REGISTRATION OF CROP CULTIVARS

seed weight, chromosome number $2n = 40$, bunch type growth habit, blue-green foliage color, yellow-anther color, and post-harvest seed dormancy. Dormant seed are metabolically alive and seed laboratory tests are effective in evaluating germination.

Puhuima (pronounced pu hu e ma, Indian tribe language translated as — “renewing of grass life”) was selected as a single apomictic aberrant plant from PI 106088 and designated as experimental L-28. Evaluations were conducted among sources through program-controlled environment in a growth chamber. Puhuima was significantly superior to all Lehmann lovegrass sources for seedling drought tolerance.

Stand establishment and survival density were comparatively lower than those of cultivar ‘Kuivato’ and A-68 Lehmann lovegrass, yet forage yield was 15% greater than ‘A-68’. An outstanding characteristic was the yield to density ratio which was 105% greater than that of A-68. Forage yield of Puhuima was superior to that of common Lehmann lovegrass. Lehmann lovegrass is more efficient in water use than any other known forage or crop species. Puhuima used 18% less water to produce an equal amount of herbage than A-68. Puhuima is an excellent seed producer with good reseeding characteristics under natural environments. Puhuima was developed for tolerance under stress environments of the Southwest. It is adapted to semiarid and arid grasslands for seeding deteriorated rangeland sites at elevations generally below 1,400 m with 30 to 35 cm annual rainfall. Characteristics include intermediate seed weight, chromosome number $2n = 40$, bunch type growth habit, blue-green foliage color, yellow-anther color, and postharvest seed dormancy. Dormant seed are metabolically alive and seed laboratory tests are effective in evaluating germination.

Seed production of Puhuima lovegrass is limited to breeder, foundation and certified seed classes. Breeder seed will be maintained by the Dep. of Plant Sciences, Arizona Agric. Exp. Stn., Univ. of Arizona, Tucson, AZ 85721.

REGISTRATION OF BOB OAT

(Reg. No. 290)

F. C. Collins and J. P. Jones

‘Bob’ oat (Avena sativa L.), CI 9261, Ark. 99-190, is a winter oat cultivar released by the Arkansas Agric. Exp. Stn. in 1977. It was derived from a cross of ‘Nora’ × ‘Florida 501’ made in 1970. Bob traces to an F₂ plant that exhibited crown rust resistance (Puccinia coronata Cda. F. sp. avenae Eriks & E. Henr.) at Stuttgart, Arkansas in 1972. It has been tested in Arkansas for 5 years and in the Uniform Central Winter Oat Nursery from 1975 to 1977. Prior to release, 13 F₄ sister lines of similar appearance were composited to form the breeder seed.

Bob should be well adapted to the oat growing areas of Arkansas and adjacent states with similar environments. Bob is particularly well adapted to the Grand Prairie area of Arkansas where most of the seed oats is grown. The 5-year yield averages for Bob, Nora, and Florida 501 at the Rice Branch Station near Stuttgart, Arkansas, were 3,898, 3,415, and 3,171 kg/ha, respectively. Bob also has had heavier test weight (48.3 kg/hl), better crown rust resistance, and higher protein level than Nora or Florida 501, and it is intermediate to Nora and Florida 501 for winterhardiness and maturity.

Bob has erect juvenile growth habit, and its adult plant height averages 5 and 7 cm shorter than Florida 501 and Nora.

REGISTRATION OF EARLY BUNCH PEANUT

(Reg No. 11)


‘Melrose’ field pea (Pisum sativum subsp. anaforeticus) was released by the Univ. of Idaho in cooperation with Oregon, Washington, and Michigan State Univ. in December, 1977. It is an F₉ selection from a cross of ‘Perfection’ edible spring pea and a selection of ‘Winter’ field pea. This cultivar has been under testing by the Univ. of Idaho since 1973 but originally was released by Michigan State Univ. as an experimental line.

Melrose has a chocolate brown, speckled adaxial coat; smooth seed; and yellow cotyledons. When grown in late fall, this cultivar flowers in early June above the fifteenth node in an indeterminate manner. Two or three flowers are borne on each peduncle. Vines may exceed 1.5 m in length.

Melrose has tolerance to Ascochyta foot rot (A. pisi), the pea leaf weevil (Sitona lineatus L.). It is susceptible to Fusarium wilt race 1 (F. oxysporum Schlecht f. sp. lath. and Hans.) and powdery mildew (Erysiphe pisi). Seed production of Melrose will be limited to one generation in northern Idaho.

Melrose is adapted to a wide range of soils and is suited for use as a green manure crop in the northern producing regions of the United States. It has excellent winter hardiness in northern Idaho when seeded in the early spring.

Melrose has yielded 11, 15, and 19% more seed than ‘Fenn’, ‘Austrian Winter’, and ‘Romack’ field peas in northern Idaho.

Seed production of Melrose will be limited to one generation each of foundation, registered, and certified seed classes. Seed production will be supervised by the North Idaho Foundation Seed Association.

REGISTRATION OF EARLY BUNCH PEANUT

(Reg No. 21)

A. J. Norden, R. O. Hammons, and D. Markarian

The ‘Early Bunch’ peanut, Arachis hypogaea var. hypogaea, was jointly released by Arkansas, Georgia, and Texas Experiment Stations in 1974. Early Bunch was derived by pedigree selection from a cross of ‘Perfection’ (Reg No. 21) × ‘Austrian’ (Reg No. 20) made in 1966 at Stuttgart, Arkansas. Early Bunch was released by Arkansas and Georgia Experiment Stations in 1974. Early Bunch is particularly well adapted to the Grand Prairie area of Arkansas and adjacent states with similar environments. Early Bunch is particularly well adapted to the Grand Prairie area of Arkansas and adjacent states with similar environments.