REGISTRATION OF CROP CULTIVARS

low gelatinization temperature as judged by the alkali spreading score of 6.9 in 1.5% KOH. These values are typical of those for U.S. medium grain cultivars. Most taste panelists rated M-401 as satisfactory and comparable to Terso.

Whole kernel (head) and total milling yields of M-401 are satisfactory and comparable to those of M7. M-401 shows greater percentages of sterility caused by low temperatures 10 to 14 days before heading than does M7. M-401 averaged 38% sterility under such conditions compared to 28% for M7. Reaction of M-401 to diseases prevalent in humid areas is unknown. M-401 is moderately tolerant to stem rot (incited by Sclerotium oryzae Catt.), being similar to other California cultivars in this regard.

Since M-401 is a late-maturing cultivar and is somewhat more susceptible to blanking than M7, it should be planted early and only in the warmer two-thirds of the rice growing areas of California. Age of M-401 may be limited largely to that required to meet the demand for the premium quality market. Culturally it can be handled like M7.

Foundation seed of M-401 was made available to seed growers in 1981. M-401 was released jointly by the California Co-operative Rice Research Foundation, Inc., the California Agric. Exp. Stn. and AR-SEA-USDA. It was approved for certification by the California Crop Improvement Association in 1981. Application is not being made for plant variety protection of M-401. Classes of seed will be breeder, foundation, registered and certified. The foundation seed field of M-401 contained 30 medium-grain, predominantly tall off-type plants per acre. These were not representative of any commercial cultivar and were rogued. New head-row seed did not contain any off-types. Breeder and foundation seed of M-401 will be maintained by the California Co-operative Rice Res. Foundation, Inc., P.O. Box 306, Biggs, CA 95917.

REGISTRATION OF NOVA SAINFOIN1
(Reg. No. 22)

M. R. Hanna2

Nova sainfoin (Onobrychis vicicifolia Scop.) was developed at the Agriculture Canada Research Station, Lethbridge, Alberta. It was tested as ‘L2108’ or ‘Kazakhstan’ during the period 1970-1979 and was licensed for sale in Canada in February 1980.

Nova traces to an importation of seed that originated in the Kazakhstan region of the U.S.S.R. The 70 parent clones of Nova were selected within a nursery of about 1,100 spaced plants on the basis of spring vigor, growth type, and visual scores for forage and seed yield. Equal quantities of seed obtained from each of the 70 clones after their interpollination were combined to provide seed for forage and seed yield trials and for establishment of what is now the Breeder seed plot of the cultivar.

Nova is similar in type to ‘Melrose,’ which is the only other cultivar licensed in Canada. In spring, the new cultivar is slightly more vigorous than Melrose and appreciably more vigorous than either of the Montana cultivars ‘Eski’ or ‘Remont.’ Nova is taller than any of the three other cultivars. In common with Melrose and Eski, it has a relatively slow rate of regrowth after cutting or grazing compared with Remont.

The major advantages of Nova are its superior winterhardiness and higher forage yield in comparison with other sainfoin cultivars. Forage yields of Nova averaged 7% higher than those of Melrose in trials conducted at seven locations in Western Canada. It is equal to or higher than those of Melrose in trials conducted in New Brunswick. Forage yields of Nova averaged over 10% higher than those of Eski in two trials in Western Canada. Nova is superior to Melrose and Eski in forage quality. It is more nutritious and palatable than Melrose and Eski. Nova is superior to Melrose and Eski in forage quality on a dry matter basis.

1Registered by the Crop Sci. Soc. of Am. Coop. Agric. Exp. Stns. of AR-SEA-USDA, U.S. Sugar Crops Field Station, Route 13, Box 306, Station, Meridian, MS 39301, and the Agric. Exp. Stns. of Louisiana, Mississippi, and Texas. Accepted 14 June 1981.
2Research agronomists and research plant pathologist at the U.S. Sugar Crops Field Station, AR-SEA-USDA, Meridian, MS 39301.

REGISTRATION OF WRAY SWEET SORGHUM
(Reg. No. 119)

D. M. Broadhead, K. C. Freeman, and N. Zummo

‘Wray’ is a sucrose-type sweet sorghum, Sorghum bicolor (L.) Moench, developed at the U.S. Sugar Crops Field Station, AR-SEA-USDA, Meridian, MS 39301, in the cooperative research program of the Agricultural Research Service and the Agricultural Experiment Stations of Louisiana, Mississippi, and Texas. The cultivar was selected in 1966 from a cross of a selection from PI 152728 (Mer. 57-1) and the cultivar ‘Rio’ and was evaluated under the breeding number ‘L2108’ or ‘Kazakhstan’ during the period 1970-1979 and was licensed for sale in Canada in February 1980.

The panicle of Wray is eell and inclined. The branches arise at nearly the same position on the rachis and usually hang to one side of the plant. Pubescence of the plant is short and semi deciduous except on the edges and calyxes which are often long and more persistent. The glumes have a short awn about one-fourth of the caryopses. The glumes do not abscise at maturity and are nonpersistent in threshed seed. The ellipsoid-shaped seed are medium to large in size with a brown, hard seedcoch, and have a soft, chalky coat underlain by a brown, branched endosperm most starchy with a medium-thick pericarp. The coleoptile is green.

Wray is resistant to leaf anthracnose and stalk rust caused by Colletotrichum graminicola (Ces.) G. W. White and rust caused by Puccinia purpurea Cke. Wray matures in 105 to 130 days. It is similar in stature to Rio. It is somewhat taller than Rio. Since Wray rarely has side branch development, the stalks in harvested stalks is usually much lower than Rio. Wray is superior to Rio in yield of stalks and seed. It shows potential as a crop for expanding production of sucrose, biomass, and fermentable sugars for alcohol production. Wray has been published in the literature.

Breeder seed will be maintained at the U.S. Sugar Crops Field Station, Meridian, MS 39301.

REGISTRATION OF MCNAIR 710 SOYBEANS
(Reg. No. 152)

D. L. Burns, S. C. Anand, and J. L. Helm

‘McNair 710’ soybean [Glycine max (L.) Merr.] was developed by McNair Seed Company, Laurinburg, NC and is from the cross ‘McNair 600’ × ‘Coker Hampton 266’. The variety is semi-deciduous except on the edges and calyxes, which are often long and more persistent. The glumes have a short awn. The ellipsoid-shaped seed are medium to large in size with a brown, hard seedcoat, and have a soft, chalky coat underlain by a brown, branched endosperm. The pericarp is mostly starchy with a medium-thick endosperm, and the coleoptile is green.

Wray is resistant to leaf anthracnose and stalk rust caused by Colletotrichum graminicola (Ces.) G. W. White and rust caused by Puccinia purpurea Cke. Wray matures in 105 to 130 days. It is similar in stature to Rio. It is somewhat taller than Rio. Since Wray rarely has side branch development, the stalks in harvested stalks is usually much lower than Rio. Wray is superior to Rio in yield of stalks and seed. It shows potential as a crop for expanding production of sucrose, biomass, and fermentable sugars for alcohol production. Wray has been published in the literature.

Breeder seed will be maintained at the U.S. Sugar Crops Field Station, Meridian, MS 39301.