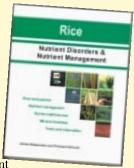
New Handbook on Rice Nutrient Management Now Available

he International Rice Research Institute (IRRI) in the Philippines has forecast that rice yields must increase by 30 percent by 2020 to keep pace with growing demand due to population increases.

A new handbook published by IRRI and PPI/PPIC describes site-specific nutrient management methods and provides a reference to assist with the identification and management of nutrient disorders. Titled Rice: Nutrient Disorders & Nutrient Management, the 191 page book is authored by Dr. Achim Dobermann, formerly with IRRI and now with the University of Nebraska, and Dr. Thomas H. Fairhurst, Deputy Director, PPI/PPIC East and Southeast Asia Program, Singapore.

Oriented to production in tropical and subtropical regions, topics include rice ecosystems, nutrient management, nutrient deficiencies, and mineral toxicities. Estimates of nutrient removal in grain and straw are included to help researchers and extension workers calculate the amount



of nutrients lost from the field under various management systems. The publication will improve understanding of new approaches to nutrient management at the farm level.

The book with CD-ROM is available for purchase. The price (including shipping/ handling) is US\$32.00 in less developed countries and US\$77.00 in highly developed countries. For more details, check the website at **www.eseap.org**, or contact Doris Tan, PPI/PPIC (ESEAP), 126 Watten Estate Road, Singapore 287599. E-mail: dtan@ppi-ppic.org, phone: 65 468 1143, or fax: 65 467 0416.

required K and all Mg and S were supplied by SPM.

Under the conditions of this study, where soil N and P were low to medium and K, Mg and S were deficient, four-year average profitable yields of up to 15,200 kg mango/ha were produced using the following recommendation: 400 g N, $125 \text{ g P}_2\text{O}_5$, $320 \text{ g K}_2\text{O}$, 40 g Mg, and 80 g S/plant/year.

Nutrient removal of N, P₂O₅, K₂O, Ca, Mg, and S by the fruit from a crop producing 15,000 kg mango/ha was measured at 22.4, 3.9, 37.1, 3.2, 3.0, and 2.3 kg/ha, respectively.

Mango quality was also improved by the recommended application as measured by color, fragrance and taste. Also, fruit weights were higher, with 14 percent solids, 9 percent soluble carbohydrate, 21 mg vitamin C/100 g, and less than 0.3 percent organic acids. The ratio of carbohydrate to acid was 30.

If mango planters follow the above recommendations, they will obtain high yields of good quality fruit, and they will receive higher profits. **BCI**

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