

Table S6. Deformed wing virus double-stranded RNA sequences used in mini-hive experiment.

Double-stranded RNA	Region	Length (bp)	Sequence	Reference
DWV-dsRNA 1	RNA-dependent RNA polymerase	699	cacctggaacatcgggtaagcgatggttgtttgacattgagctacaagactcgggatgtt atctcctgcgtggaatgcgtcccgaaacttgagattcaattatcaacgacacagttaatga ggaaaaagggataaaaacctcacactatattcacggattgtttgaaggatacttgtttgc ctgttgaaaaatgtagaataacctggtaagactagaatatttagtataagtcggttacagt ttaccataccgtttcgacagattacttagactttatggcatcctatcgagctgcacgac ttaatgctgagcatggtattggtattgatgttaacagcttagagtggacaaatttggcaa caagttgtctaagtatggcactcacatcgtgacaggagactataagaatttggctcctg ggtagattccgatgttgcagcttcagcgttcgaaattattatcgactgggtattacatt acaccgaagaagataataaagacgaaatgaagcgagtaattgtggaccatggcgcaagaga tcttagcgcctagtcattctatatcgcgacttgggtgtaccgagtaccttgcggaattccat caggttctccaataacggacatattgaatacaatttcaaattgtttgttaattaggttag cttggttaggtattactgatttgcctttgtccgagttct	Desai et al. 2012; Leonard et al. 2020
DWV-dsRNA 2	Helicase	443	gcatgagctagctttgcatccactctaccaatcgatataaatcggtatctaaaccaata tcagattcatctaattcacgcaacggaagttcatacacacgatcatacggctctctttca ctctcgattgctttaccggtgaacatttcattgtacaagtgggttcagcaactccaaagcca tgcaatccttcagtaccagcaacatggatacctataattggccgttgtaaattccgagac ataacctcatacaaaccatcagcgttaatacttattggagttttattattattctcgaaa gccaatagctgagtatggtcgccagttactaacactccatcattctgagcacgtatatgt tcattatgtgacgctataaattt	Leonard et al. 2020
DWV-dsRNA 3	3C-protease	500	tattcatatacaatacgaataagcctttcccgaggtttgatcgtattgctatggaagcta tttatcggcgtagaaatgttttgattgaatgtaaagcgagtgaagagaagaagcgaggat gcaagcattgtgagaatgatattcctattgctgaatgtagtcctaagatgttgaaagatt tccatcatatcaaatttaggtatgcacatgatgtatgtaattccgagaccacatggtctg aatggatgacgtataatgaatttcttgaatggataactcctgtgtatatggctaaccgtc gtaaggcgaatgaatcgtttaagatgcgtgtagatgaaatgcaaagtgttacgtatggatg aaccattggaaggtgataacattctcaataagtatgttgaagttaatcagcgcttagtg aggaaatgaaggcatttaaggagcgtacactatggtcagatttacatcgcttaggtgcg aaattagtgcgctcagttaag	Leonard et al. 2020

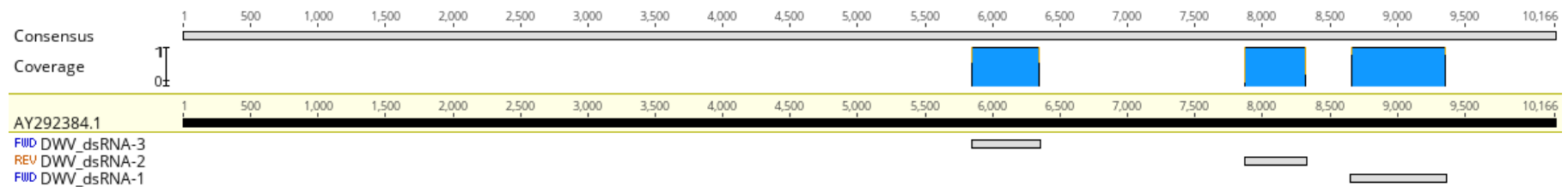


Figure S5. DWV-dsRNA sequences mapped to DWV-A reference genome (AY292384.1). used as a sequence template to design DWV-dsRNA sequences to show where in the genome the sequences target. Sequences were mapped in Geneious Prime 2020.2.3 (Biomatters, Auckland, New Zealand) where this figure was taken from.

References

- Desai, S., et al., Reduction in Deformed wing virus infection in larval and adult honey bees (*Apis mellifera* L.) by double-stranded RNA ingestion. *Insect Molecular Biology*, 2012. 21(4): p. 446-455.
- Leonard, S.P., et al., Engineered symbionts activate honey bee immunity and limit pathogens. *Science*, 2020. 367(6477): p. 573-576.