Bajra Napier Hybrid - PBN 342

PBN 342, a new bajra napier hybrid [Pennisetum glaucum (L.) R.Br. x Pennisetum purpureum Schumach] multicut variety developed by Forage and Millet Section, Department of Plant Breeding and Genetics, Punjab Agricultural University, Ludhiana was identified in the Group Meet of All India Coordinated Research Project on Forage Crops and Utilization held during April 17-18, 2017 at CSK HPKV, Palampur, Himachal Pradesh. This variety has been released and notified by Ministry of Agriculture and Farmers’ Welfare, Department of Agriculture, Cooperation and Farmers’ Welfare, New Delhi vide Notification number 3-62/2017-SD.IV dated March 27, 2018 (S.O. 1379E) for commercial cultivation in North Western Zone (NWZ), North Eastern Zone (NEZ) and Southern Zone (SZ) in the states of Punjab, Haryana, Rajasthan, Odisha, Assam, Tamil Nadu and Karnataka. The variety PBN 342 was developed from the cross, Kale Bajra x N 22 through interspecific hybridization followed by clonal selection. It has been tested in the All India Coordinated Programme in AICRP (FCU) crops for three years in perennial trial during kharif 2014 to 2016. It recorded an average green fodder yield of 937.1 q/ha which was 19.4, 5.6 and 12.2 per cent higher than the checks viz., NB 21 (785.0 q/ha), CO 3 (887.0 q/ha) and PBN 233 (835.1 q/ha), respectively. It also exhibited its superiority for dry matter yield over the national checks viz., NB 21 (27.4 %), CO 3 (9.2 %) and PBN 233 (15.2 %) as well. PBN 342 exhibited its superiority for per day productivity for dry matter yield against two national checks NB 21 (7.0 %) and PBN 233 (8.2 %) and was at par with the third national check, CO 3. The average plant height of this variety is about 167cm. Its distinguishing morphological characteristics include more leafiness, high tillering ability and leaf stem ratio. It is ready for first cutting in 60 days after planting. The new bajra napier hybrid variety PBN 342 has shown a high degree of resistance against diseases, namely, root rot and Pyricularia leaf spot at various locations all over India during kharif 2014 to 2016. No incidence of rice grass hopper was observed at various locations all over India during the period of three years of evaluation in AICRP(FCU). It has better nutritional quality in terms of crude protein yield against two national checks, NB 21 (12.9 %) and PBN 233 (10.1 %) and was at par with third national check PBN 233. The salient features of this variety are high green and dry fodder yield potential, more leafiness and tillering capacity and better nutritional properties. It is expected that the variety will gain preference among the bajra napier hybrid growing farmers of NWZ, NEZ and SZ comprising of states of Punjab, Haryana, Rajasthan, Odisha, Assam, Tamil Nadu and Karnataka.

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