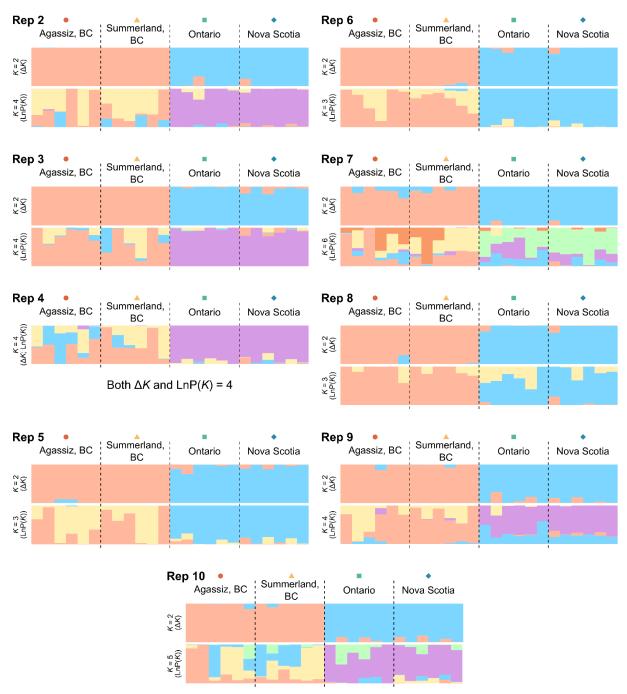
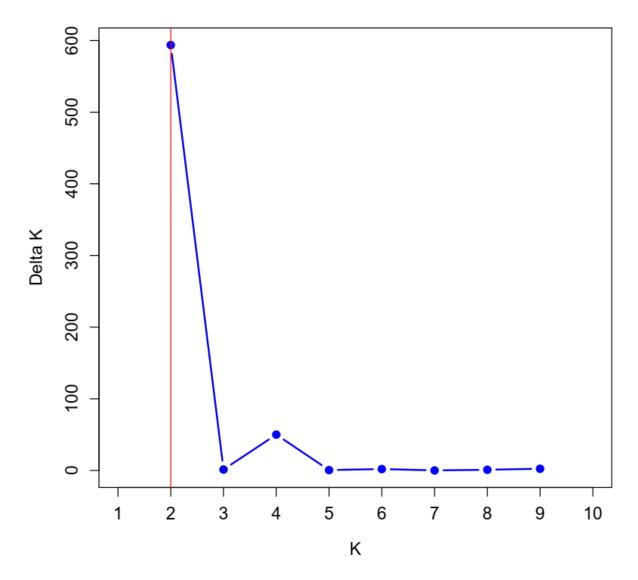
Supplemental material for:

Nelson *et al.* 2023. Spotted-wing drosophila, *Drosophila suzukii* (Diptera: Drosophilidae), exhibits large-scale spatial genetic structure across Canada but not fruit host-associated genetic structure. The Canadian Entomologist.



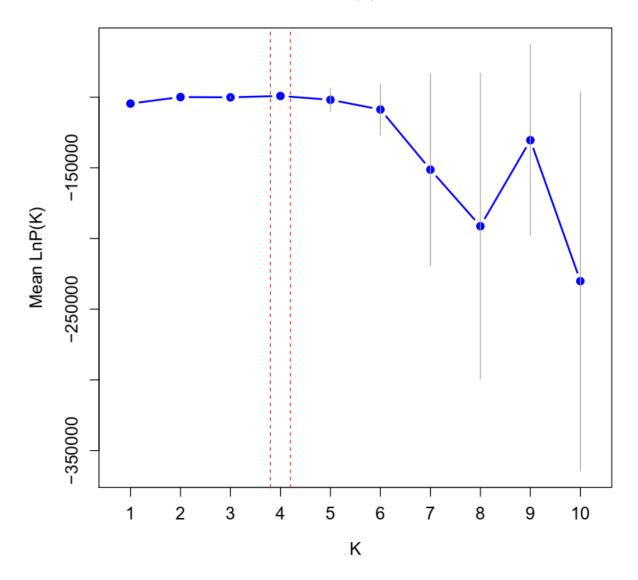
Supplementary material, Fig. S1. *Structure* analyses for the second to tenth subsampled replicates of 24 *Drosophila suzukii* individuals. K values with greatest statistical support for each replicate using ΔK and LnP(K) are presented.



