

Genetic Evaluation and Utilization

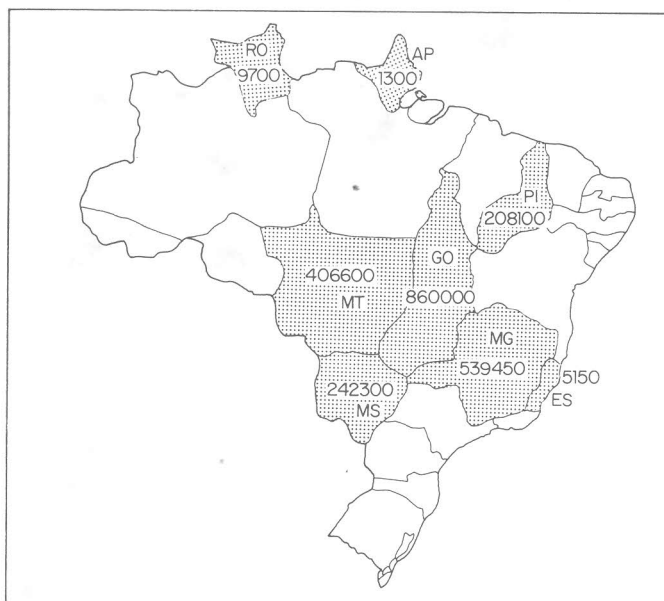
OVERALL PROGRESS

Upland rice varieties released in Brazil

E. P. Guimarães and O. P. de Morais, National Research Center for Rice and Beans (EMBRAPA/CNPAF) - Caixa Postal 179, 74000 Goiânia, Goiás, Brazil

The National Research Center for Rice and Beans (EMBRAPA/CNPAF) started the work on rice in 1976. The first 2 yr were dedicated to national and international germplasm collection and studies on available genetic variability. In 1978, the first crosses were made at CNPAF, and evaluation started. In 1983, a national evaluation network was organized.

Varieties released in 1985 are Arroz BR 4 (IAC 5544/Dourado Precoce), EMCAPA 01 (IAC 5544/Dourado Precoce), Cuiabana (IAC 47/SR 2041-50-1), Rio Paranaíba (IAC 47/63-83), Araguaia (IAC 47/TOS 2578/7-4-2-3-



Potential area (ha) to be covered by the upland rice cultivars released in Brazil since 1985.

B2), Guarani (IAC 25/63-83) and Centro America (IAC 25/63-83). These cultivars outyield local checks and are blast resistant.

The figure shows the potential area to be covered by the new releases, representing about 70% of the total upland rice area of Brazil. □

Two medium to early-maturing rice varieties for northwest India

E.A. Siddiq, V.P. Singh, F.U. Zaman, A.R. Sadananda, and R.P. Puri, Division of Genetics, Indian Agricultural Research Institute (IARI), New Delhi 110012, India

IARI recently released 2 early-maturing varieties (120-125 d), Pusa 169 and Pusa 205, for general cultivation.

Pusa 169, derived from a cross of IR28 with Pusa 140-56, and Pusa 205, derived from a cross of IR28 with Pusa

Table 1. Relative yield performance of Pusa 169 (IET7278) in All India Coordinated Yield Trials (AICRIP) (UVT-2).

Season, year	Yield (t/ha)		
	Pusa 169	Rasi	Ratna
Kharif 1980	4.6	3.7	4.1
Kharif 1981	4.3	3.7	4.2
Kharif 1982	4.8	3.8	4.4

Table 2. Relative yield performance of Pusa 205 (IET7279) in All India Coordinated Yield Trials (UVT-2).

Season, year	Yield (t/ha)		
	Pusa 205	IR36	Rasi
Kharif 1983	4.0	3.6	3.5
Rabi 1984	5.5	5.1	4.9
Kharif 1984	3.6	2.8	3.0
Rabi 1985	4.3	3.6	3.6

33-18, were identified as superior in yield performance in the medium-early and early groups in All India Coordinated Yield Trials and various on-farm and minikit trials (Table 1,2). Yields almost equal those of popular medium-duration varieties, although the 2 varieties mature 2 wk earlier. Both varieties are moderately resistant to bacterial blight, and Pusa 205 is resistant to blast. Both have long slender grains and good cooking quality. Pusa 169 was released

in 1986 for Haryana, Punjab, western Uttar Pradesh, Bihar, West Bengal, and Karnataka; Pusa 205 for Punjab, West Bengal, and Orissa. □

Performance of improved rice varieties in farmers' fields in Bhutan

N.Q.R. Nathaniels, P. Druba, and G.B. Chetri, Centre for Agricultural Research and Development (CARD), Agriculture Department, Wangdiphodrang, Bhutan; and A.R. Samiano, Training and Technology Transfer Department, IRRI

Five improved rice varieties (one tall, four semidwarf) were evaluated at seven typical farmers' fields in the Wangdiphodrang-Punakha valley in 1986. The sites were at altitudes between 1,250 m and 1,500 m. Soils were loam to sandy loam and sandy clay loam with pH 5.6-6.9 and 0.9-1.7% organic C.