

Tracing the origin of Korean invasive populations of the spotted lanternfly, *Lycorma delicatula* (Hemiptera: Fulgoridae)

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Supplementary material 1

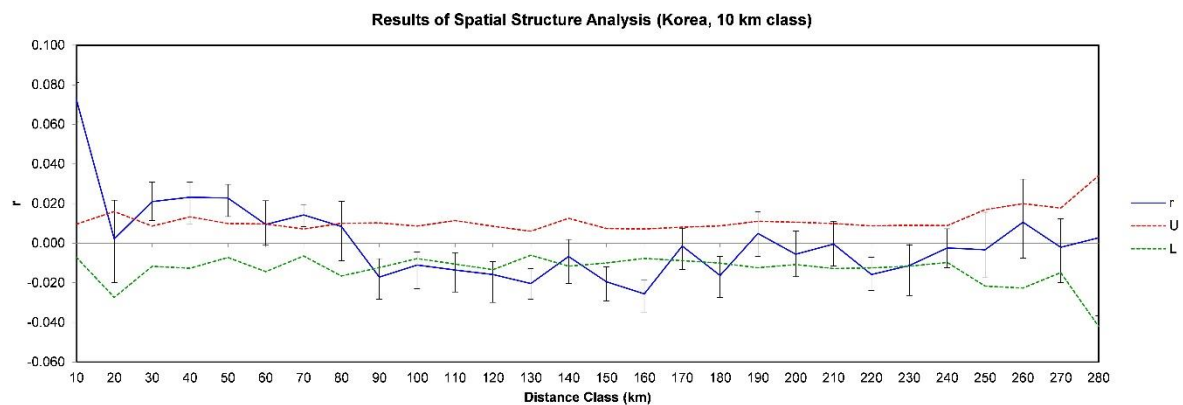


Figure S1. Spatial autocorrelation analysis at 10 km distance class using Korean pops. r (blue line) means autocorrelation coefficient, U (dashed red) +95% confidence, L (dashed green) - 95% confidence

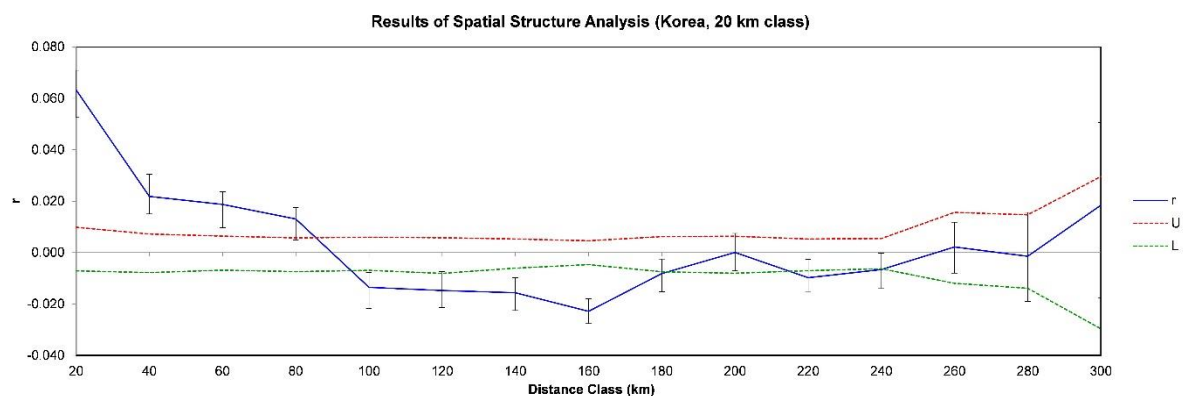


Figure S2. Spatial autocorrelation analysis at 20 km distance class using Korean pops. r (blue line) means autocorrelation coefficient, U (dashed red) +95% confidence, L (dashed green) - 95% confidence

