

**S2 Table.** MCScanX collinearity metrics within genomes.

Species	<i>A. ricciae</i>	<i>A. vaga</i>	<i>A. vaga</i> (collapsed)	<i>R. macrura</i>	<i>R. magnacalcarata</i>
Genes <sup>1</sup>	49857	57431	35424	24594	29359
Assembly N50 (kb)	277	260	27	73	53
Singletons (% genes)	1613 (3.2%)	1246 (2.2%)	7583 (21.4%)	4704 (19.1%)	6029 (20.5%)
Dispersed duplicates (%)	9153 (18.4%)	15198 (26.5%)	23418 (66.1%)	16090 (65.5%)	19149 (65.2%)
Proximal duplicates (%)	588 (1.2%)	779 (1.4%)	252 (0.7%)	181 (0.7%)	265 (0.9%)
Tandem duplicates (%)	1139 (2.3%)	1206 (2.1%)	1173 (3.3%)	717 (2.9%)	920 (3.1%)
Segmental duplicates <sup>2</sup> (%)	37342 (74.9%)	38961 (67.9%)	2998 (8.5%)	2881 (11.7%)	2988 (10.2%)
Of which form homologous blocks (%)	36595 (73.4%)	37061 (64.5%)	0	0	0
Of which form ohnologous blocks (%)	17051 (34.2%)	15740 (27.4%)	2998 (8.5%)	2881 (100%)	2988 (100%)
Total # blocks					
Homologous	475	905	0	0	0
Ohnologous	903	923	184	175	187
Median block size (# genes)					
Homologous	24	13	NA	NA	NA
Ohnologous	11	9	5	11	12

<sup>1</sup>Curated gene sets for reference genomes were used in this analysis (see Table 1); <sup>2</sup>Total genes forming collinear blocks. Note that the a gene may contribute to multiple collinear blocks. Homologous blocks defined as those with an average pairwise  $K_s \leq 0.5$  (*A. ricciae*) and  $K_s \leq 0.3$  (*A. vaga*); ohnologous blocks defined as those with an average pairwise  $K_s > 0.5$  (*A. ricciae*),  $K_s > 0.3$  (*A. vaga*), and  $K_s > 0.4$  for both *R. macrura* and *R. magnacalcarata*.