Registration of 'Huntsman' Proso Millet

'Huntsman' (Reg. no. CV-175, PI 578074) is a white proso millet (*Panicum miliaceum* L.) developed cooperatively by the Nebraska Agricultural Experiment Station and the USDA-ARS. It was released for seed production in May 1994. Huntsman was selected from the cross NE79012/NE79017/3/'Cope'//'Dawn'/'Common' which was made in 1987 by Dr. L.A. Nelson. NE79012 is a selection from a Dawn/NE76004 cross and NE79017 is a selection from the cross Dawn/NE76010. NE76004 is a selection from a Dawn/'Min 402' cross and NE76010 is a selection from Dawn/'Panhandle'. Crosses were made and F_2 seed was produced in the greenhouse during the winter of 1986–1987. Huntsman is an increase of an F_4 line selected in 1988 and tested as NE870063. Huntsman was released because of its large seed, high yield potential, and late maturity.

Huntsman has a white seed coat (lemma and palea) and a compactum (closed) type panicle. The foliage is green in color and is similar to 'Sunup'.

Huntsman has been tested in Nebraska yield nurseries starting in 1988, and in regional trials from 1991 to 1993. In Nebraska trials, average grain yields of Huntsman were similar to Sunup, 7% greater than 'Rise', and 62% greater than Dawn.

Seed size of Huntsman (141 seeds g^{-1}) is larger than other released cultivars of proso millet except 'Earlybird'. Seed weight of Huntsman averages 2% higher than Sunup and 5% higher than Rise.

Huntsman is similar in heading date to Cope, but can be harvested slightly earlier. It is significantly later in maturity than previous Nebraska releases. Heading date of Huntsman is ≈ 1.5 d later than Sunup. Dawn is generally ready for harvest at least 1 wk earlier than Huntsman.

Grain volume weight of Huntsman (732 kg m^{-3}) is high compared with Cope (710 kg m^{-3}), and is generally higher than other released cultivars. Grain volume of Huntsman was not significantly different from Sunup (724 kg m^{-3}) over the past 4 yr.

Huntsman is intermediate in plant height between Sunup and Rise. The straw strength of Huntsman is similar to Sunup and better than other cultivars with similar plant height. Huntsman is less susceptible to lodging than Panhandle, Cope, 'Abarr', or 'Snowbird'.

Huntsman has shown no susceptibility to Russian wheat aphid [*Diuraphis noxia* (Mordvilko)]. Dawn and other lines have been attacked by head rot associated with stem boring species in the same nurseries, but Huntsman may have escaped due to preference based on relative maturity rather than resistance.

Breeder seed of Huntsman will be maintained by the Nebraska Agricultural Experiment Station. The seed classes will be breeder, foundation, registered, and certified with only one generation for each class. Huntsman will not be submitted for plant variety protection.

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References and Notes

1. D.D. Baltensperger, and G.E. Frickel, Panhandle Res. & Ext. Ctr., Univ. of Nebraska, Scottsbluff, NE 69361; L.A. Nelson, Dep. of Agronomy, Univ. of Nebraska, Lincoln, NE 68583; R.L. Anderson, USDA-ARS Central Great Plains Res. Stn., Akron, CO 80720. Huntsman was developed with partial financial support from the Anna Elliott Foundation. Contribution no. 10733 from the Nebraska Agric. Res. Div. Registration by CSSA. Accepted 30 Nov. 1994. *Corresponding author.

Published in Crop Sci. 35:941 (1995).

Registration of 'Flor de Mayo M38' Common Bean

'Flor de Mayo M38' common bean (*Phaseolus vulgaris* L.) (Reg. no. CV-116, PI 574540) was released by the National Research Institute for Forestry and Agriculture (INIFAP), Mexico, in 1994 for commercial production. It originated from a modified double-cross population MX 6344 made in 1985 at the International Center for Tropical Agriculture (CIAT), Cali, Colombia; the pedigree is A 409/[BAT 1670/(NEP Bayo 22/XAN 112)]. The F_2 generation was mass-selected at Palmira, Colombia, followed by single-plant selection in the F_3 and progeny testing in the F_4 at Popayán, Colombia. The F_3–derived F_5 line was tested at Quilichao, Colombia. Pathogen-free F_8 seed was produced and coded as MAM 38 in May 1989 for international distribution.

Flor de Mayo M38 possesses an indeterminate prostrate Type III growth habit, with 8 to 12 basal branches and mean canopy height of 40 cm. It has white flowers with medium-sized cordate bracteole and ovate trifoliate leaves. It requires ≈ 105 d to reach maturity (range 95 to 110 d). Flor de Mayo M38 carries the dominant *I* gene for resistance to bean common mosaic virus. It is highly resistant to the prevalent races of rust [caused by *Uromyces appendiculatus* (Pers.:Pers.) Unger var. *appendiculatus*]. It possesses tolerance to anthracnose [caused by local isolates of *Colletotrichum lindemuthianum* (Sacc. & Magn.) Lams.-Scrib. from the Mexican states of Durango, Guanajuato, and Mexico], halo blight [caused by *Pseudomonas syringae* pv. *phaseolicola* (Burkholder) Young et al.], common bacterial blight [caused by *Xanthomonas campestris* pv. *phaseoli* (Smith) Dye], and low soil fertility.

Flor de Mayo M38 was tested at four to six locations each year from 1989 to 1992 in the highlands of Mexico (from Chihuahua to the state of Mexico). Its yield varied with location, planting date, and precipitation during the growing cycle. Because of its maturity class, Flor de Mayo M38 appears to be better adapted to early June sowing at the onset of the rainy season and to highly productive rainfed and irrigated environments of the bean growing regions of the Mexican highlands. Under favorable rainfed environments of the humid highlands, mean yield has been above 2.0 t ha^{-1}, thus outyielding check 'Flor de Mayo Bajío' by 50%. Also, it outyielded all previously released cultivars in the Flor de Mayo seed class (classification for commercial purposes, pink speckled on cream background, medium seed size). Under irrigation, Flor de Mayo M38 exhibited a yield of 3.5 t ha^{-1}. In comparative yield trials conducted for 3 yr at three locations in Colombia, it outyielded the landrace (a nonimproved cultivar) 'Flor de Mayo' control cultivar by an average of 24% (1).

Flor de Mayo M38 has a medium seed size (100-seed weight of 27 g). Its seed coat color pattern makes it [illegible] Flor de Mayo cultivar. Seed samples of [illegible] from several location–years in the Mex[illegible] processed for quality traits. [illegible] 26% on a dry-weight basis, [illegible] class. Cooking time of [illegible] longer than that of [illegible] average for this [illegible] showed [illegible]

[illegible]
Apdo. Postal 10, [illegible]