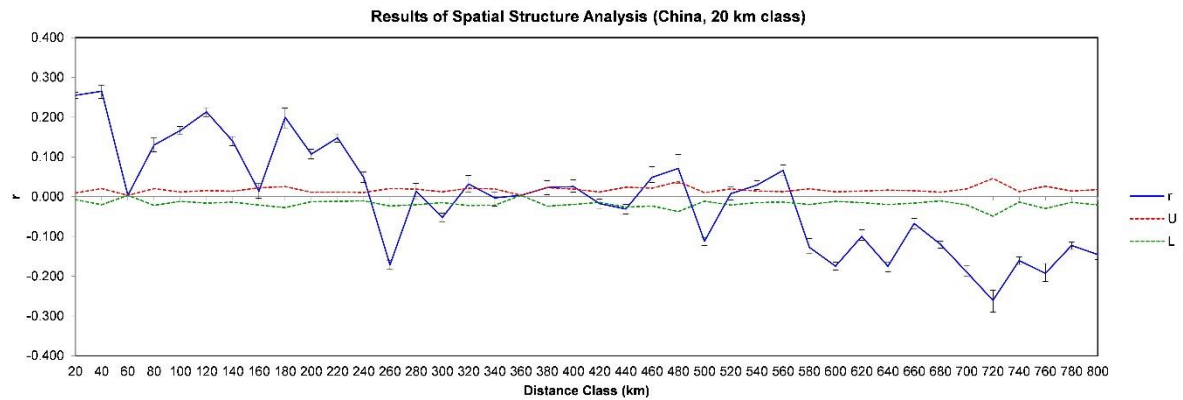


Figure S3. Spatial autocorrelation analysis at 20 km distance class using Chinese pops. r (blue line) means autocorrelation coefficient, U (dashed red) +95% confidence, L (dashed green) -95% confidence

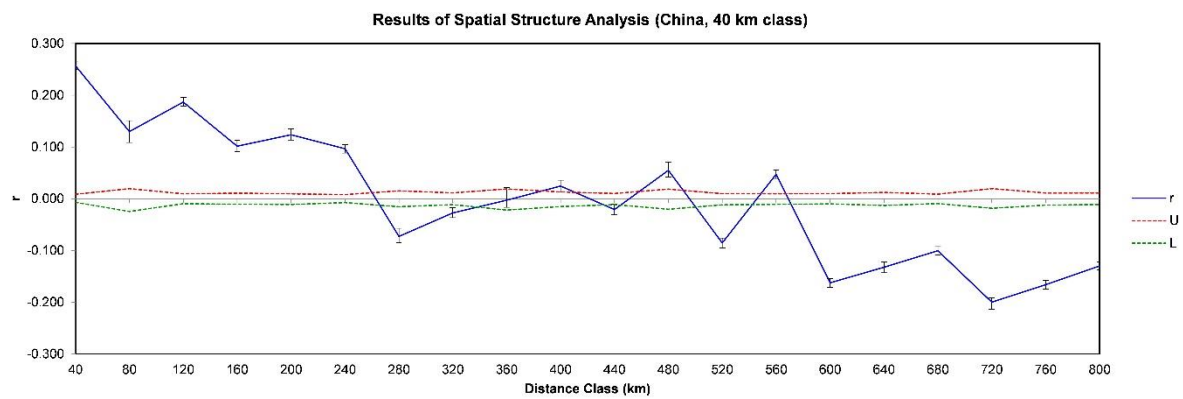


Figure S4. Spatial autocorrelation analysis at 10 km distance class using Chinese pops. r (blue line) means autocorrelation coefficient, U (dashed red) +95% confidence, L (dashed green) -95% confidence

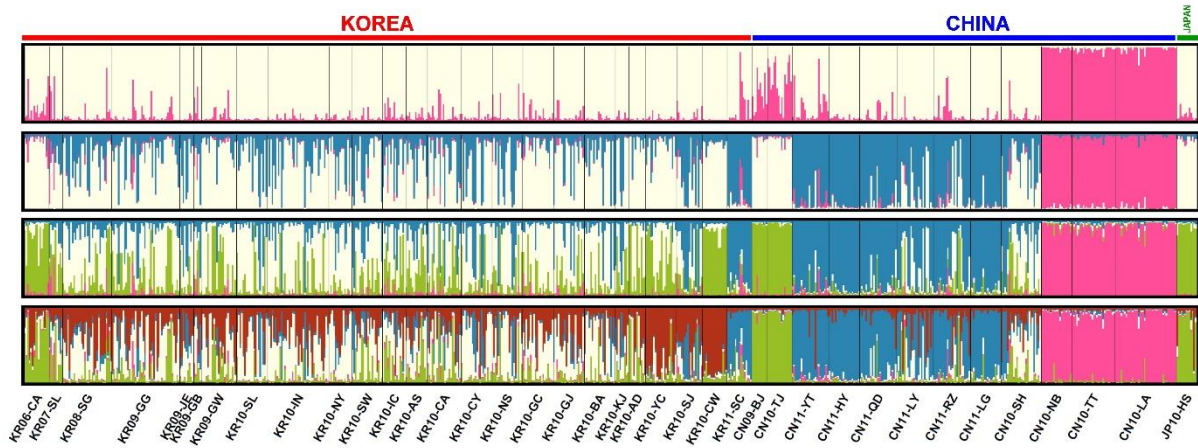


Figure S5. Genetic structure of *L. delicatula* for 762 individuals collected from Korea, China and Japan, visualized by individual assignment. In order from the top to the bottom, each genetic structure is shown when $K = 2$ (white/pink), 3 (white/pink/blue), 4 (white/pink/blue/green) or 5 (white/pink/blue/red), respectively.

