AEROBIC

RICE VARIETIES

- DRR Dhan 41 (IET – 22729)
- DRR Dhan 54 (IET – 25653)
- DRR Dhan 55 (IET – 25671)
- DRR Dhan 57 (IET – 23354)

DRR Dhan 41

IET 22729 | Aerobic Rice Variety for Direct Sowing

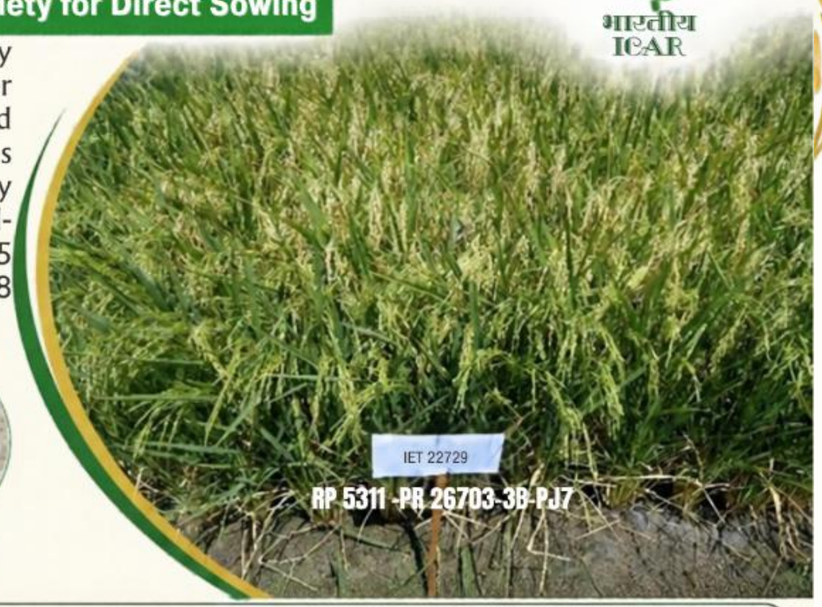
DRR Dhan 41, an aerobic variety suitable for cultivation in water scarce areas under direct seeded conditions. This variety is originated from an introduction by IRRI, Philippines through IURON-INGER nursery. Matures in 115 days with an average yield of 3.8 t/ha in aerobic system



Paddy (Husk)



Milled Rice



Grain Yield:	3.8 t/ha under aerobic conditions
Plant height (cm):	90 cm
Duration (days):	115 days (seed to seed)

Rice Variety:	DRR Dhan 41 (IET 22729)
Variety Type:	Aerobic Rice Variety for Direct Sowing
Released for States:	Bihar and Karnataka
Grain Type:	Long slender
Grain Yield:	3.8 t/ha under aerobic conditions
Disease and Pest Resistance:	Moderately resistant to nematodes, BPH and leaf folder
Parentage:	Nekken1/BPIR1 10
IET No:	22729
Year:	2014
Notification No:	S.O.268(E) | 28/01/2015
Protection of Plant Varieties and Farmers' Rights Authority Number:	2019/365
Ecology:	Direct Seeded Aerobic conditions
Season:	Kharif & Rabi

Disease and Pest Resistance: Moderately resistant to nematodes, BPH and leaf folder

Grain Quality & Milling Characteristics

1000 grain weight (g):	24.0g
L/B ratio:	3.16
Head rice recovery (%):	61.7%
Alkali spreading value:	5.5
Amylose content (%):	23.52%
Gel Consistency (mm):	48.5mm

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DRR Dhan 54

IET-25653

RP 5943-421-16-1-1-B



A high yielding variety resistant to multiple diseases under direct seeded aerobic conditions

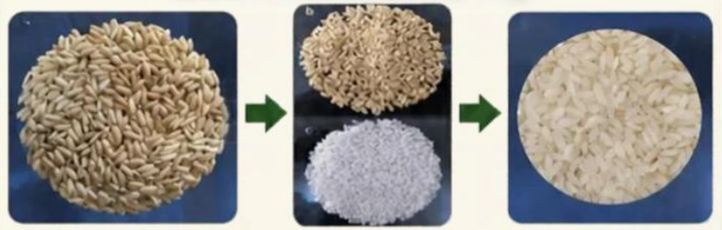
DRR Dhan 54 is a high yielding multiple disease resistant variety with desirable grain quality traits suitable for cultivation under direct seeded aerobic conditions in water limiting areas with short bold premium grain and cooking quality.

DIRECT SEEDED | AEROBIC ECOLOGY | MULTIPLE DISEASE RESISTANCE | WATER-LIMITING AREAS

KEY HIGHLIGHTS

It possess high hulling recovery (78.1%), milling recovery (69.7%) and head rice recovery (HRR) of 65.3%. It recorded desirable cooking quality traits - Intermediate amylose content (21.6%), GC of 44mm, ASV of 4.0, with white kernel appearance and very occasional chalkiness.

