

number of fields were sampled and analyzed by N-STaR and the determination was made that the 0 to 18-in. soil sample depth required for N-STaR analysis resulted in lower levels of field variability than a traditional 0 to 4-in. soil sample used for routine soil analysis of rice nutrient requirements. During 2011, 17 field-scale strip trials were conducted across the Midsouth US comparing the N-STaR site-specific N rate to the producer practice within a large-scale production field. Treatments were replicated and harvested with a commercial combine, weighed using a weigh wagon, and moisture determined. Statistical analysis indicated that for 15 of the 17 sites, the N-STaR rate recommendation resulted in yields that were equal to or higher than the producer practice. The average N rate reduction across all sites was 55 lb N/A, and in some cases the N rate reduction was as much as 105 lb N/A with no statistical yield difference.

The release of N-STaR for silt loam soils within the Midsouth has been well received by growers. Continuing research with N-STaR will focus on the completion of a correlation and calibration curve for rice produced on clay soils. Other ongoing research is the development of the N-STaR technology for soft red winter wheat production in Arkansas, which indicates the need to sample 6-in. deep and is currently being validated in small-plot trials. The success of N-STaR in rice and wheat promises more efficient N use in Midsouth agriculture. **DC**

Acknowledgements

This research was funded by the Arkansas Rice Research Promotion Board, Louisiana Rice Promotion Board, Mississippi Rice Promotion Board, Texas Rice Promotion Board, and the US Rice Foundation.

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Mohamed El Gharous Joins Staff of IPNI as Consulting Director of North Africa Program

The International Plant Nutrition Institute (IPNI) is pleased to announce the addition of a new scientific staff member. Dr. Mohamed El Gharous will serve as Consulting Director of IPNI's newly established regional program in North Africa. The program will work collaboratively with the National Agronomic Research Institute (INRA) on projects and activities of mutual interest. Dr. El Gharous will be based in Settat, Morocco.

"The establishment of this program in North Africa marks another milestone for IPNI's regional representation within the African continent," said IPNI President Dr. Terry Roberts. "Mohamed's knowledge of arid and semi-arid agriculture will be a great addition to the knowledge-base of IPNI, and his representation of the North African region will be highly valued by our members and staff."

Dr. El Gharous received a Horticultural Engineer degree (B. Sc.) in 1980 from the Agronomy and Veterinary Hassan II Institute in Rabat, Morocco. He was hired by INRA in Morocco in 1980. Mohamed subsequently received his M.Sc. (Agronomy) in 1987 and his Ph D. (Soil Science) in 1994—both from Oklahoma State University in Stillwater, USA.

Dr. El Gharous's research career began by examining soil fertility for cereals in arid and semi-arid regions. He has since been responsible for coordinating the soil and plant testing laboratory at the Aridoculture Center at Settat (INRA-Settat) as well as research on soil test calibration in arid and semi-arid zones. He has coordinated the cereal and soil management research sub-programs at INRA-Settat, conducted research

on soil fertility and fertilization within the aridoculture program, and assisted the management of the Aridoculture Center.

Selected research highlights include following the evolution of P and K in soils under wheat-fallow rotation and quantifying their residual effects; improving fertilizer recommendation techniques in calcareous soils of Morocco; exploring composting and compost effects on soil quality and plant nutrition; defining fertilizer formulas adapted to Moroccan soil and climatic conditions and crops; and adaptation and improvement of soil and plant analyses methods.

Presently, Dr. El Gharous is also Head of the Regional Center for Agricultural Research in Settat; and a member of the Faculty of Science and Technology at the University of Hassan I, Settat, where he lectures and serves as a supervising committee member for a number of graduate student programs. Dr. El Gharous is a nationally recognized expert on the subjects of fertilization, the research programs of INRA-Settat, and Zero-Tillage. He is a member of the Franco-Moroccan joint scientific committee for PRAD Projects (Research Projects in Agriculture for Development), President of the Sports and Cultural Association of Agricultural Research (INRA Club at Settat), and Vice President of the Cultural Association of the Chaouia Ouardigha Region. **DC**



Dr. Mohamed El Gharous