a basal scar but no cavity. Awns are absent.

Pennline 116 carries a gene for the hulless trait (from James), but this trait is not expressed in the semidwarf. Occasional semidwarf segregates with open panicles are found in populations having Pennline 116 as a parent.

Breeder seed of Pennline 116 will be maintained by The Pennsylvania Agric. Exp. Stn. A limited quantity of seed will be sent to breeders who request it from the Dep. of Agronomy, Tyson Building, The Pennsylvania State University, University Park, PA 16802.


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REGISTRATION OF OKPC-1 KLEINGRASS
GERMPLASM1
(Reg. No. 15)

C. M. Tallaferro, R. M. Ahring, and W. L. Richardson

OKPC-1, a new kleingrass (Panicum coloratura L.) germplasm line was released by the Crop Sci. Soc. of Am. in 1983. It is short in plant height and has excellent lodging resistance. The line should be useful as a parent to produce commercial cultivars with these traits.

OKPC-1 was derived from a 'James'/C.I. 8447 cross (XW69G373) made in 1969. The C.I. 8447 parent is a dwarf winter oat (NC 2469-3) from the North Carolina Agricultural Experiment Station with a club-type panicle and the Dw-7 dwarfing gene. OKPC-1 traces to an F3 plant row selected in 1974. In tests in Pennsylvania in 1975 and 1976, it averaged 36 and 26 cm shorter plant height than 'Mariner' and 'Otee,' respectively. Grain yield and bushel weight are low because grain filling tends to be incomplete. Pennline 116 has shown no lodging at N levels up to 134 kg/ha.

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REGISTRATION OF TIFT-1 HYACINTH BEAN
GERMPLASM1
(Reg. No. GP 44)

John D. Miller and Homer D. Wells

TIFT-1 hyacinth bean, Lablab purpureus (L.) seeds, known as Dolichos lablab L., was released jointly by ARS and the University of Georgia Agricultural Experiment Station near El Reno, Okla. (35° 31' N Lat.). The line was selected in small plot trials at several locations in Oklahoma and in space-planted nurseries at Stillwater. Stands of OKPC-1 have consistently demonstrated superior spring recovery and have persisted much better than have those of Selection 75 in small plot trials at Stillwater. Stems of OKPC-1 have demonstrated superior spring recovery and have persisted much better than have those of Selection 75 in small plot trials at Stillwater.

No artificial selection was imposed during the period of advance and OKPC-1 populations are composed of heterogeneous plant types indicative of a broad genetic base. Morphological characters for which variability has been demonstrated include: foliage color, leaf/stem ratio, pubescence, seedhead traits e.g. color and compactness.

Up to 100 g seed of OKPC-1 will be provided on request and agreement to make appropriate recognition of its source as evidenced by early, uniform recovery and growth of plants in small plot trials at several locations in Oklahoma and in space-planted nurseries at Stillwater. Stands of OKPC-1 have consistently demonstrated superior spring recovery and have persisted much better than have those of Selection 75 in small plot trials at Stillwater.

Requests for seeds should be sent to C.M. Tallaferro, Dep. of Agronomy, Oklahoma State Univ., Stillwater, OK 74078.