NUTRIENT USE BY CITRUS TREES: A REVISED PERSPECTIVE FOR MANAGEMENT

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The production of citrus in the world has summed up more than 100 million ton of fruits per year destined either for the fresh fruit market or for the frozen concentrated orange juice (FCOJ) industrial plants, what represents an important econonical agricultural activity. However, growers have faced significant challenges face to market restraints and occurrence of diseases that led to increased production costs, which can be counterbalanced with increased fruit production. This later has been possible with efficient nutrient supply for high yield and superior crop quality with definition of nutrient sources and rates, delivery systems, timing of application and horticultural responses of trees. Therefore, improved knowledge of these factors is important for the establishment of best recommendation practices for citrus groves. Recently, the differential response of trees to nitrogen (N), phosphorus (P) and potassium (K) in long term field experiments were chracterized depending on rootstock combinations, as well as the N and boron (B) use efficiency with aid of isotope tracers. Nutrient management via fertigation in tropical soils, where acidification caused by fertilizer application plays a major role on sustainability of groves, and in nurseries, where some specific facts apply have also been addressed. Such information were incorporated in the guidelines for citrus nutrient management, which promoted significant increases in crop production.