

## ポスドク募集（国際イネ研究所）

### Position Announcements for Project Scientists - Physiology

The International Rice Research Institute (IRRI) is seeking two Project Scientists to join the team working on development of a perennial upland rice plant. IRRI, supported by the Consultative Group on International Agricultural Research (CGIAR), is a nonprofit, autonomous organization based in the Philippines and engaged in research and training on rice-related technology. The multidisciplinary team conducting this work includes breeders, molecular biologists, and physiologists. The Perennial Upland Rice Project is one of IRRI's "New Frontier" Projects and represents part of the Institute's program to develop sustainable farming systems for the uplands. A perennial upland rice would assure permanent ground cover while providing a source of food, and could contribute to the establishment of sustainable cropping systems for areas highly susceptible to erosion. The first phase of the project will end in June 1998, when the second 3-year phase will commence.

#### Position I. Physiology of perenniality in rice

The successful candidate filling this position will work on physiological understanding of perenniality in rice. Major activities are:

- \* Clarify the carbon and nutrient flow in perennial rice with a particular focus on rhizomes.
- \* Identify key factors that determine perenniality.
- \* Set up an appropriate screening system for improved grain production in perennial rice from the viewpoint of source-sink relationships.

Applicants should have a PhD in Plant Physiology, Plant Biochemistry, Crop Science, Biology or a related field, and a strong background in quantitative production physiology. A minimum of 3 years research experience (pre- and/or postdoctoral) on sink-source relationships in rice plants, excellent knowledge of enzymology and molecular biology beside his/her major area, good writing skills, and profound knowledge of advanced statistical data analysis are desirable. Experience in tracer (radioactive or stable) experiments, and isolation and purification of metabolites or enzymes are advantageous. Fluency in English is required.

#### Position II. Physiology of water use in upland rice

Perennial species of *Oryza* are adapted to moist habitats, but perennial upland rice must tolerate aerobic soils and periods of desiccation. Activities to address this issue are:

- \* Characterize annual and perennial rice species for root and shoot response to water deficit and for recovery processes.
- \* Develop high capacity screening techniques to identify lines with superior performance under different moisture regimes, including extended desiccation.
- \* Interact with molecular geneticists to differentiate mechanisms of adaptation to water-limited environments.

Applicants should have a PhD in Plant Physiology, Crop Science, Biology or a related field, and a strong background in quantitative production physiology. A minimum of 3 years research experience (pre- and/or postdoctoral) on crop water relations, good knowledge of soil science, and competence in statistical analysis are desirable. Applicants should have an interest in ecophysiology, physiological genetics, and linkages between field performance and molecular biology. Ability to work in a cooperative, multidisciplinary environment is essential. Fluency in English is required.

Both positions are located at the Institute's Los Baños headquarters. Salary and perquisites for the position are internationally competitive. IRRI provides a gender-sensitive environment and welcomes women applicants.

Qualified applicants should send a c. v. including details of three referees (with FAX or email addresses) to:

Dr. Osamu Ito, Head, APPA Division, International Rice Research Institute, P.O. Box 933, Manila 1099, Philippines. Tel: (63-2) 845 0563, Fax: (63-2) 891 1292, E-mail: O.ITO@CGNET.COM.

**Closing date: 31 March 1998 (or until position filled).** The appointment will begin on 1 July 1998 and is initially for one year, extendable for an additional year.