

Supplementary Tables

Table S1. Statistical outputs comparing densities of *Adelges tsugae* between treatments for each generation of HWA for western hemlock (*Tsuga heterophylla*). A-E are from experimental round 1 (2015-2016) and F-K are from experimental round 2 (2017-2018).

Generation	Sample Period	df	z value (t value where 'glmer' used)	P value	Wilcoxon Signed Rank Test P value
A) Progrediens Adults 2015	July 2015	31	1.052	0.2929	0.6891
B) Maturing Sistens 2015	November 2015	19	0.419	0.6749	0.2213
C) Sistens Adults 2016	March 2016	19	1.450	0.1470	0.0244*
D) Progrediens Adults 2016	July 2016	23	2.121	0.0402*	0.0078**
E) Maturing Sistens 2016	November 2016	13	1.830	0.0673	0.0519
F) Progrediens Nymphs 2017	June 2017	28	0.816	0.4144	0.3225
G) Progrediens Adults 2017	July 2017	28	2.005	0.0449*	0.0110*
H) Maturing Sistens 2017	November 2017	28	2.198	0.0280*	0.0010**
I) Sistens Adults 2018	March 2018	28	2.889	0.0039**	<0.001***
J) Progrediens Adults 2018	July 2018	26	4.149	<0.001***	<0.001***
K) Maturing Sistens 2018	November 2018	22	2.883	0.0039**	0.0425*

Significant effects at $P < 0.05$ are in bold. Significance symbols for $P < 0.001$ (***), <0.01 (**), <0.05 (*)

The line in the middle of the table separates experiment 1 from experiment 2.

Table S2. Statistical outputs comparing densities of hemlock woolly adelgid between treatments for each generation of HWA for eastern hemlock (*Tsuga canadensis*). A-E are from experimental round 1 (2015-2016) and F-K are from experimental round 2 (2017-2018).

Generation	Sample Period	df	z value (t value where 'glmer' used)	<i>P</i> value	Wilcoxon Signed Rank Test <i>P</i> value
A) Progrediens Adults 2015	July 2015	15	-0.629	0.5293	0.0591
B) Maturing Sistens 2015	November 2015	No Data	No Data	No Data	No Data
C) Adult Sistens 2016	March 2016	No Data	No Data	No Data	No Data
D) Progrediens Adults 2016	July 2016	10	1.054	0.2947	0.5839
E) Maturing Sistens 2016	November 2016	Inf	1.962 (t)	0.0498*	0.1814
F) Progrediens Nymphs 2017	June 2017	21	0.208	0.8354	0.6848
G) Progrediens Adults 2017	July 2017	21	-0.010	0.9922	0.8394
H) Maturing Sistens 2017	November 2017	11	1.176	0.2398	0.0225*
I) Adult Sistens 2018	March 2018	7	2.548	0.0108*	0.0313*
J) Progrediens Adults 2018	July 2018	5	1.343	0.1792	0.0625
K) Maturing Sistens 2018	November 2018	9	0.760	0.4470	0.2084

Significant effects at $P < 0.05$ are in bold. Significance symbols for $P < 0.001$ (***), <0.01 (**), <0.05 (*)

The line in the middle of the table separates experiment 1 from experiment 2