

---

## ANNOUNCEMENT

### International Rice Research Institute

#### *The race to save wild rices*

Los Baños, Philippines – Elephants hate trespassers. Last year, they chased Dr Duncan Vaughan out of Bison Valley in southern India where he was collecting wild rice seeds. While that was Vaughan's worst experience, he often swims in murky swamps and climbs mountains to get a few precious tillers of a plant that most people consider a weed.

'The seeds of these rare and endangered species of wild rice must be conserved to assure their survival', Vaughan, associate geneticist at the International Rice Research Institute (IRRI), says. 'The useful genes of wild rices can be incorporated into their domesticated relatives to develop commercial varieties with the best traits of each.'

For example, *Oryza nivara*, a wild rice from India, is the only known source of genes for resistance to grassy stunt virus disease. Incorporation of that resistance into improved rice varieties has saved Third World farmers hundreds of millions of dollars. The only other alternative would be disease-ravaged crops, or protection with petrochemical-based pesticides.

Vaughan has collected wild rices from India, Indonesia, Nepal, the Philippines, Sri Lanka, and Thailand. He visits archaeological sites, game parks, and forest reserves where wild animals, trees, and plants are protected by law. Seeds are collected cooperatively with governments and conservation groups.

'Half of all the seeds we collect go to the country's national research program; we preserve the others at IRRI', Vaughan says. More than 2000 of the almost 83,000 rice varieties stored at IRRI's International Rice Germplasm Center (IRGC) are wild rices.

Scientists and governments can withdraw, free of cost, such seeds to use as 'genetic building blocks' to develop improved varieties locally. The gene bank assures rice-growing countries of the genetic variability essential to improve rice production.

'Newly opened areas in Africa and South America can now be planted to rice because of the genetic materials pooled from diverse habitats', Chang says.

Efforts to conserve wild rice species began in the 1950s. Early national collections were made by the Indian Council for Agricultural Research. The National Institute of Genetics in Japan conducted other international expeditions. Wild rices in Africa have been collected by the French agricultural research agencies IRAT and ORSTOM.

'The world's remaining wild rice habitats are important reservoirs of useful genes', Vaughan says. 'We must not only collect and conserve seeds, we must also identify wild rices in protected areas where they can continue to evolve.'

Vaughan's work is far from over. Many rice varieties remain uncollected in the Himalayas, the Oceania islands, and war-torn areas of Indochina and Burma.

**IRRI, PO Box 933, Manila, Philippines**

---