SHORT BOLD PREMIUM GRAIN



WHITE KERNEL APPEARANCE • VERY OCCASIONAL CHALKINESS

AGRONOMIC SPECIFICATIONS

Pedigree	RP 5124-11-4-3-2-1/IR 78877-208-B-1-1
Ecology	Aerobic
Grain type	Short Bold
Duration	114-118 Days
Yield	5.6 t/ha
Plant height	110-115 cm
1000 grain weight	25.11 g
L/B ratio	2.3
Head rice recovery	65.5%
Alkali spreading value	4.0
Amylose content	21.6%
Gel consistency	22 mm

RECOVERY AND COOKING QUALITY

Hulling recovery	78.1%
Milling recovery	69.7%
Head rice recovery (HRR)	65.5%
Amylose content	21.6%
Gel consistency (GC)	44mm
Alkali spreading value (ASV)	4.0

SALIENT FEATURES

DRR Dhan 54 can replace popular varieties like Sahbhagi Dhan, MTU1010 and IR64.

RECOMMENDED STATES

Telangana, Haryana, Odisha, Bihar, Jharkhand and Gujarat.

Notification No:
S.O. 500(E) | 09/01/2021

Protection of Plant Varieties and Farmers' Rights Authority Number:
2022/0013

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DRR Dhan 55

IET-26194

Variety type:
A high yielding early aerobic rice variety

Description:
It is an aerobic variety ideal for direct sowing in non-puddled soils. It is a mid-early duration variety maturing in 120-130 days possessing long bold grains. The average grain yield is 4.97 t/ha under aerobic system. DRR Dhan 55 consistently out-performed the check varieties in Eastern zone (Zone III) and Central Zone (Zone V). It has long bold grain with moderate resistance to neck blast, gall midge, rice thrips and plant hoppers.

Pedigree: MTU-1010 / IR79915-B-83-4-3

Ecology: Aerobic

Grain type: Long Bold

Duration: 120-130 Days

Yield: 5.5 t/ha



AEROBIC RICE
DIRECT SOWING IN NON-PUDDLED SOILS

MID-EARLY DURATION120-130 DAYS | LONG BOLD GRAINS | AVERAGE GRAIN YIELD UNDER AEROBIC SYSTEM | VARIETY YIELD5.5 T/HA

PLANT, PANICLE AND GRAIN



Photographs of Plants, panicles, grain, brown rice and polished rice of the proposed variety DRR Dhan 55 (IET 26194)

HUSKED RICE



MILLED RICE



AGRONOMIC SPECIFICATIONS

- 1000 grain weight: 25.0 g
- Duration: 120-130 Days
- Yield: 5.5 t/ha
- Ecology: Aerobic
- Grain type: Long Bold
- Pedigree: MTU-1010 / IR79915-B-83-4-3
- Notification No: S.O. 500 (E) | 29/01/2021
- Protection of Plant Varieties and Farmers' Rights Authority Number: 2022/0014
- Plant height: 100-110 cm

DISEASE & PEST RESISTANCE

Moderately resistant to leaf blast, neck blast, gall midge, rice thrips and plant hoppers.

SALIENT FEATURES

IET 26194 exhibited moderately resistant to leaf blast, neck blast, gall midge, rice thrips and plant hoppers.

GRAIN AND MILLING QUALITY

- Kernel length: 6.22 mm
- Kernel breadth: 2.22 mm
- L/B ratio: 2.80
- Hulling: 78.07%
- Milling: 68.90%
- Head rice recovery: 55.53%
- Alkali spreading value: 7.0
- Amylose content: 22.58%
- Gel consistency: 22 mm

RECOMMENDED STATES

Bihar and Chhattisgarh.



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DRR Dhan 57

IET-26171

A high yielding early aerobic rice variety

DRR Dhan 57 is a high yielding early variety suitable for aerobic conditions of Jharkhand (Zone III) and Chhattisgarh (Zone V). The overall mean grain yield in Zone III and Zone V was 4782 kg/ha, which is 13%, 17% and 16 % higher than National, Zonal and Local checks, respectively indicating good cooking quality.



AEROBIC ECOLOGY

EARLY DURATION 115 - 124 DAYS

OVERALL MEAN GRAIN YIELD 4782 KG/HA

YIELD ADVANTAGE OVER CHECKS
13% 17% 16%
NATIONAL ZONAL LOCAL

VARIETY IDENTITY

Pedigree	BPT 5204/Azucena
Ecology	Aerobic
Grain type	Short Bold
Duration	115 - 124 Days
Yield	4.5 - 5.5 t/ha
Notification No	S.O. 8 (E) | 24/12/2021
Protection of Plant Varieties and Farmers' Rights Authority Number	2022/0024
Plant height	102-110 cm
1000 grain weight	23.0 g



Semi-tall plant habit



Healthy panicles

SALIENT FEATURES

It is a semi tall, high yielding, short bold grained variety with moderate resistance to major insect pests and diseases such as leaf blast, neck blast. Resistance to gall midge, rice thrips and moderate resistance to plant hoppers and Whorl Maggot.

GRAIN TYPE: SHORT BOLD



PADDY GRAIN



HUSKED GRAIN



MILLED RICE

GRAIN AND COOKING QUALITY

Head Rice Recovery:	60%
Alkali Spreading Value:	4.0
Amylose Content:	23.4%
Gel Consistency:	53mm



RECOMMENDED STATES
Jharkhand and Chhattisgarh.



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