

**Additional file 6: Figure S4.** Mutation mapping for the 13 PCGs of *Ma. balthica*. A10 is taken as the reference and compared to other mitogenomes. Gray circles: synonymous changes in amino-acid (aa) among *M. balthica* lineages (*i.e.* all mitogenomes included); gray diamonds: synonymous changes in aa among *M. balthica rubra* lineages (*i.e.* excluding *M. balthica balthica* (F17)); black circles: non-synonymous changes in aa among *M. balthica* lineages; black diamonds: non-synonymous changes in aa among *M. balthica rubra* lineages.

