



ICAR- IIRR developed varieties and hybrids available for commercialization through licensing

TRIGUNA: 130 days duration variety for irrigated areas, CVRC release in 1997 for Andhra Pradesh and Maharashtra. It has long slender grains, yield potential 4.5 t/ha, moderately resistant to gall midge, BPH and blast. PPV&FRA registration no. 40 of 2013



KRISHNA HAMSA: A mid early duration long slender grained variety (120 days) released in 1997 in Andhra Pradesh for rabi season. Possesses cold tolerance at seedling stage and heat tolerance at reproductive stage, also released by CVRC for boro areas of Assam, Tripura, West Bengal, Odisha and Bihar. Yield potential 5 t/ha, resistant to blast and moderately resistant to brown spot. PPV&FRA Registration No: 69 of 2012.



SHANTHI: A mid early duration (120-125 days) with long slender grains, released for cultivation in Andhra Pradesh for irrigated areas of Kharif and Rabi seasons in 2001. It is resistant to blast, moderately resistant to brown spot and WBPH, yield potential 4.5 t/ha. PPV&FRA registration no. 58 of 2012





VASUMATI: A high yielding medium duration semi dwarf basmati rice variety possesses all basmati quality features with excellent elongation on cooking; 14% yield advantage over Pusa Basmati 1 and 44% over Taroari Basmati. It is a CVRC release in 2001 for cultivation in traditional basmati growing areas of Uttar Pradesh, Jammu & Kashmir and Rajasthan, moderately resistant to leaf blast, brown spot and WBPH. PPV&FRA Registration No: 29 of 2013.



DHANRASI: Released in 2002 by CVRC for rainfed shallow lowlands of Andhra Pradesh, Karnataka and Tamil Nadu, late duration, heavy panicles, sturdy stem, possessing short bold grains, yield potential 6 t/ha, resistance to blast, gall midge, iron toxicity, soil acidity, aluminum toxicity and moderately resistance to BLB, RTV and stem borer. This is the first variety developed by introgressing genes of wild species (*O. rufipogon*). PPV&FRA registration no. 43 of 2013.



SUGANDHAMATI: A short statured, semi dwarf high yielding basmati variety, released by CVRC in 2004 for traditional Basmati growing areas of Punjab, Jammu & Kashmir and Haryana. Superior in yield and comparable in quality with Pusa Basmati 1 with resistance to leaf blast and brown spot diseases. It has long slender scented grains. PPV&FRA Registration No: 39 of 2013.





JARAVA: A coastal saline tolerant late duration (150 days) variety, released by CVRC in 2005 for coastal saline areas of West Bengal, Andamans and Puducherry, yield potential 3.3 - 5.4 t/ha, short bold grains, resistant to neck blast, leaf folder, planthoppers, sheath rot, moderately resistant to brown spot, bacterial blight, rice tungro virus, BPH and WBPH. PPV&FRA registration no. 47 of 2013.



IMPROVED SAMBA MAHSURI: First MAS derived product, a medium duration (140 days) gene pyramided variety possessing medium slender grains and has excellent cooking and grain quality features similar to Samba Mahsuri with BLB resistance and released for states of Andhra Pradesh, Jharkhand, Chattisgarh, Orissa, Gujarat, Maharashtra and Bihar in rainfed shallow lowlands by CVRC in 2007, yield potential 4.6 t/ha. PPV&FRA Registration No: 80 of 2012. Improved Samba Mahsuri also determined to have a very low level of glycemic index (50.99) and hence milled rice derived from Improved Samba Mahsuri can be considered highly suitable for patients suffering from Type II diabetes. So far 3 MOAs signed with private seed companies for commercial production and popularization of Improved Samba Mahsuri rice variety.





VARADHAN: Medium duration (125 days), Short bold, high Milling (72%) and head rice recovery (60%) and intermediate alkali spreading value (5.0); resistant to RTD & WBPH, moderately resistant to leaf blast. Yield potential of 60-70 quintals/ha. Yield advantage of 22% over Sasyasree, 18% over IR 64. Released in 2008 for the states of Haryana, Uttarakhand, Jharkhand, Uttar Pradesh. PPV&FRA Registration No: 204 of 2014.



