

Table S2. Repeat Masker analysis in 4 hemiptera species

	<i>Acyrtosiphon pisum</i>		<i>Bemisia tabaci</i>		<i>Nilaparvata lugens</i>		<i>Rhodnius prolixus</i>	
	Length (bp)	Percent (%)	Length (bp)	Percent (%)	Length (bp)	Percent (%)	Length (bp)	Percent (%)
DNA transposon	66,456,504	14.31	85,077,858	12.92	130,676,362	11.45	141,501,804	20.14
hAT-Tip100	8,290,507	1.79	14,241,345	2.16	1,643,289	0.14	169,925	0.02
hAT-hAT5	25,907	0.01	12,686,393	1.93	25,046	0	1,349	0
CMC-EnSpm	663,535	0.14	8,733,777	1.33	20,987,157	1.84	994,495	0.14
Zator	463	0	8,069,056	1.23	32,745	0	35,999	0.01
TcMar-Mariner	47,419	0.01	4,813,514	0.73	1,601,321	0.14	125,840,811	17.91
Maverick	801,635	0.17	2,702,328	0.41	13,189,471	1.16	1,029,661	0.15
hAT-Charlie	1,836,751	0.4	2,094,311	0.32	3,391,556	0.3	2,837,122	0.4
hAT	6,167,504	1.33	840,979	0.13	1,877,074	0.16	528,363	0.08
TcMar-Tc1	694,913	0.15	148,354	0.02	12,828,284	1.12	3,390,081	0.48
DNA	5,954,658	1.28	23,599	0	109,613	0.01	46,528	0.01
Novosib	542,658	0.12	2,380	0	32,834,519	2.88	2,743	0
LTR	14,475,552	3.12	121,814,430	18.5	140,195,792	12.29	34,814,221	4.95
Gypsy	3,447,085	0.74	12,384,080	1.88	34,617,150	3.03	3,705,736	0.53
Copia	347,907	0.07	8,082,810	1.23	1,875,164	0.16	603,113	0.09
Pao	1,557,493	0.34	5,048,369	0.77	14,539,028	1.27	747,762	0.11
ERVK	90,886	0.02	844,377	0.13	2,242,354	0.2	141,309	0.02
LINE	12,077,243	2.6	20,920,803	3.18	146,443,403	12.84	22,469,588	3.2
RTE-BovB	1,396,522	0.3	6,861,136	1.04	30,599,713	2.68	2,082,445	0.3
Jockey	3,692,974	0.8	3,465,455	0.53	10,525,547	0.92	6,376,921	0.91
L1	65,327	0.01	1,961,798	0.3	1,156,554	0.1	272,916	0.04
R1	1,323,220	0.28	1,554,306	0.24	1,673,083	0.15	832,413	0.12
L2	1,933,444	0.42	1,490,226	0.23	79,979,576	7.01	1,883,301	0.27
CR1	1,668,550	0.36	1,046,353	0.16	6,655,361	0.58	678,294	0.1
LOA	25,821	0.01	132,575	0.02	619,768	0.05	3,156,365	0.45

RTE-X	17,061	0	70,166	0.01	2,350,725	0.21	2,506,889	0.36
SINE	31,623,176	6.81	6,308,561	0.96	5,755,889	0.5	57,025	0.01
5S	8,845	0	1,629,774	0.25	3,192,847	0.28	3,881	0
tRNA-Lys	971	0	328,492	0.05	15,598	0	719	0
Deu	0	0	222,763	0.03	374	0	552	0
ID	62,832	0.01	64,929	0.01	1,403,679	0.12	1,900	0
tRNA-Deu-L2	0	0	4,762	0	0	0	0	0
tRNA-L2	0	0	4,430	0	0	0	0	0
7SL	542	0	1,513	0	653,501	0.06	778	0
SINE	3,199,835	0.69	78	0	847	0	757	0
C	543	0	0	0	1,419	0	1,977	0
ARTEFACT	0	0	0	0	7,719	0	0	0
RC	1,337,285	0.29	18,012,658	2.74	12,773,145	1.12	653,344	0.09
Other	4,798	0	663	0	18,981	0	3,271	0
Unknown	24,800,394	5.34	13,070,828	1.99	18,021,260	1.58	6,049,944	0.86
Total TE	150774952	32.47	265205801	40.29	453892551	39.78	205549197	29.25
Simple_repeat	451,496	0.1	10,687,627	1.62	52,615,747	4.61	4,483,785	0.64
Satellite	54,676	0.01	3,483,412	0.53	7,743,059	0.68	153,586	0.02
TRF	3,413,952	0.74	19,578,623	2.97	40,148,516	3.52	9,992,159	1.42
Total	154,695,076	33.32	298,955,463	45.41	554,399,873	48.6	220,178,727	31.34

Note: LTR represents long terminal repeat, LINE represents long interspersed nuclear elements, SINE represents short interspersed nuclear elements. Total TE includes DNA transposon, LTR, LINE, SINE, RC, ARTEFACT, Unknown and Other.

