

New rice variety has 'higher yield, nutrition, pest resistance'

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The century old Tamil Nadu Rice Research Institute at Aduthurai reached another milestone with the release of a new paddy variety ADT 53 this Pongal season.

According to institute Director V Ravi, ADT 53 is a short (110-115 days) duration variety that could fit well in the Kuruvai and Kodai seasons in the delta districts and Sornavari/ Navarai seasons in the rest of the districts in the State.

It is also a contingent samba variety that could be cultivated when there is a delay in canal water release beyond October, to enable farmers to harvest the crop before closure of the dam, he added.

The release is more significant at this juncture as it has found acceptance among millers and farmers two decades after the existing ruling ADT 43's release (in 1998).

"It is a medium slender grain, white rice with 65 per cent milling outturn," the Rice Research institute director said and noted how several short duration varieties, such as ADT 36, ADT 37, ASD 16, ADT 45 and CO 51 have been predominant in the Kuruvai and Kodai seasons but ADT 43 continued to remain on top both among farmers and consumers due to the grain quality.

This new release (ADT 53), which has been derived from a ADT 43 and JGL 384 cross, and developed through pedigree selection by combining

the yield and grain quality, therefore assumes significance.

It was tested across locations with the culture name AD 07073 (at the stage prior to release as a variety). In the 242 locations field tested across districts in Tamil Nadu, this variety in the pre-release stage recorded mean productivity of 6,334 kg/hectare. The average yield was found to be 10 per cent higher than the ruling ADT 43 and 14 per cent over CO 51, the Director explained.

That's not all. At Alanaganallur in Madurai District, this variety recorded the highest grain yield of 9,875 kg/ha, depicting its highest yield potential.

Yield apart, ADT 53 is rich in Zinc (26.1 ppm (parts per million) and Iron (14.70 ppm), resistant to stem borer, leaf borer and diseases such as blast and sheath blight.

While the new release is seen as a

milestone achievement, rice researchers are concerned over the steep decline in the area under rice.

"The area has fallen from 43 million hectares to 40 million hectares in 2018 and the reasons are many. Urbanisation is taking a toll on farm holdings. Further, rice is a water-intensive crop. Total water requirement is around 1,200 mm, depending on the agro climatic situation, duration of the variety and soil characteristics. This is almost 3 times when compared to groundnut, which is around 400 mm and maize (350 mm)," the TNRRRI Director explained.



File photo of ADT 53 raised on a farm in Tamil Nadu