

Figure 1. Evolutionary History of the Hymenoptera

(A) Representatives of sawflies, wasps, ants, and bees. Scale bars represent 5 mm.

(B) Phylogenetic relationships and divergence time estimates of Hymenoptera. Key evolutionary events are indicated at the respective clades (note that only the major eusocial lineages are considered). The tree was inferred under the maximum-likelihood optimality criterion, analyzing 1,505,514 amino acid sites and applying a combination of protein domain- and gene-specific substitution models. Divergence times were estimated with an independent-rates molecular clock approach and considering 14 validated fossils. Triangular branches cover multiple species (number of species in parentheses) whose relationships are shown in detail in Figure S1. Nodes with circled numbers are referred to in the main text.