

Nutrient Studies on Yu Her Pao Lychee Orchards in South Taiwan

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Abstract

The aims of this study were to investigate the contents of soil and leaf nutrients, and to establish the method and the reference of nutrient diagnosis as guides for fertilization improvement for Yu Her Pao lychee. Fourteen orchards located in Kao-Ping district were chosen to survey the soil and leaf nutrients during different stages. The results showed that the soil pH of 50% orchards were in suitable range, and organic matter were all low. Available Ca and Mg were low, too. The average content of leaf N, P and K were all highest before application of basal and were lowest during anthesis stage. The average content of Ca and Mg were highest during fruit set stage, and were lowest before application of basal. The correlation between leaf nutrients and yield is highest during anthesis stage, so we should sample the leaf below the panicle during anthesis stage. When combining the leaf nutrients during anthesis stage and another reference which about lychee nutrients, we get the tentative criteria of leaf nutrients at anthesis stage for Yu Her Pao, N:0.79~1.30%, P:0.09%~0.18%, K:0.35~0.73%, Ca:0.575~1.13%, Mg:0.28~0.40%, Fe:34.7~254.3 mg kg⁻¹, Mn:182.7~409.3 mg kg⁻¹.

Key words: Yu Her Pao Lychee, Anthesis stage, Nutrient diagnosis.

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