

# Nutrient Availability Changes with pH

John Erwin

Nutrient availability changes as the pH of a potting substrate changes. For instance, iron (Fe) availability decreases as pH increases. This is the basis for the common iron-deficiency symptom or interveinal chlorosis on upper leaves when media pH exceeds 6.8-7.0 even when sufficient iron has been applied through the

fertilization program or is in the media. In contrast to high pH induced iron deficiency, iron and manganese availability increases substantially when pH is below 6.0. This high availability can cause problems with some species: most notably seed geraniums, New Guinea impatiens, celosia, and African marigolds.

The chart below shows common changes in the availability of different essential nutrients as pH changes between 5.5 and 6.5.

Fe

NH<sub>4</sub>

P

