

Supplementary Materials

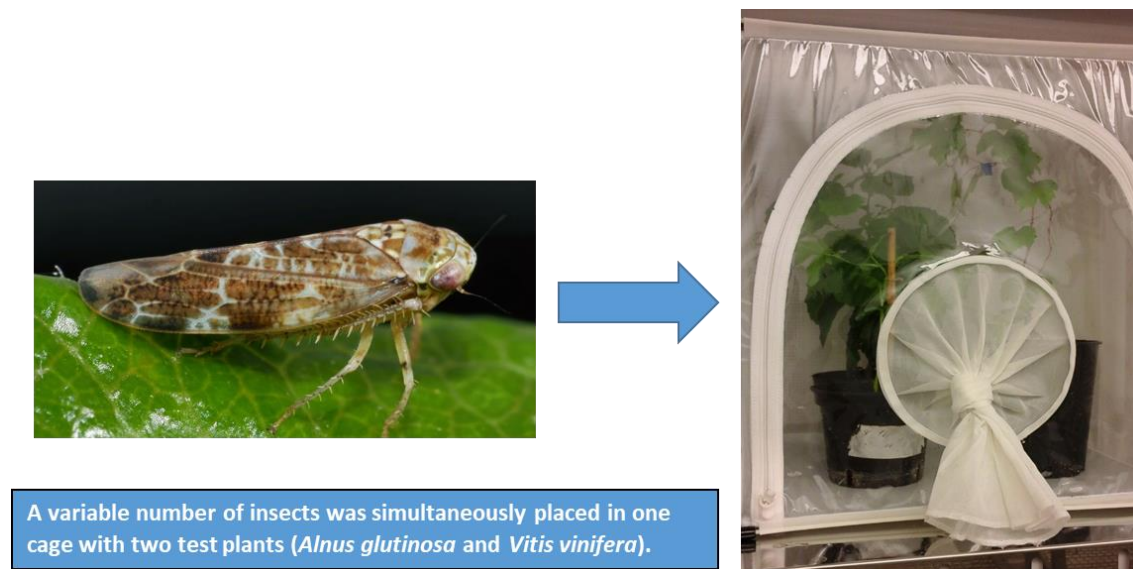


Figure S1a. Schematic diagram for a dual choice approach with stwo test plants in the same cage with specimens of *Allygus spp.* or *O. ishidae*, respectively. Dead specimens were sporadically removed from the cage and frozen at -20°C.

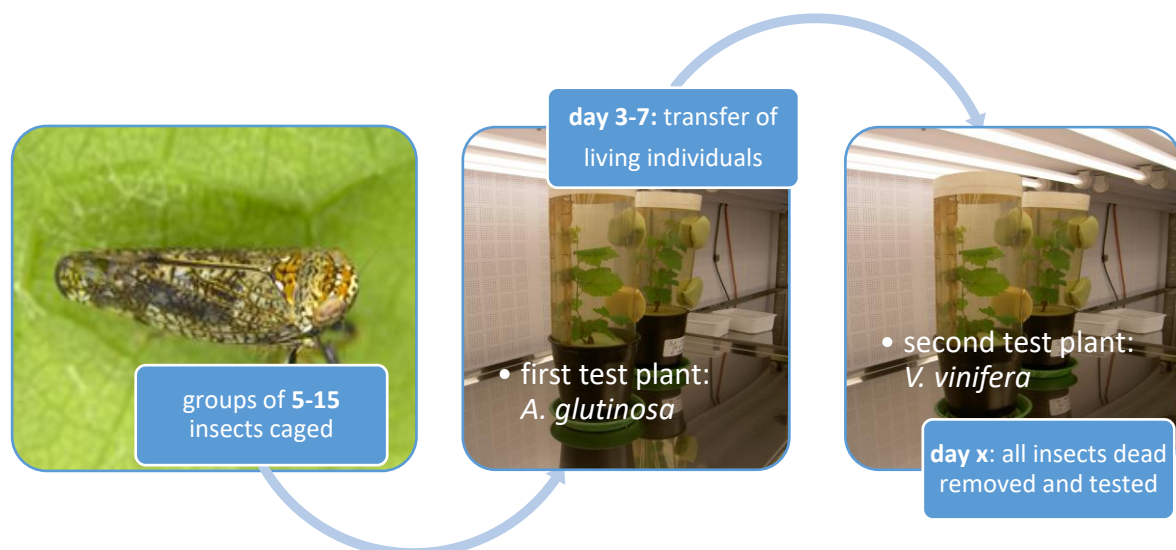


Figure S1b. Schematic diagram for a transmission trial assay with transfer of *Allygus spp.* or *O. ishidae* specimens, respectively, among test plants *A. glutinosa* and *V. vinifera*. Dead specimens were sporadically removed from the cage and frozen at -20°C.



