

Climate resilient rice varieties “Swarna Unnat Dhan” and “Swarna Sukha Dhan”

Two rice varieties namely “Swarna Unnat Dhan” and “Swarna Sukha Dhan” have been developed by ICAR Research Complex for Eastern Region, Patna in collaboration with International Rice Research Institute (IRRI), Philippines.

Swarna Unnat Dhan (IET 27892), a high yielding multiple stresses tolerant rice variety, has been released and notified by Central Sub-Committee on Crop Standards, Notification and Release of Varieties for Agricultural Crops, Govt. of India (**vide notification number S.O. 8 (E) dated 24th December 2021**) for cultivation under irrigated transplanted condition in the states of Bihar, Odisha, West Bengal, Madhya Pradesh and Maharashtra of India. Swarna Unnat Dhan is an early duration (115-120 days), semi-dwarf, high yielding (5.0-5.5 t ha⁻¹), multiple stresses (drought, disease and insect pest) tolerant, lodging resistant with desirable cooking quality traits and having long slender grain type. Swarna Unnat Dhan is suitable for cultivation under transplanted condition in irrigated areas as well as water scarcity areas. Quality wise, Swarna Unnat Dhan possesses 77.7% hulling, 67.4% milling, 63.2 % head rice recovery (HRR) with desirable intermediate alkali spreading value, amylose content (24.34%) with long slender grain type. Rice variety Swarna Unnat Dhan showed moderately resistant to Bacterial leaf blight, false smut, sheath rot, leaf blast and brown spot diseases and major pests like stem borer, BPH and gallmidge under natural condition.



Swarna Sukha Dhan (IET 24692), a high yielding multiple stresses tolerant rice variety, has been released by State Seed Sub-Committee (Uttar Pradesh) on 23.06.2021 and notified by Central Sub-Committee on Crop Standards, Notification and Release of Varieties for Agricultural Crops, Govt. of India (**vide notification number S.O. 8 (E) dated 24th December 2021**) for cultivation under direct seeded condition in drought prone rainfed areas of Uttar Pradesh. Swarna Sukha Dhan is an early duration (110-115 days), semi-dwarf, high yielding (3.5-4.0 t ha⁻¹), multiple stresses (drought, disease and insect pest) tolerant, with desirable quality traits and high micronutrient [(Zinc:23.1ppm)] content. It also possesses desirable cooking quality traits and having medium slender grain type. Swarna Sukha



Dhan is suitable for cultivation under direct seeded condition in rainfed midland to upland ecosystem of Uttar Pradesh. Quality wise, Swarna Sukha Dhan possesses 78.4% hulling, 70.9% milling, 68.4 % head rice recovery (HRR) with desirable intermediate alkali spreading value (ASV=4.0), amylose content (22.32%) with medium slender grain type. Rice variety Swarna Unnat Dhan showed moderately resistant to bacterial leaf blight (BLB), false smut, leaf blast, sheath blight, RTD and brown spot diseases and major pests like stem borer, leaf folder, whorl maggot, and brown plant hopper (BPH) under natural condition.

These varieties have promise for restricted irrigated areas and drought-prone rainfed areas and thus, will contribute to increasing rice productivity and improve the socio-economic status of the farmers.