

Table S3. Density of *S. japonicum* retrotransposable elements found in EBRs (Evolutionary Breakpoint Regions) and non-EBR intervals (determined from homologous synteny blocks at 10 kb resolution).

Element type ¹	Density EBRs ²	Density non-EBRs ³	<i>p</i> -value ⁴
LTR	0.53	0.48	0.0002
non-LTR	1.04	0.97	0.0004
Penelope-like	0.14	0.16	0.01

¹ Twenty-five retrotransposable elements detected in the *S. japonicum* genome were used (SjCHGCS1 to SjCHGCS22, and Sj-penelope1 to Sj-penelope3). Of these, 18 were classified as LTR, 4 as non-LTR, and 3 as Penelope-like. Positions of the retrotransposable elements were identified in the *S. japonicum* genome using the RepeatMasker (<http://www.repeatmasker.org/>) program with the *-s* option.

² Average no. of retrotransposable elements found in the 10 kb intervals overlapping with EBRs.

³ Average no. of retrotransposable elements found in the non-EBR regions.

⁴ Statistically significant differences in retrotransposable elements in the EBR regions as compared to the rest of *S. japonicum* genome were calculated using the Student's *t*-test with uneven variances.