

random in the seedboxes. At 7 d after seeding, the seedboxes were transferred to iron trays (60 × 40 × 15 cm) filled with 5 cm water. At 20 d after seeding, the plants in the boxes were covered with nylon net cages into which LF moths collected in the field were released at 20 moths/cage (1 male to 1 female). A cotton swab soaked in 1% sugar solution was hung inside the cage as food for the moths. Moths were allowed to oviposit for 3-4 d. At 15 d after release of moths, LF damage was assessed as percent damaged leaves in each row and accessions were rated according to the *Standard evaluation system for rice*.

The same accessions were screened in the field at the Paddy Breeding Station, TNAU.

Reaction of rice accessions to LF. Coimbatore, India.

Accession	Cross	Damage rating ^a	
		Greenhouse	Field
BKNBR1088-83	IR2030-203-3-1/RD 1	3	3
RP1579-43	Phalguna/ARC6650	3	3
RP2199-41-25-30-55	Phalguna/TKM6	3	3
RP2199-249-209	Phalguna/TKM6	3	3
F'TB12 (donor)	—	3	3
RP2035-48-54-6	Phalguna/IR50	3	3
RP2235-85-62-8	Phalguna/IR50	3	3
RP2235-115-75-40	Phalguna/IR50	3	3
RP2235-136-65-10	Phalguna/IR50	3	3
TNAULFR83 1324	Bhavani/IR4707-106-3-2	3	3
TNAULFR832042	Bhavani/ARC10550	3	3
T2005 (donor)	—	3	3
TNI (susceptible check)	—	9	9
PTB33 (resistant check)	—	3	3

^aBy the *Standard evaluation system for rice*.

Twelve accessions were identified as resistant in the greenhouse and in the field (see table).□

Screening rice varieties for resistance to mealybug

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We evaluated 17 varieties for resistance to mealybug *Brevinnia rehi* Lindinger. Experimental plots were 4 × 2 m with 2 seedlings/hill at 15- × 10-cm spacing

Mealybug infestation on 17 rice varieties.^a Coimbatore, India.

Variety	Infested plants (%)	Mealybugs (no./tiller)
PY 3	31.2 (33.1) a-d	43.4 (19.7) b
CO 37	23.4 (28.6) a-c	43.1 (19.6) b
CO 41	36.8 (36.7) b-e	41.7 (19.2) b
ADT31	31.9 (35.9) a-e	58.6 (23.0) c
ADT36	28.2 (31.9) a-d	61.0 (23.2) c
IR20	29.2 (42.4) c-e	64.2 (24.0) c
IR50	31.5 (34.0) a-d	92.7 (28.9) de
ACM9	45.7 (42.5) c-e	101.2 (30.1) d-f
ACM10	51.0 (45.6) de	107.6 (31.0) f
IET8616	19.1 (25.7) a	32.7 (17.1) a
AS20665	19.8 (26.3) ab	39.6 (18.9) b
AS24956	48.4 (44.0) c-e	92.0 (28.7) d
AS28838	55.0 (47.9) de	102.2 (30.2) ef
AD85001	58.0 (49.7) e	96.7 (29.5) de
AD85003	53.1 (46.8) de	101.1 (30.2) ef
TNAU831146	43.7 (41.2) c-e	98.6 (29.7) d-f
TNAU831175	52.7 (46.6) de	101.7 (30.1) d-f

^aMeans of 3 replications. Figures in parentheses are arc sine transformed values. In a column, means followed by a common letter are not significantly different (P = 0.05) by DMRT.

with 3 replications. Twenty hills were selected for each entry and the number of mealybugs/ tiller and percentage infested plants on 20 hills/entry were recorded at 15-d intervals beginning 15 d after transplanting.

Mealybug infestation ranged from

19% to 58% (see table). IET8616 had the fewest infested plants; AD85001 was highly susceptible. ACM10 had the highest number of mealybugs/ tiller. Mealybugs/ tiller and percentage infestation were positively correlated ($r = 0.9786$).□

Genetic Evaluation and Utilization

DROUGHT TOLERANCE

Evaluation of drought-resistant upland rice accessions

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We evaluated 53 early-maturing rice accessions against local checks Oct 1986-Feb 1987. Seeds were sown directly in 1-m² plots at 20 cm between rows and

10 cm within rows.

Rainfall during the cropping period was 474.4 mm in 20 rainy days, with a 16-d drought spell during the vegetative phase. Drought tolerance and recovery percentage were scored using the *Standard evaluation system for rice*.

Two drought-resistant varieties were identified: IRAT 170 and IR21018-97-1 (see table).□

Performance of promising upland rice varieties under moisture stress. Paramakudi, India.

Variety	cross	Drought tolerance	Drought recovery
IRAT 170	IRAT13/Palawan	3	3
IR21018-97-1	BG34-8/RP825-70-7-1//IR36	3	3
Nootripathu (local check)	—	3	5
PMK1 (improved check)	Co 25/ADT31	3	3