

# IPNI REGIONAL REVIEW

## Middle East Program



Locations of ongoing IPNI activities within Jordan, Egypt, and Pakistan, and sites with past activities implemented in Syria and Turkey. Countries marked with stars denote regions with good potential for IPNI activities (Iraq, Iran, Saudi Arabia, and Sudan).

## examples of IPNI REGIONAL ACTIVITIES



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### 4R Nutrient Stewardship

The goal is the promotion of improved nutrient management by implementing 4R Nutrient Stewardship; with emphasis on balanced fertilization and expanding opportunities for fertigation. Specific program objectives include:

- Improved crop yield and quality.
- Improved water use efficiency (more crop per drop) and nutrient efficiency (more food per kg of nutrient).
- Improved soil health and productivity.
- Higher farmer income through plant nutrient education.

### Research and Demonstration

- IPNI currently supports multi-partner cooperative research and demonstration programs in five countries:

**Egypt:** National Research Center (Dept. of Fertilizer Technology; Dept. of Plant Nutrition)

- wheat, maize, legumes

**Syria:** The Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD)

- wheat, maize, legumes, citrus

**Turkey:** Cukurova University, Cotton Research Institute, Hazelnut Research Institute, Arab Potash Company.

- maize, cotton, hazelnut, watermelon

**Jordan:** Arab Potash Company

- wheat, legumes, onions, vegetables

**Pakistan:** Engro

- rice, wheat, banana

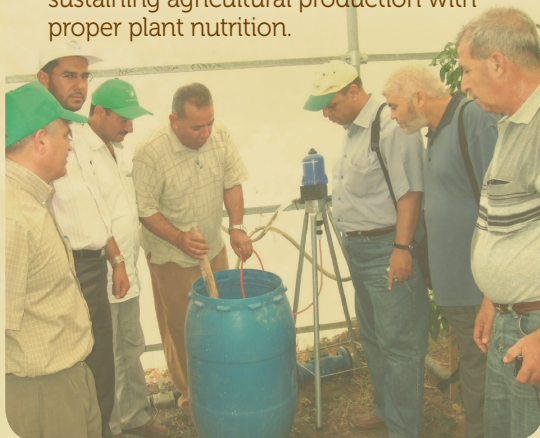
### Educational Outreach

**In-person Training:** Extensive outreach through on-farm demonstrations, field days, and workshops across the region.

**Publications:** Key IPNI educational materials have been translated into Arabic and are currently distributed across the region for nutrient management training. An Arabic translation of the 4R Plant Nutrient Manual is being distributed across the region. A Turkish translation of manual is expected to be completed in 2017.

## Key Regional Issues

- Chronic lack of water for irrigated crops, with growing competition for water from urban growth. Water scarcity and limited availability of arable land constrain agricultural expansion.
- Regional imbalance between supply and demand for food continues to grow due some of the world's most rapid population growth, increased income, and consumer expectations.
- National food subsidy programs can distort market forces and incentives for crop production.
- Arab countries are the largest importers of cereal in the world. Formerly large food-producing breadbasket countries no longer grow sufficient crops due to civil conflict and government policies.
- The Middle East region is represented by very diverse countries, cultures, and natural resources. There is no one-size-fits-all solution to multiple challenges of sustaining agricultural production with proper plant nutrition.



Dr. Rusan (center) conducting a fertigation training workshop.