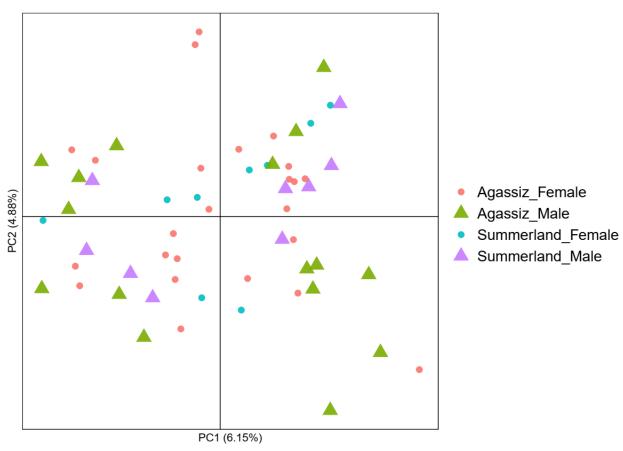


Supplementary material, Fig. S2. $\Delta(K)$ support for K = 2-9 for the first replicate of the *Drosophila suzukii* data set containing six individuals per collection location (see Fig. 1).

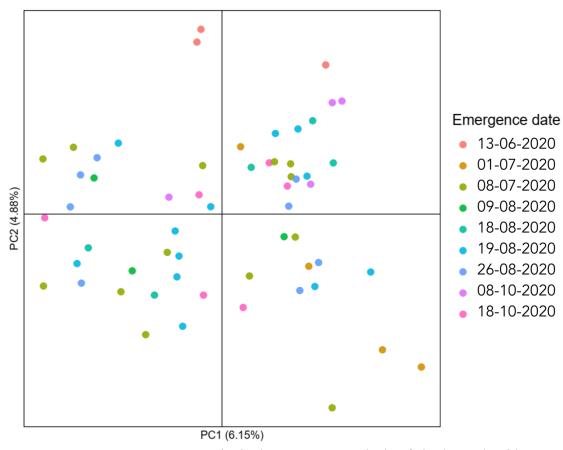
Mean $LnP(K) \pm Stdev$



Supplementary material, Fig. S3. LnP(K) support for K = 1-10 for the first replicate of the *Drosophila suzukii* data set containing six individuals per collection location (see Fig. 1).

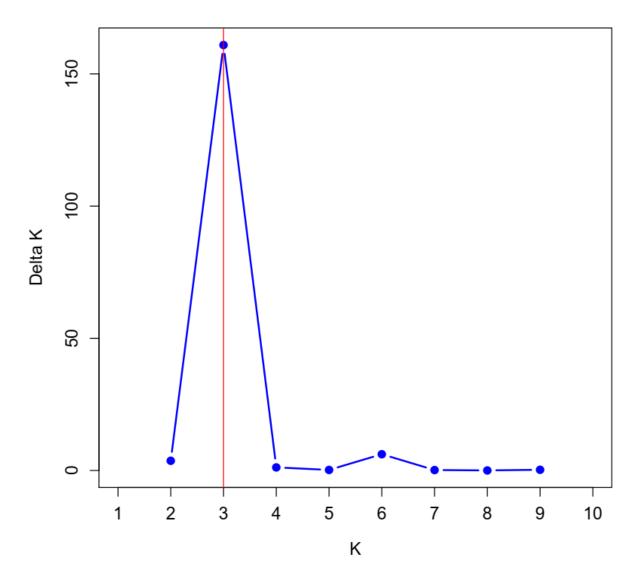


Supplementary material, Fig. S4. Principal component analysis of single-nucleotide polymorphisms from *Drosophila suzukii* collected in Agassiz and Summerland, British Columbia, Canada.



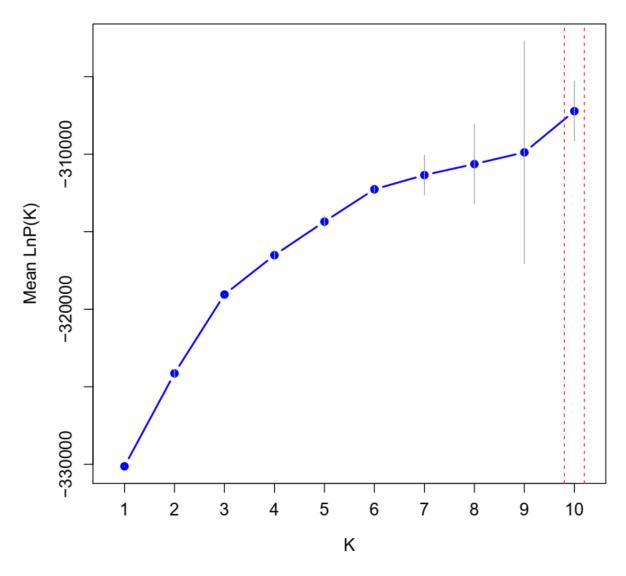
Supplementary material, Fig. S5. Principal component analysis of single-nucleotide polymorphisms from *Drosophila suzukii* collected in Agassiz and Summerland, British Columbia, Canada. No phenology-associated genetic structuring is apparent, although individuals that emerged on 13-06-2020 cluster close to the top of PC2. PC, principle component.



