

A phylogenetic tree showing the relationships between 100 taxa. The tree is rooted on the left and branches out to the right. Each taxon is represented by a colored circle at the tip of a branch, followed by a four-part character state vector (e.g., 2-2-0-2, 3-1-1-1, 7-1-3-1). To the right of the tree is a large matrix of colored squares, where each row corresponds to a taxon and each column to a character. The colors of the squares represent the state of that character for that taxon, using a palette of red, yellow, green, purple, and grey. The matrix shows a high degree of variation across characters, with many taxa having unique combinations of states. The tree structure is complex, with many internal nodes and a large number of tips, indicating a high level of diversification.

