Establishment of *Citrus medica* L.-Hairy Root System for Genome Editing and Antimicrobial Screening Against the Unculturable HLB Pathogen, *Candidatus* Liberibacter asiaticus

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Huanglongbing (HLB) disease, presumably caused by a fastidious bacterium, *Candidatus* Liberibacter asiaticus (*C*Las), drastically reduces citrus production. The inability to culture *C*Las in defined growth medium and the difficulty of generating transgenic citrus plants greatly hinder the evaluation of antimicrobial compounds and resistance genes. To address this, we developed an efficient and rapid hairy root transformation system using citron (*Citrus medica* L.), which produces rapid hairy roots and is highly amenable to *Rhizobium rhizogenes*-mediated transformation. We achieved explant survival and transformation efficiencies of 100% and 73%, respectively, producing transgenic roots within 30–60 days. We demonstrated that citron-based hairy root systems could be effectively used in genome editing, transgene evaluation, and antimicrobial efficacy testing against HLB disease. Altogether, this system provides a robust and efficient platform for the rapid screening of HLB therapies.