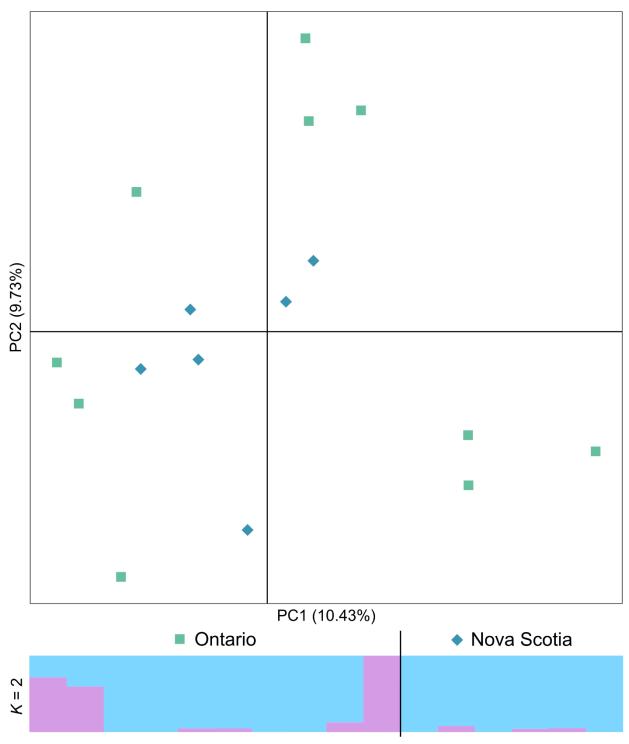


Supplementary material, Fig. S6. $\Delta(K)$ support for K = 2-9 in the *Drosophila suzukii* data set containing samples from Agassiz and Summerland, British Columbia, Canada.

Mean $LnP(K) \pm Stdev$

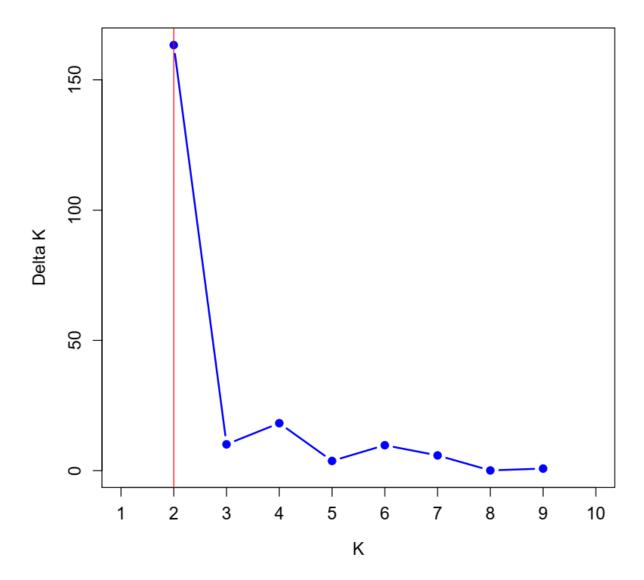


Supplementary material, Fig. S7. LnP(K) support for K = 1-10 in the *Drosophila suzukii* data set containing samples from Agassiz and Summerland, British Columbia, Canada.



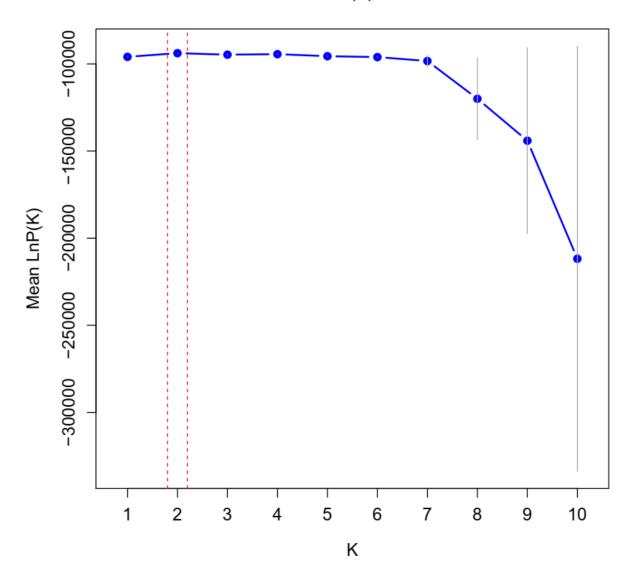
Supplementary material, Fig. S8. Principal component analysis and *structure* barplot demonstrating no spatial genetic clustering among *Drosophila suzukii* collected in Ontario and Nova Scotia, Canada. K value with greatest statistical support using LnP(K) and ΔK is presented.





Supplementary material, Fig. S9. $\Delta(K)$ support for K = 2-9 in the *Drosophila suzukii* data set containing samples from Ontario and Nova Scotia, Canada.

$Mean\ LnP(K)\pm Stdev$



Supplementary material, Fig. S10. LnP(K) support for K = 1-10 in the *Drosophila suzukii* data set containing samples from Ontario and Nova Scotia, Canada.