Success Story 2: Improved Samba Mahsuri

Bacterial blight (BB) is a major disease of reducing rice yields significantly. Since chemical control of the disease is not possible, development and deployment of resistant varieties is the only economically feasible strategy available for managing the disease. Towards this objective a collaborative research team of scientists from DRR and CCMB have successfully introgressed three major BB resistance genes, *Xa21*, *xa13* and *xa5* into the genetic background of a very popular, high yielding, fine-grained but bacterial blight susceptible variety, Samba Mahsuri through marker-assisted backcross breeding. Through the research work, an improved version of Samba Mahsuri, aptly named **Improved Samba Mahsuri** was developed, notified and released for cultivation in the year 2008.

More than seven thousand farmers have enthusiastically taken up cultivation of Improved Samba Mahsuri and the variety has been cultivated to the extent of 60,000 ha in the in *Kharif* 2012 alone. The variety, due to its high yield along with excellent grain and cooking qualities is steadily replacing Samba Mahsuri not only in BB prone areas but also in other areas of the country. The variety has been registered and IPR enabled with the Protection of Plant varieties and Farmer’s Rights Authority (PPVFRA) (Registration No.: REG/2009/240).

In addition, Improved Samba Mahsuri has been licensed to a Private Seed Company (M/s Sri Biotech, Hyderabad on non – exclusive basis) for a licensing fee of ₹ 6,00,000. Extensive cultivation of Improved Samba Mahsuri is limiting the losses caused by BB disease and is enhancing the rice production in the country.

*Improved Samba Mahsuri* is highly resistant to bacterial blight.......

‘Improved Samba Mahsuri’ has good agro-morphological features (figures a & b) and has excellent grain quality parameters (figures d & f) similar to Samba Mahsuri (figure c & d)
Business Line

new hope for paddy farmers to fight leaf blight

V. Karamnath
Scientist of the Rice Research introduced a new Samba Mahsuri variety.

Yelahanka, Dec 31:

Two farmers - Mr. Pratap Reddy of Visramagudde in Kurnool District in Andhra Pradesh and Mr. K. M. Hemachandra of Vekkapeta near Tirumala in Tirupati - have a reason to be pleased. Bacterial leaf blight (BLB), the disease that reduces paddy yields by 30-70 per cent in prolonged rains and cloudy weather, is a nightmare for them. BLB kills the entire plant.

The scientists of the Indian Council for Agricultural Research (ICAR), in collaboration with the National Rice Genetists, have introduced a new variety of Samba Mahsuri to control this disease. 

The new variety, which is resistant to BLB, has been developed by scientists of the Indian Council for Agricultural Research (ICAR), in collaboration with the National Rice Genetists. The new variety is resistant to BLB, which causes significant losses to paddy crops.

According to scientists, the new variety is expected to increase paddy production by up to 30 per cent. It has also been found to be tolerant to other diseases such as blast and bacterial leaf blight, which are common in many regions of the country.

The new variety is expected to be commercially available in the next few months. It is expected to be widely adopted by farmers in the next few years, as it offers a solution to the problem of BLB, which has been a significant challenge for paddy farmers in the country.

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