Figure S2. Symptom expression of a grapevine plantlet (cultivar 'Scheurebe') three months after inoculation with naturally infected *Orientus ishidae* under controlled conditions.

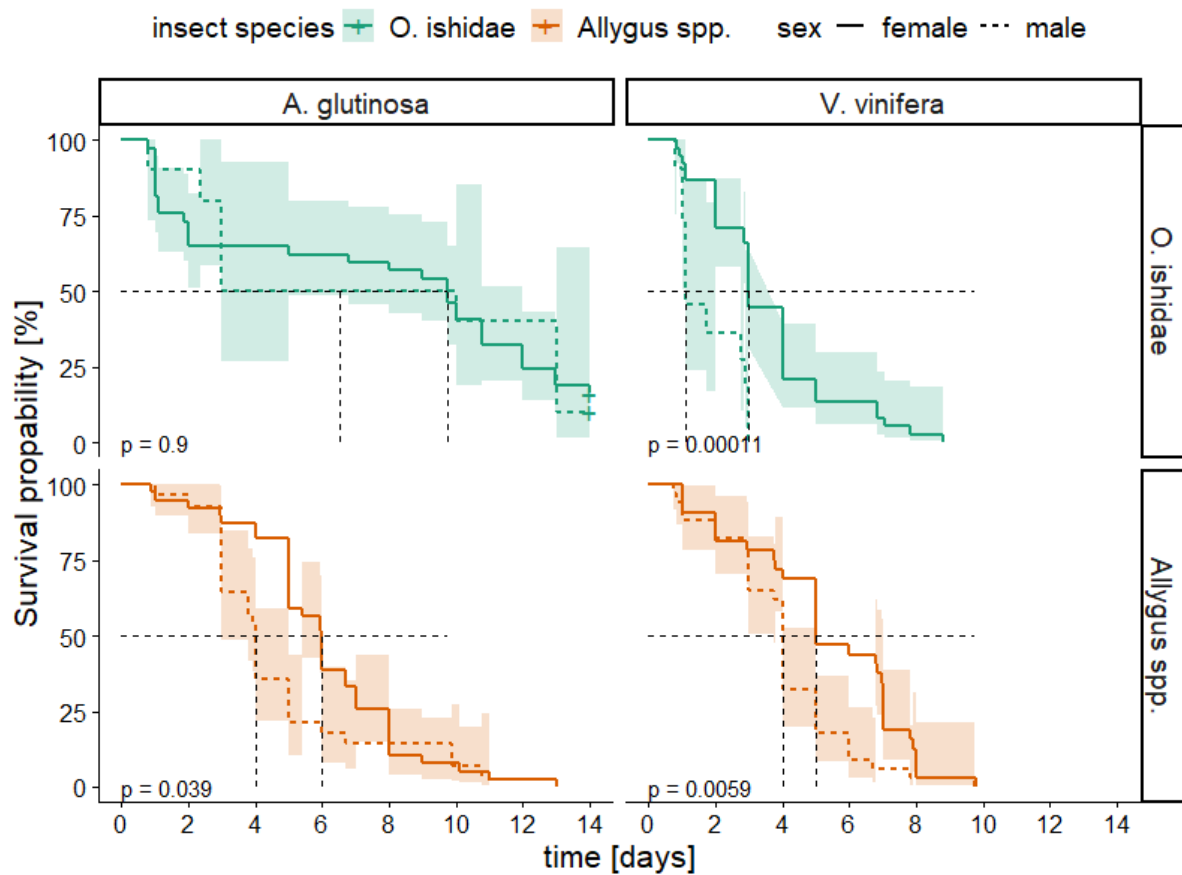


Figure S3. Kaplan-Meier survival curves for *Orientus ishidae* (top, green) and *Allygus* spp. (orange; bottom) females (continuous line) and males (dashed line) on two different test plants: (left) *Alnus glutinosa* ($n_{orientus_females} = 37$, $n_{orientus_males} = 10$, $n_{allygus_females} = 39$, $n_{allygus_males} = 28$) and (right) *Vitis vinifera* ($n_{orientus_females} = 38$, $n_{orientus_males} = 11$, $n_{allygus_females} = 32$, $n_{allygus_males} = 34$). 95% confidence intervals are reported by transparency. Censored data are marked with a plus (+). P-values < 0.05 represent significant differences between insect sexes according to Log-rank test with Bonferroni correction. Dashed black line indicate median survival time (i.e., time when 50% of the insects are still alive).