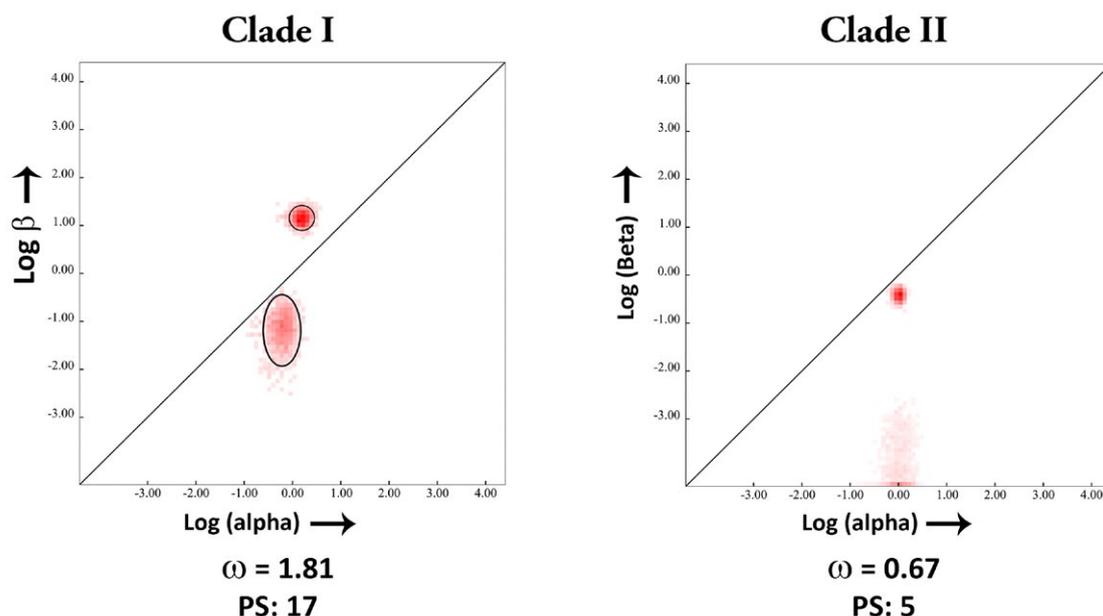


## Supplementary Figure 1. Evolutionary fingerprint of *Trittame loki* major ICK toxin clades



**Evolutionary Fingerprint:** Estimates of the distribution of synonymous ( $\alpha$ ) and non-synonymous ( $\beta$ ) substitution rates inferred for *Trittame loki* major ICK toxin clades are shown here. The ellipses reflect a Gaussian-approximated variance in each individual rate estimate, and coloured pixels show the density of the posterior sample of the distribution for a given rate. **The diagonal line represents the idealized neutral evolution regime ( $\omega=1$ ), points above and below the line correspond to positive selection ( $\omega>1$ ) and negative selection ( $\omega<1$ ), respectively.** Site model 8 omega ( $\omega$ ) along with the total number of positively selected sites detected by its Bayes Empirical Bayes (BEB) approach are also indicated below.