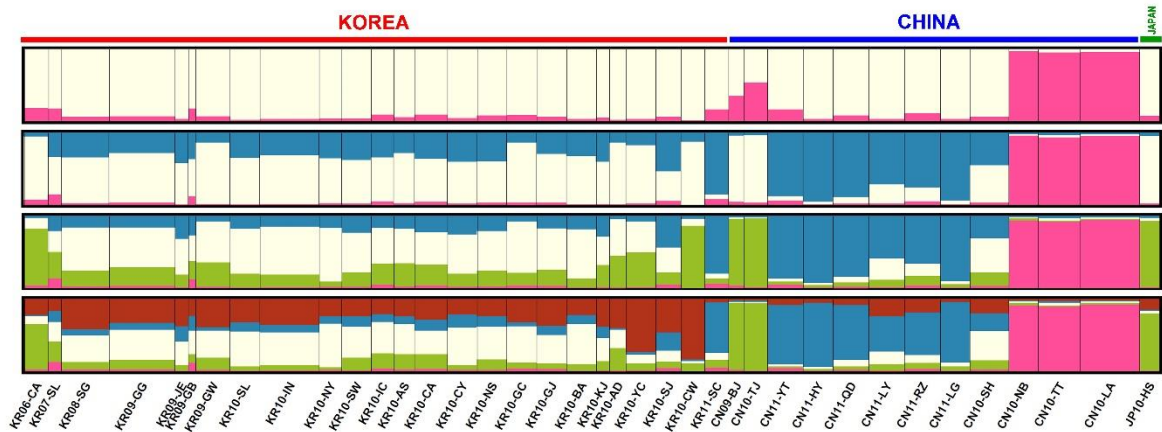


Figure S6. Genetic structure of *L. delicatula* for 762 individuals collected from Korea, China and Japan, visualized by group (pop.) assignment. In order from the top to the bottom, each genetic structure is shown when $K = 2$ (white/pink), 3 (white/pink/blue), 4 (white/pink/blue/green) or 5 (white/pink/blue/red), respectively.

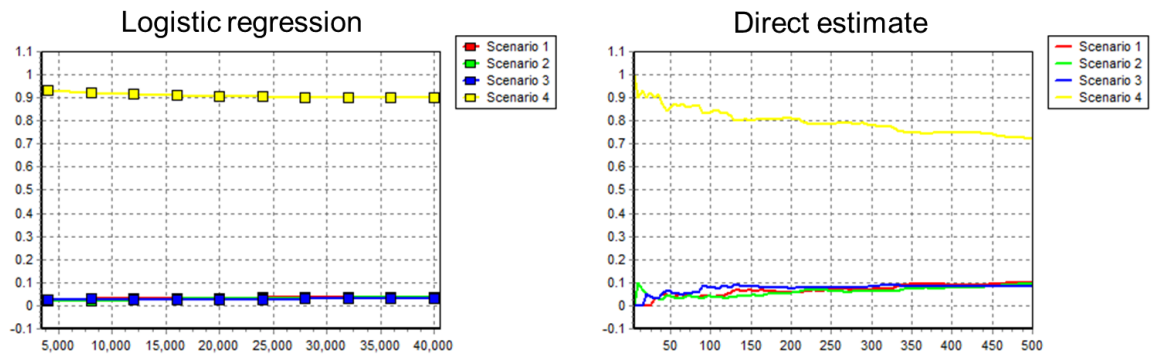


Figure S7. Plots output by DIYABC showing the posterior probability (y-axis) of the three scenarios through the logistic regression (left) and direct estimate (right) approaches as output by DIYABC. The x-axis corresponds to the different $n\delta$ values used in the computations.



Figure S8. Photographs of a collection site of CN10-SH as strongly inferred to the main source area; (A) planted density of the host plants (*A. alitissima*), (B) egg masses on a tree bark, (C) large number of SLF adults on a tree.