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Nutrient Deficiency Photo Contest Results Announced by IPNI

ongratulations to the winners of the 2007 photo contest and sincere thanks to those who submitted entries. On this page, we highlight winners for each of the four categories. The entries were judged on the overall quality of the image as well as the supporting data provided by entrants. All entries are posted for viewing on the IPNI website at:

>www.ipni.net/2007photocontest<.

We encourage readers to look for opportunities to capture digital photos and document crop nutrient deficiencies and disorders in 2008. Also watch for details outlining the 2008 edition of the IPNI contest in the next issue of Better Crops with Plant *Food* and at the website.

Nitrogen Category...N-Deficient Tobacco

Adriana Elina Ortega of Salta, Argentina, took this shot showing N deficiency in tobacco under no-till cultivation and mulch. Plants had a light green appearance and a definite yellowing of older leaves. Fully developed leaves had 1.79% N total and cured leaves had 1.18% N total.

(Second place: S. Srinivasan, Tamil Nadu, India. Third place: Ryan Stoffregen, Illinois, U.S.A.)



Phosphorus Category...P-Deficient Canola

Lyle Cowell of Saskatchewan, Canada, noticed this unintended 'test strip' in a canola crop that was directseeded into alfalfa stubble. The previous alfalfa crop depleted soil P and, in this case, the farmer ran out of seed-row P fertilizer on the last pass during seeding, causing slow and stunted growth.

(Second place: Nathan Slaton, Arkansas, U.S.A. Third place: Mr. Syafruddin, South Sulawesi, Indonesia.)



Colin Massey of Arkansas, U.S.A., captured this image of K deficiency in bermudagrass. The crop received no K over a 2-year period. Mean soil test K in 2007 was 82 ppm. Tissue K concentration in 2007 ranged from 0.57% to 1.03% across four harvests. Averaged across harvests, total biomass with no K fertilizer was 59% of yields produced with 560 kg K₂0/ha applied over the four harvests.

(Second place: Li Yuying, Heilongjiang, China. Third place, Nathan Slaton, Arkansas, U.S.A.)





Other Category...B Deficiency in Coconut Palm

P. Jeyakumar of Tamil Nadu, India, took this close-up photo showing B deficiency in a 14-yearold coconut palm. The deficiency was confirmed with symptoms such as early shedding of buttons (female flowers), resulting in poor fruit set, plus small and unevenly opened leaves. The developed nuts were also small and malformed. The soil test revealed that B content was very low (less than 0.3 mg/kg). Leaf tissue analysis also registered a lower value of 14 mg/kg.

(Second place: Luis Estrada, Guatemala. Third place: Nolver Arias, Santander, Colombia.)

Cash prizes are awarded in each of the four categories as follows: First place: US\$150.00; Second place: US\$75.00; Third place: US\$50.00.

Abbreviations and notes: N = nitrogen; P = phosphorus; K = potassium; B = boron; ppm = parts per million.