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### Title

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**8.10****Colonization and distribution patterns of *Candidatus Liberibacter asiaticus* in distinct citrus rootstocks**Lopes, S.A.<sup>1</sup>, Luiz, F.Q.B.F.<sup>2</sup>, and Stuchi, E.S.<sup>2</sup><sup>1</sup>Fundecitrus, Araraquara<sup>2</sup>EMBRAPA, Cruz das Alamas, Brazil

A study was conducted to assess (i) patterns of Las colonization in graft-inoculated 1-y-old seedlings of Cravo Rangpur lime, Sunki mandarin, and Swingle citrumelo and (ii) patterns of Las distribution in naturally infected 4 and 10-y-old trees of sweet oranges 'Pera' on Sunki and 'Folha murcha' on 11 rootstocks. The seedlings were inoculated at the trunk, 40 cm above the substrate level. Samples of bark were collected at the inoculation site, 10, 20, and 30 cm below it, and from the root 45, 75, 105, and 135 days after inoculation (dai). Samples from trees included symptomatic leaves and bark from the trunk (10 cm above or below the grafting line) and roots. The samples were analyzed through qPCR to estimate log Las genome/gram tissue. In seedlings Las colonization pattern was similar for all rootstocks. Las was detected in the root 45 dai or 3 months before the symptoms developed on leaves. In Swingle maxima titers were lower but reached a plateau faster (45 to 75 dai) than in Sunki or Cravo (75 to 135 dai) for all sampled sites. In the field the distribution pattern of Las in the trees was also similar for all rootstocks, with higher titers detected in the leaves ( $5.29 \pm 0.22$ ) than in trunks ( $4.38 \pm 0.49$ ;  $3.78 \pm 0.27$ ) or roots ( $3.38 \pm 0.28$ ). No correlation existed between the amount of symptom on the canopy and Las titer in the root. This lack of correlation plus the fast movement of Las from the inoculation site down to the root may explain the failure of pruning to control HLB.