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Mandarin and mandarin hybrid genetic transformation for resistance to *Candidatus Liberibacter asiaticus*

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Brazil is one of the largest producers and exporters of citrus. Currently, Huanglongbing disease (HLB) associated to *Candidatus Liberibacter asiaticus* (CLAs) is the main threat to the citrus industry. The aim of this work is to study the genetic transformation of mandarin/mandarin hybrid 'Thomas' (*Citrus reticulata* Blanco) and 'Fremont' (*C. clementina* hort. ex Tanaka x *C. reticulata* Blanco) with the gene that encodes an attacin antibacterial peptide (*attA*) driven by phloem-specific promoters. The genetic transformation experiments were performed with epicotyl segments, via *Agrobacterium tumefaciens* (EHA 105), with the gene constructs pCatSUC2/*attA* and pCatPP2/*attA*, containing the *attA* gene controlled by AtSUC2 and AtPP2 promoters. Transgenic plants were identified by PCR analysis and acclimatized to greenhouse conditions. The plants will be propagated and evaluated for resistance to CLAs.

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