AKSHAYA DHAN: Medium duration (135 days), long bold, high milling 71%) and head rice recovery (63%); resistant to neck blast, moderately resistant to RTD, Sheath rot, brown spot, WBPH, non-lodging. Yield potential of 60-70 quintals/ha. Yield advantage of 25% over Jaya (variety) and 17% over KRH-2 (hybrid). Released in 2008 for the states of Jharkhand, Andhra Pradesh, Tamil Nadu, Karnataka. PPV&FRA Registration No: 151 of 2014.



SAMPADA: Medium duration (135 days) with medium slender grains, good cooking quality with 70.1% head rice recovery; resistant to leaf blast, moderately resistant to BPH & WBPH. Yield advantage of 41.5 and 18.4% over IR64 and PR106, 24.0% over BPT 5204. Yield Potential of 58-68 quintals /ha. Released in 2008 for the states of Bihar, Chhattisgarh,



Maharashtra, Tamil Nadu, Kerala. PPV&FRA Registration No: 180 of 2014.



DRR DHAN - 40: A high yielding elite introgression line, medium duration (135 -140 days), short bold grains; moderately resistant to leaf blast, neck blast, RTV, brown spot and sheath rot. Yield Potential of 55-59 quintals /ha. Yield advantage of 25% over Jaya,



34% over KRH2. Released for the states of Maharashtra, Tamil Nadu, West Bengal. PPV&FRA Registration No: 216 of 2019.

DRR Dhan 45 (IET 23832): Rice, a major staple food crop, is the efficient in micronutrients leading to malnutrition which is widely known as hidden hunger. WHO identified zinc, iron and vitamin A as the critical micronutrients and their deficiency symptoms (blindness, stunting, etc.) are generally specific.



Biofortification employing traditional breeding methods is the most socially accepted and best strategy to enrich the quantities of some of the nutrients in the edible parts of various crops. DRR Dhan 45, a mid-early duration culture developed by IIRR, notified and released in the states of Tamil Nadu, Karnataka and Andhra Pradesh under irrigated condition. It has 37.1% and 17.2% mean yield advantage over Samba Mahsuri and IR64 with 18.8 ppm zinc. PPV&FRA registration no. 92 of 2019. Two MOAs were signed with private seed companies for commercial production and popularization of DRR Dhan 45.



DRRH-2: A high yielding early early duration (115 days) rice hybrid possessing long slender translucent grains with high head rice recovery has been developed by IIRR, Hyderabad and released for commercial cultivation during 2005. It is resistant to leaf



blast, neck blast and rice tungro disease. It is moderately tolerant to sheath rot, brown spot and WBPH. Yield potential of DRRH-2 is 6.5 t/ha, which is 20% more than other hybrids of the same duration. It is resistant/tolerant to biotic and abiotic stresses and has potential to perform well under rainfed alkaline conditions. PPV&FRA registration no. 375 of 2019. So far, 16 MOAs were signed with various private seed companies for commercial production and popularization of DRRH-2.

DRRH-3: The first medium slender grain type high yielding hybrid DRRH-3. It has strong culm and has given superior performance even under lower doses of N (40 kg N/ha) indicating its higher nitrogen use efficiency. It matures in 130-135 days and gives grain yield of 6.0 - 6.5 t/ha under normal irrigated conditions. It is resistant to



neck blast and moderately resistant to leaf blast, rice tungro disease and brown spot and tolerant to white backed plant hopper. This hybrid can give about 23-30 % more yield than BPT 5204 with comparable quality features. Being a hybrid, DRRH-3 can perform even better under stresses thereby less loss to the farmers under adverse situations. It is released in 2009 and recommended for states of Andhra Pradesh, Madhya Pradesh, Orissa, UttarPradesh, Gujarat. PPV&FRA registration no. 374 of 2019. So far, 11 MOAs were signed with various private seed companies for commercial production and popularization of DRRH-3.