

MUSHKBUDJI-Aromatic Land Race of Kashmir

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More than 100 landraces have been documented from Kashmir valley, however, majority of them stand replaced from farmer's field by the high yielding varieties, and have been confined to some specific pockets of the valley. The preference for high yielding varieties has led to genetic erosion and loss of these valuable landraces which once were cultivated for several traits like taste, aroma, other unique quality features and medicinal use. The reasons attributed to loss of heritage rice's of Kashmir include their low yield potential and susceptibility to biotic and abiotic stresses particularly to paddy blast. Still after two to three decades before the wide scale cultivation of these landraces was slowly abandoned, some prominent ones such as *Mushk Budji* and *Kamad* still occupy considerable area and demand in domestic markets. *Mushk Budji* is short bold aromatic rice grown in higher reaches of Kashmir valley. The cooked rice is unique and possesses harmonious blend of taste, aroma and rich organoleptic properties. It is mainly is grown in areas of Sagam, Panzgam and Soaf Shali of district Anantnag and Beerwah belt of district Budgam. The consumption of aromatic rices in Kashmir has now been limited to special occasions, marriages and festivals. Consumer's preference is to get rice of good cooking (head rice, colour, amylose content, gel consistency, kernel elongation on cooking, softness etc.) and eating quality (taste and aroma). Intermediate amylose content has been recorded for *Mushk budji* which is preferred in major rice consuming regions of the world. Gelatinization temperature is the range within which the starch granules begin to swell irreversibly in hot water. Intermediate range (70-74°C) has been recorded for *Mushk budji*. Cooked kernel length has been found to be low in *Mushk budji* [1].

Mushk budji revival programme was undertaken in 2007 by Mountain Research Centre for Field Crops, Khudwani of SKUAST-Kashmir with the objective to conserve local biodiversity through utilization for socio-economic development of rice growers which proved to be a huge success. SKUAST-Kashmir developed the purified version of *Mushk budji* after exercising pure line selection for true to type plant architecture, grain and cooking quality. During kharif 2011, the performance of purified version against the older version was demonstrated in the farmer's field in the Saga m belt of District Anantnag, a popular niche area of local heritage rices of Kashmir. The year 2013 proved as a success story during which an area of 50 ha in five adjoining villages was brought under *Mushk budji* and about 1500 q seed was produced with the close coordination of line Department, Govt. of Jammu and Kashmir sooner it was realized that the landrace in spite of appealing farmers and consumers due to its unique quality, may meet a challenge in its successful cultivation and hence adoption because of its huge susceptibility to blast. The frequent crop failures resulted in the areas where there was no timely and repeated application of fungicides. Efforts have been made to incorporate blast resistance genes viz Pi54, Pi1 and Pita into the genetic background of *Mushk Budji* [2].

References

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