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USE OF SPAD METER FOR DIAGNOSING THE NITROGEN LEAF CONTENT OF PEACH TREES OF THE CULTIVAR 'RICH LADY'

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Abstract:

A SPAD-502 meter was used as an easy method to estimate nitrogen leaf content of peach trees, cultivar 'Rich Lady' from orchards located in the Portuguese region of Beira Interior. The aim of this study was to evaluate the relationship between SPAD values and nitrogen leaf content, in June, in order to obtain an early diagnosis of the nutritional status of the trees, allowing an efficient nitrogen fertilisation in early cultivars. Twenty-five leaves per tree were sampled from 45 trees in three peach orchards, in June 2006, and 25 leaves per tree from 24 trees in a nitrogen fertilisation trial (0, 50, 100, and 200 kg N/ha) in June 2006 and June 2007. SPAD-502 values were calculated based on the readings from the middle part of each leaf, before leaf chemical analysis was performed. SPAD values were significantly correlated with N and Mg leaf content.