



NEWSFLASH : The 4R Nutrient Stewardship concept enables site-specific nutrient management to improve white corn yield in the Philippines

October 25, 2013. Penang, Malaysia – Site-specific nutrient management (SSNM) for white corn in on-farm trials has been found to increase farmers' yields in the Philippines by following the 4R Nutrient Stewardship approach, i.e. apply the right source of nutrients, at the right rate, at the right time, and in the right place.

The performance of SSNM prototype recommendations were evaluated in various regions of the Philippines during the dry season crop planting of 2012-2013. Both traditional varieties and improved open-pollinated varieties of white corn showed a marked yield improvement (44%), with traditional varieties going up from 1.8 to 3.2 t/ha, and open-pollinated varieties going from 2.3 to 4.1 t/ha, respectively.

Using SSNM for hybrid maize (yellow corn), which was developed by the International Plant Nutrition Institute's Southeast Asia Program (IPNI SEAP) as a starting point, SSNM for white corn shows great potential. Identified as one of the major crops in the Food Self Sufficiency Program of the Philippines, white corn is a staple in many regions, and any efforts made towards increasing yield with SSNM will help alleviate the food insecurity problem being faced in the country.

While SSNM improved white corn yield and gave better results than farmer's practice, the recommendations are still being adjusted on-site. Strategies are being formulated to test SSNM in combination with urea substitutes like Bio-N (a nitrogen-fixing microbial inoculant) and organic matter, which may prove beneficial over time.

Coordinated by the Department of Agriculture's Bureau of Agricultural Research (DA-BAR) and funded by the National Corn Program of the Philippines, the SSNM maize team of the University of the Philippines Los Baños (UPLB) guided the SSNM on-farm trials. Plans are underway to replicate the success in other farms, and IPNI SEAP will be working closely with UPLB and DA-BAR for the development of Quick Guides for white corn as well as a decision support system, Nutrient Expert® for White Corn, which are several tools developed by IPNI to support the wider-scale dissemination of 4R Nutrient Stewardship in the region.

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About IPNI

The International Plant Nutrition Institute (IPNI) is a not-for-profit, science-based organization dedicated to the responsible management of plant nutrition for the benefit of people. Through cooperation and partnerships with respected institutions around the world, IPNI adds its strength to agronomic research, education, demonstrations, training, and other endeavors. Best management practices for nutrient stewardship encourage the concept of 4Rs - applying the right nutrient source, at the right rate, at the right time, and in the right place. To learn more about IPNI, please visit: www.ipni.net

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