

Climate resilient rice varieties “Swarna Shakti Dhan” and “Swarna Samriddhi Dhan”

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

Swarna Shakti Dhan (IET 25640) is a drought tolerant aerobic rice variety, has released and notified by the Central Sub-Committee on Crop Standards, Notification and Release of Varieties for Agricultural Crops, Govt. of India for the cultivation in the states of Haryana, Odisha, Bihar, Jharkhand, Chhattisgarh, Gujarat and Maharashtra. This rice variety is an early duration (115-120 days), semi-dwarf, high yielding ($4.5-5.0 \text{ t ha}^{-1}$), multiple stresses (drought, disease and insect pest) tolerant with desirable cooking quality traits and high micronutrient i.e., zinc (23.5 ppm) and iron (15.1 ppm) content. It is resilient to change in rainfall distribution. Swarna Shakti Dhan is suitable for cultivation under direct-seeded aerobic condition in water limiting irrigated areas and drought-prone rainfed area. This variety showed desirable quality parameters like high hulling (76.3%), milling (66.36%), and head rice recovery (63.2%), intermediate amylose content (22.52%), alkali spreading value (ASV=4.0), and a soft GC with very occasionally chalky and short bold grain type.



Swarna Samriddhi Dhan (IET 24306) is a medium duration high yielding variety. Bihar State Seed Sub-Committee (SVRC), Govt. of Bihar has released and recommended for its notification. This variety is suitable for cultivation under transplanted condition in irrigated as well as rainfed shallow lowland ecology of Bihar. Swarna Samriddhi Dhan is semi-dwarf, high yielding ($5.5-6.0 \text{ t ha}^{-1}$), medium duration (135-140 days), multiple stresses (drought, submergence, disease and insect pest) tolerant, lodging resistant with desirable cooking quality traits and having long slender grain type. Quality wise, Swarna Samriddhi Dhan possesses



77.8% hulling, 62.0% milling, 55.6 % head rice recovery (HRR) with desirable intermediate alkali spreading value, amylose content (24.33%) with long slender grain type. Beside drought tolerant, this variety can also tolerate 10-12 days submergence.

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 farmers.