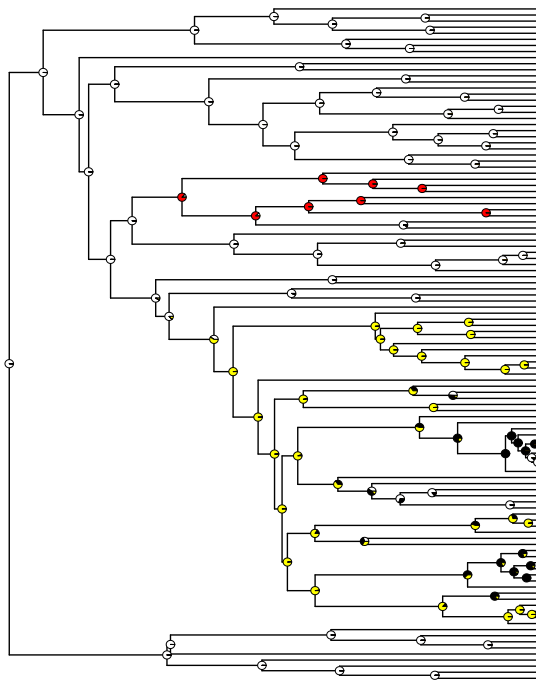
Additional file 4. Evolution of shape of posterior margin of the outline of dorsal surface of cercal prong in lateral view. Ancestral character state reconstruction for shape of posterior margin of the abdominal sternite 5 using maximum likelihood and the rayDISC function in the R package corHMM. Only reconstruction of the best fitting model (ARD) is shown. Pie proportions represent state probabilities estimated for each internal node. Character states are indicated in insets at the bottom.



Outline of dorsal surface of cercal prong in lateral view

- ○ straight or almost straight
- ● swollen or curved uniformly
- ● with a proximal hump
- ● with a subapical saddle-shaped concavity followed by a hump