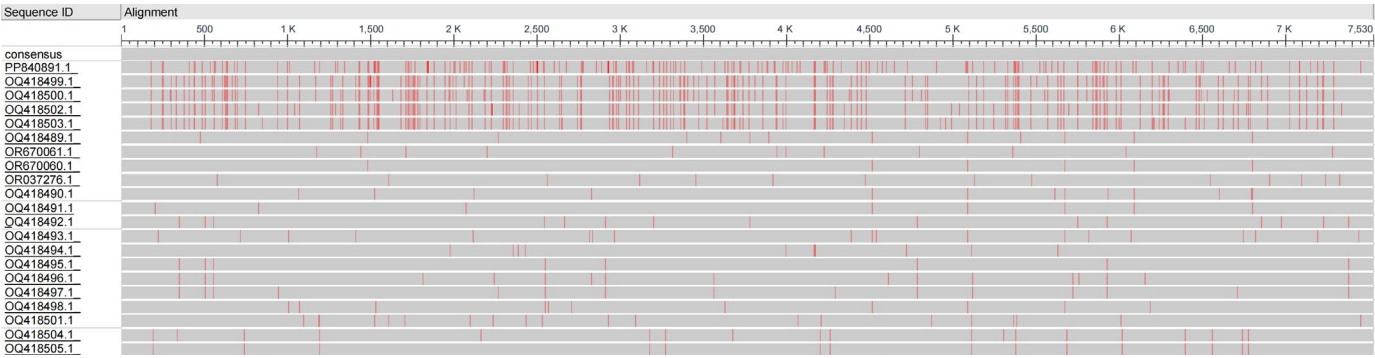
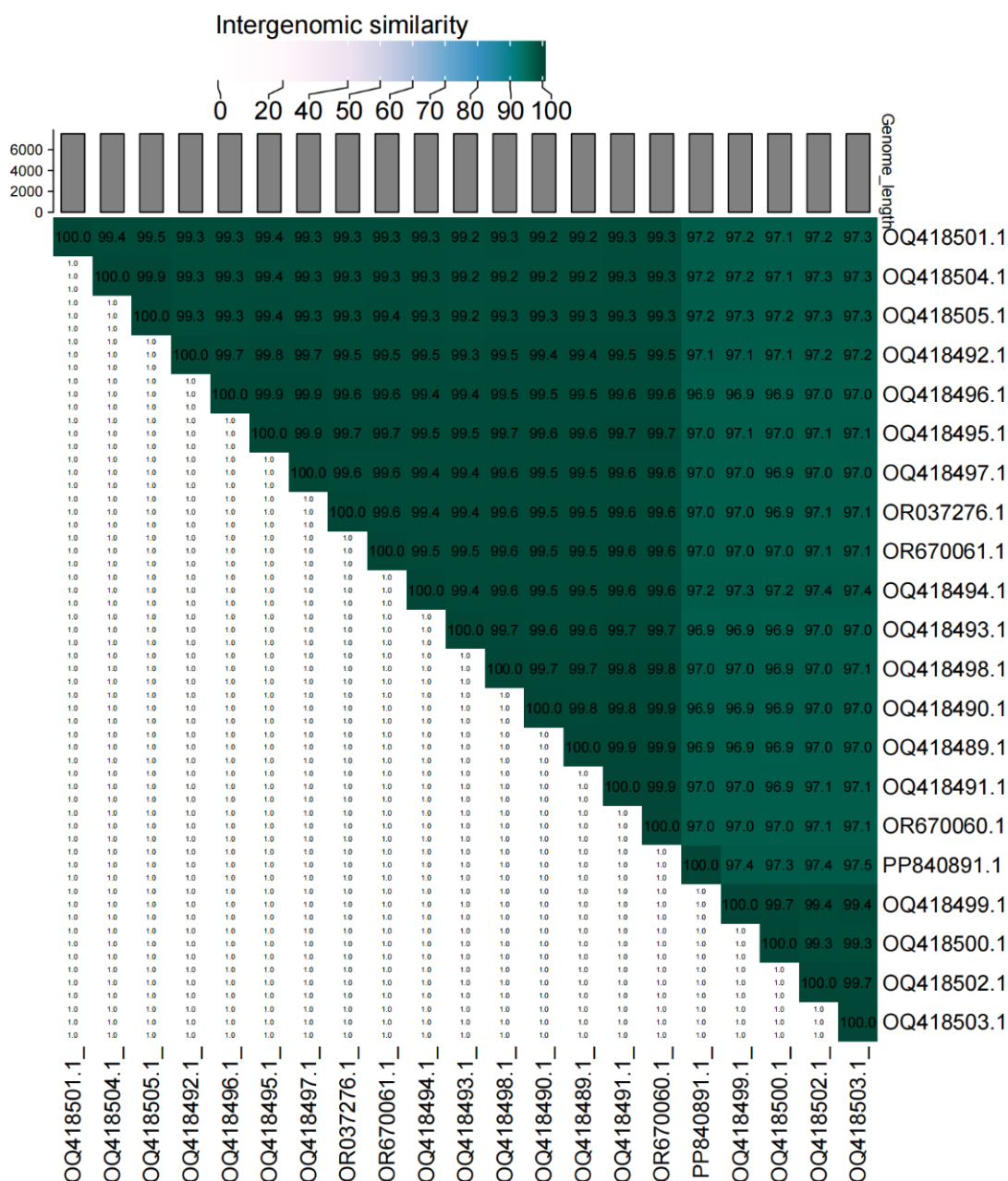


Supplementary Figure S1. Topographical map of California highlighting the Tulare and Hacienda Heights regions, where citrus yellow vein clearing virus was detected. Red circles mark the locations. A legend in the corner indicates elevation ranges. (Source: Modified from <https://www.california-map.org/topo-map.html>)



Supplementary Figure S2. The citrus yellow vein clearing virus California isolates in group multiple alignment. The base-pair with frequency-based differences were marked red.



Supplementary Figure S3. The citrus yellow vein clearing virus (CYVCV) California isolates nucleotide diversity visualized by VIRDIC-generated heatmap. The figure incorporates intergenomic similarity values (right half) and alignment indicators (top annotation).