

### First record of the wild rice *Oryza meridionalis* in Indonesia

B.R. Lu, Genetic Resources Center, IRRI,  
and T.S. Silitonga, Research Institute of  
Food Crop Biotechnology, Central  
Research Institute for Food Crops  
(CRIFC), Agency for Agricultural Research  
and Development (AARD), Department  
of Agriculture, Bogor, Indonesia

*Oryza meridionalis* Ng is an annual diploid ( $2n = 2x = 24$ ) wild species of rice, which has only been reported as endemic to the northern parts of Australia. This wild rice contains the same AA genome as cultivated rice (*O. sativa* L.), and is therefore one of the most accessible genetic resources in the wild rice gene pool for rice improvement. During a recent exploration and collection mission (29 September–9 October 1999) for wild rice species in Irian Jaya, Indonesia, *O. meridionalis* was found and collected at many sites in Merauke District. This is the first record for *O. meridionalis* in Irian

Jaya. *O. meridionalis* was found in swampy lowlands and forests, along canals and ditches, and near or inside farmers' rice fields. According to local farmers, this species occurs abundantly, particularly during the wet season (February–May) when water is sufficient. Farmers call this wild rice *Miyang Padi*, which means “awned rice,” or *Padi Rawa Hitam*, meaning “black swamp rice.” They complain about this wild rice infesting their rice fields and interfering with fishing, which shows the common occurrence of *O. meridionalis* in the area.

The traditional staple food crops in Irian Jaya are mainly sago and tuber crops, such as sweet potato, cassava, and taro. Cultivated rice, introduced into the area only in the early 1980s by transmigrants, is now preferred by many people, particularly those who have moved to Irian Jaya from other parts of the country. The most serious rice insect pests and diseases occurring in this area are whitebacked

planthopper [*Sogatella furcifera* (Horvath)] and rice tungro disease, based on information from the local agriculture extension offices. Because *O. meridionalis* occurs naturally in this area, it might be worthwhile to screen its populations for resistance to these pests. Other wild rice species, such as *O. officinalis*, *O. longiglumis*, and *O. rufipogon*, were also found and collected in Irian Jaya during the expedition. The exploration and collection mission was jointly conducted by IRRI and the Research Institute of Food Crop Biotechnology, CRIFC, AARD, Department of Agriculture of Indonesia.

### Influence of unusual weather on pest outbreaks and rice production in Bangladesh

Zahirul Islam, Entomology Division,  
Bangladesh Rice Research Institute  
(BRRI), Gazipur, Bangladesh

During the past few years, unusual weather conditions in Bangladesh have directly and indirectly affected rice production. Rice in Bangladesh is grown in four overlapping seasons: *aus* (summer rice), transplanted *aman* (monsoon rice), deepwater rice (mostly floating rice), and *boro* (winter rice). More than 93% of the 2.9 million ha of boro rice is irrigated and is thus less vulnerable to weather calamities. In contrast, transplanted *aman*, which covers about 5 million ha, is mostly rainfed and is often affected by submergence and drought.

The 1997 transplanted *aman* crop was affected by a severe drought during the crucial reproductive developmental stage in October. A widespread outbreak of brown planthopper (BPH), *Nilaparvata lugens* (Stål), also occurred in October. BPH populations probably built up during August and September, when rainfall was adequate. The drought and BPH outbreak caused localized yield losses of up to 50%



(Left) A panicle of *Oryza meridionalis* collected near Wasur National Park in Merauke District of Irian Jaya, Indonesia. (Below) Farmers helped to collect seed samples from *Oryza meridionalis* plants occurring in their field near Kuprik at Merauke District.

