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Candidatus Liberibacter asisticus detection in the leaves, roots from infected trees and leaves of new shoots from the stumps of the infected sweet orange trees in Texas

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A total of 108 root and corresponding symptomatic leaf samples from four different quadrants were collected from 27 6 year old sweet orange trees in which the presence of *Candidatus* Liberibacter asiaticus (CLas) was previously confirmed by quantitative polymerase chain reaction (qPCR). There was no significant difference (p>0.05) in the level of infection as determined by threshold cycle (Ct) values between different types of tissue tested. Analysis of variance (ANOVA) showed that there is no significant difference (p>0.05) in test results among different distances from the trunk or quandrants where the root samples were collected. The stumps of the infected trees were covered in a psyllid-proof cage and leaves from the new shoots emerged from these stumps did not show the presence of CLas where as the roots showed the presence of CLas. Moreover, there was no significant difference between roots from infected trees and roots from infected stumps. Additionally, there was a significant difference with an average Ct value difference of 2.97 cycles between the DNA samples extracted from roots using two different commercially available kits.