

Table S5. AT skewness and GC skewness in the whole mitogenome sequence, protein coding genes (PCGs), tRNAs, rRNAs and control region of *A. assamensis* and the selected Bombycoid species.

Species Name	Whole mitogenome		Major strand		Minor strand	
	AT Skew	GC Skew	AT Skew	GC Skew	AT Skew	GC Skew
<i>A. assamensis</i>	-0.02	-0.22	-0.13	-0.12	-0.12	0.15
<i>S. ricini</i>	-0.01	-0.23	-0.12	-0.13	-0.13	0.08
<i>A. pernyi</i>	-0.02	-0.22	-0.13	-0.13	-0.12	0.07
<i>A. yamamai</i>	-0.02	-0.22	-0.13	-0.13	-0.12	0.09
<i>B. mandarina</i>	0.06	-0.20	-0.04	-0.09	-0.15	0.08
<i>B. mori</i>	0.06	-0.22	-0.03	-0.12	-0.16	0.08
<i>M. sexta</i>	-0.01	-0.18	-0.10	-0.07	-0.13	0.09
Species Name	PCGs		Major strand PCGs		Minor strand PCGs	
	AT Skew	GC Skew	AT Skew	GC Skew	AT Skew	GC Skew
<i>A. assamensis</i>	-0.16	0.01	-0.14	-0.14	-0.19	0.32
<i>S. ricini</i>	-0.16	0.02	-0.14	-0.15	-0.20	0.33
<i>A. pernyi</i>	-0.17	0.01	-0.15	-0.15	-0.19	0.31
<i>A. yamamai</i>	-0.16	0.02	-0.15	-0.15	-0.18	0.32
<i>B. mandarina</i>	-0.14	0.05	-0.05	-0.10	-0.27	0.31
<i>B. mori</i>	-0.13	0.03	-0.05	-0.13	-0.27	0.33
<i>M. sexta</i>	-0.14	0.05	-0.11	-0.09	-0.19	0.31
Species Name	tRNA		Major strand tRNAs		Minor strand tRNAs	
	AT Skew	GC Skew	AT Skew	GC Skew	AT Skew	GC Skew
<i>A. assamensis</i>	0.02	0.18	0.00	0.06	0.24	0.46
<i>S. ricini</i>	0.01	-0.15	0.02	-0.02	-0.09	-0.44
<i>A. pernyi</i>	0.00	-0.14	0.02	0.00	-0.14	-0.45
<i>A. yamamai</i>	0.01	-0.13	0.03	-0.01	-0.18	-0.44
<i>B. mandarina</i>	0.03	-0.15	0.04	-0.02	0.01	-0.45
<i>B. mori</i>	0.03	-0.15	0.03	-0.05	0.02	-0.48
<i>M. sexta</i>	0.00	-0.11	0.02	0.01	-0.11	-0.39
Species Name	rRNA		<i>rrnL</i>		<i>rrnS</i>	
	AT Skew	GC Skew	AT Skew	GC Skew	AT Skew	GC Skew
<i>A. assamensis</i>	-0.03	-0.36	-0.02	-0.37	-0.05	-0.34
<i>S. ricini</i>	-0.02	-0.39	-0.01	-0.38	-0.04	-0.40
<i>A. pernyi</i>	-0.03	-0.39	-0.01	-0.40	-0.05	-0.37
<i>A. yamamai</i>	-0.03	-0.36	-0.02	-0.38	-0.05	-0.34
<i>B. mandarina</i>	0.03	-0.37	0.05	-0.39	0.01	-0.32
<i>B. mori</i>	0.03	-0.40	0.05	-0.40	0.00	-0.38
<i>M. sexta</i>	-0.03	-0.34	-0.03	-0.33	-0.04	-0.35
Species Name	Control Region					
	AT Skew			GC Skew		
<i>A. assamensis</i>	-0.10			-0.45		
<i>S. ricini</i>	-0.02			-0.21		
<i>A. pernyi</i>	-0.09			-0.13		
<i>A. yamamai</i>	-0.07			-0.31		

<i>B. mandarina</i>	-0.02	-0.04
<i>B. mori</i>	-0.06	-0.27
<i>M. sexta</i>	-0.06	-0.33