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Nutritional Analysis of Flowers from ‘Valencia’ Orange Trees Infected with Huanglongbing

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In the mid2000s, Brazil has reported the disease citrus greening or huanglongbing (HLB), considered one of the most destructive diseases in plants by its complexity. As an agent associated with HLB, we have bacteria: "*Candidatus Liberibacter americanus*", "*Ca. Liberibacter asiaticus* ", "*Ca. Liberibacter africanus*". Symptoms of greening may be masked by other symptoms generated from some diseases, besides such symptoms are similar to those caused by various mineral deficiencies. The objective of this study was to verify if the HLB affects the accumulation of nutrients in citrus flowers. The experiment was in Valencia oranges trees (*C. sinensis*) on Rangpur lime (*C. limonia*) with 12 years of age. Treatments consisted of: 1) symptomatic branches of flowers (PCR+), 2) asymptomatic branches of flowers (PCR+) and 3) flowers of healthy plants (PCR-). The levels of macronutrients and micronutrients were measured in December of 2011. The results showed lower levels of N, P, K, Ca, Mg, B, Fe, Mn in the flowers of diseased plants (asymptomatic and symptomatic) compared with the levels of certain nutrients in healthy plants. The reduction in nutrient concentration mobile (N, P and K) as not mobile in the phloem (Ca and B) shows that the absorption and distribution of nutrients were reduced in young tissues and justifies the diversity of symptoms found. The nutrients are involved in the activation / inactivation of enzymes related to metabolism and biosynthesis of plant hormone, auxin, gibberellins and cytokinins, which regulate the abortion of plant organs.