

## Supplementary material 2

Analysis of redundancy and proximity to genes of the LTR-RT clusters present in the library, in six subsets of the North Dakota accession read package:

(a) Percent of reads mapping to different reference datasets, calculated in six read packages (of 6,000,000 75 nt-long reads each) of the North Dakota accession for each superfamily or family (only families with a genome proportion greater than 1% are reported)

LTR-RTs superfamily or family	Subset 1	Subset 2	Subset 3	Subset 4	Subset 5	Subset 6	Max percentage variation
All LTR-RTs	46.51	46.50	46.50	46.52	46.45	46.49	0.14
<i>Copia</i>	13.54	13.52	13.52	13.56	13.53	13.52	0.28
<i>AleII</i>	5.00	4.99	4.99	5.01	4.99	4.99	0.43
<i>Maximus/SIRE</i>	6.17	6.17	6.17	6.19	6.17	6.16	0.44
<i>Gypsy</i>	32.97	32.98	32.98	32.96	32.92	32.97	0.16
<i>Athila</i>	2.96	2.97	2.97	2.96	2.96	2.96	0.42
<i>Chromovirus</i>	24.40	24.40	24.40	24.40	24.38	24.41	0.12
<i>Ogre/Tat</i>	5.61	5.61	5.61	5.61	5.58	5.60	0.50

(b) Number of gene-RT mapping paired reads (i.e., paired reads of which one mapped onto a gene and the other onto a LTR-RT) per million of paired reads of which at least one mapped onto an LTR-RT, calculated among six subsets of reads (of 7,000,000 paired reads each) of the North Dakota accession on different families of LTR-RTs

LTR-RTs superfamily or family	Subset 1	Subset 2	Subset 3	Subset 4	Subset 5	Subset 6	Max percentage variations
All LTR-RTs	143.86	149.43	151.29	146.57	146.57	143.57	5.10
<i>Copia</i>	44.43	45.57	45.14	42.29	47.29	42.29	10.57
<i>AleI/Retrofit</i>	2.57	2.57	3.43	2.57	3.57	1.57	56.00
<i>AleII</i>	12.71	14.29	16.14	13.29	14.71	11.29	30.09
<i>Angela</i>	5.57	4.57	4.71	3.86	4.71	4.57	30.77
<i>Bianca</i>	1.00	0.86	0.57	0.71	0.71	0.71	42.86
<i>Ivana/Oryco</i>	0.86	1.00	1.00	0.29	1.00	1.71	83.33
<i>Maximus/SIRE</i>	18.29	19.00	16.86	17.29	19.43	18.43	13.24
<i>TAR/Tork</i>	3.29	2.71	2.43	4.14	2.71	3.57	26.09
<i>Gypsy</i>	99.43	103.86	106.14	104.29	99.29	101.29	6.46
<i>Athila</i>	12.86	11.57	13.57	11.43	11.57	12.43	15.79
<i>Chromovirus</i>	74.00	78.71	77.86	78.43	73.86	76.86	6.17
<i>Ogre/Tat</i>	12.57	13.57	14.71	14.43	13.86	12.00	18.45