

# Characterization of Nutrient Disorders of *Pericallis x hybrida* 'Jester Pure Blue'

*Pericallis x hybrida* 'Jester Pure Blue' plants were grown in silica sand culture to induce and photograph nutritional disorder symptoms. The nutrient deficiency treatments were induced with a complete nutrient formula minus one of the nutrients. Plants were monitored daily to document and photograph sequential series of symptoms on youngest, young, recently

mature, and mature leaves as they developed (Figures 1-9).



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Figure 1. Nitrogen deficiency began as a lower leaf yellowing (left) and advanced to leaf necrosis (right).



Figure 2. Phosphorus deficiency appeared as dull black-green coloration of the leaves (left), advancing to leaf necrosis (right).



Figure 3. Sulfur deficiency (left image illustrates control plant on the left side and S deficient plant on the right side) began with plants exhibiting a greenish-yellow color (left) and progressed to a more intense yellow coloration in the leaves and necrosis (right).



Figure 4. Calcium deficiency (left image shows control on left and Ca-deficient on right) appeared as speckling on lower leaves near the petiole and interveinal chlorosis on the upper leaves (left), progressing to lower leaf yellowing and leaf curl (right).



Figure 5. Magnesium deficiency began as spots on leaf margins (left) and advanced to larger spots and the plant developing a yellow coloration (right).



Figure 6. Potassium deficiency began as lower leaf speckling (left) and was followed by necrosis (right).



Figure 7. Boron deficiency appeared as whitish yellow speckling on leaf edge of recently matured leaves (left) and advanced to speckling covering the entire leaf and inflorescence abortion (right).



Figure 8. Boron toxicity began with necrosis on lower leaves along the margin where veins reached the edge of the leaf (left), progressing to the entire leaf edge becoming necrotic and yellow coloration between the necrotic and healthy tissue (right).



Figure 9 (left). Iron deficiency appeared as interveinal chlorosis of recently matured leaves (left) and advanced to chlorosis spreading over the entire plant (right).