

## Resistance to 2 diseases in Faizabad, UP, India.

Disease	Entries <sup>a</sup> (%)			
	Resistant <sup>b</sup>	Moderately susceptible	Susceptible	Probable escapes
False smut	42.99	23.98	6.79	26.24
Narrow brown leaf spot	65.67	3.43	13.74	17.16

<sup>a</sup>Based on 221 genotypes tested against FS, 231 tested against NBLs. <sup>b</sup>Reaction: 0 = probable escape, 1-3 = resistant, 4-6 = moderately susceptible, 7-9 = susceptible.

## Sources of resistance to rice yellow dwarf and its vector

G. N. Rao and P. Narayanasamy, Plant Pathology Department, Tamil Nadu Agricultural University, Coimbatore 641003, India

We tested 24 rice genotypes for resistance to rice yellow dwarf (RYD) and its green leafhopper (GLH) vector (*Nephotettix virescens* Distant).

First- and second-instar GLH nymphs were allowed 48 h acquisition feeding on

RYD source plants and confined on healthy rice plants for 30 d to complete the latent period. Twenty 7-d-old test seedlings of each genotype were placed individually in test tubes, and inoculated with 2 GLH/tube for 24 h. Inoculated seedlings were planted in earthen pots and disease symptoms monitored.

The genotypes also were tested for reaction to GLH (TN1 and PTB33 were susceptible and resistant checks) using 15 seedlings/variety in seedbox screening (4-5 second- and third-instar nymphs/seedling).

Entries maturing in Sep generally escaped FS and those in Oct, NBLs: 37 genotypes escaped both diseases and 71 showed resistance to both (see table). FS pressure starts building in Oct and is highest in varieties that mature in Nov. NBLs pressure starts building in Nov and is highest in varieties that mature in late Nov and Dec. □

Resistance (infection range 5-30%) showed in 18 genotypes: IR64, IET7492, and IR62 recorded very low infection (see table). Incubation period was longest in IR64, followed by IR62 and IET7492. Twenty genotypes were moderately resistant or resistant to vector GLH.

IR62, IR64, and IET7492, with resistance to both RYD and GLH and with long incubation periods, are good donors for developing RYD-resistant cultivars. □

## Sources of resistance to RYD and GLH.

Genotype	RYD infection (%)	Reaction <sup>a</sup>	Mean incubation period (d)	Increase over (%) susceptible check	GLH	
					Grade	Reaction <sup>b</sup>
IR64	5.0	R	40.0	43.4	3	R
IET7492	5.0	R	39.0	39.8	3	R
IR62	10.0	R	39.5	41.6	3	R
TNAU 80030	15.0	R	35.0	25.4	3	R
Tadukan	15.0	R	34.7	23.4	3	R
TNAU 831520	15.0	R	34.0	21.9	3	R
IR58	15.0	R	33.7	20.8	3	R
IR30	15.0	R	33.3	19.4	3	R
IR8	15.0	R	33.3	19.4	5	MR
RP1931-54	20.0	R	33.5	20.1	3	R
IR26	20.0	R	33.0	18.3	5	MR
IR5	20.0	R	32.5	16.5	5	MR
TNAU 831521	20.0	R	32.0	14.7	5	MR
NLR 139-69	25.0	R	33.0	18.3	5	MR
IR24	25.0	R	32.4	16.1	3	R
TNAU 80058	25.0	R	31.6	13.3	3	R
ADT 31	30.0	R	31.5	12.9	5	MR
TKM 9	30.0	R	31.5	12.9	5	MR
AD 85002	35.0	I	31.3	12.2	5	MR
TNAU 80042	40.0	I	30.5	9.3	5	MR
CO 43	40.0	I	30.5	9.3	7	S
Ponni	45.0	I	30.5	9.3	7	S
White Ponni	50.0	I	30.0	7.5	7	S
IR20	70.0	S	28.9	3.6	7	S
TN1 (susceptible check)	85.0	S	27.9	—	9	HS
PTB33 (resistant check)	—	—	—	—	1	HR
LSD (P=0.05)	—	—	0.6	—	—	—

<sup>a</sup>R = 0.30, I = 31-60%, S = 60% infection. <sup>b</sup>HR = highly resistant, R = resistant, MR = moderately resistant, S = susceptible, HS = highly susceptible.

## Technique to preserve conidia of rice blast (Bl) fungus

Sun Guochang and Sun Shuyuan, Plant Protection Institute, Zhejiang Academy of Agricultural Sciences, Hangzhou; and Shen Zongtan, Agronomy Department, Zhejiang Agricultural University, Hangzhou, China

We studied the effect of preservation conditions on viability and pathogenicity of conidia of four rice Bl fungus *Pyricularia oryzae* Cav. races.

Freshly produced conidia were washed from barley grains with distilled water. The spore suspension was passed through a general filter paper (f 12 cm) in a funnel, dried at 30-35 °C, and stored in an aluminum box (f 10 × H15 cm) at ambient temperature (-4-35 °C) and in a desiccator at three temperatures: ambient, 4 °C, and -20 °C.

Conidia viability was evaluated every 3-4 mo in a drop of distilled water on a concave slide incubated at 28 °C for 24 h. Pathogenicity was tested by