

Tree statistics

General information

The final transformed tree is **unrooted** and has **50 tips**, with **98 total nodes**. The tree is **fully bifurcating**.

The total length of the tree (sum of all branch lengths) is **5.48**; the tree is not clock-like: the minimum height of a leaf is **0.2375**, while the maximum height is **0.3242**.

Branch lengths range between 0.001494 and 0.2445, with mean **0.05645** and median 0.04127 (89% highest-density interval: **0.001494** — **0.1379**, 95% HDI: 0.001494 — 0.1894).

[Figure 1](#) shows the distribution of branch lengths in the tree.

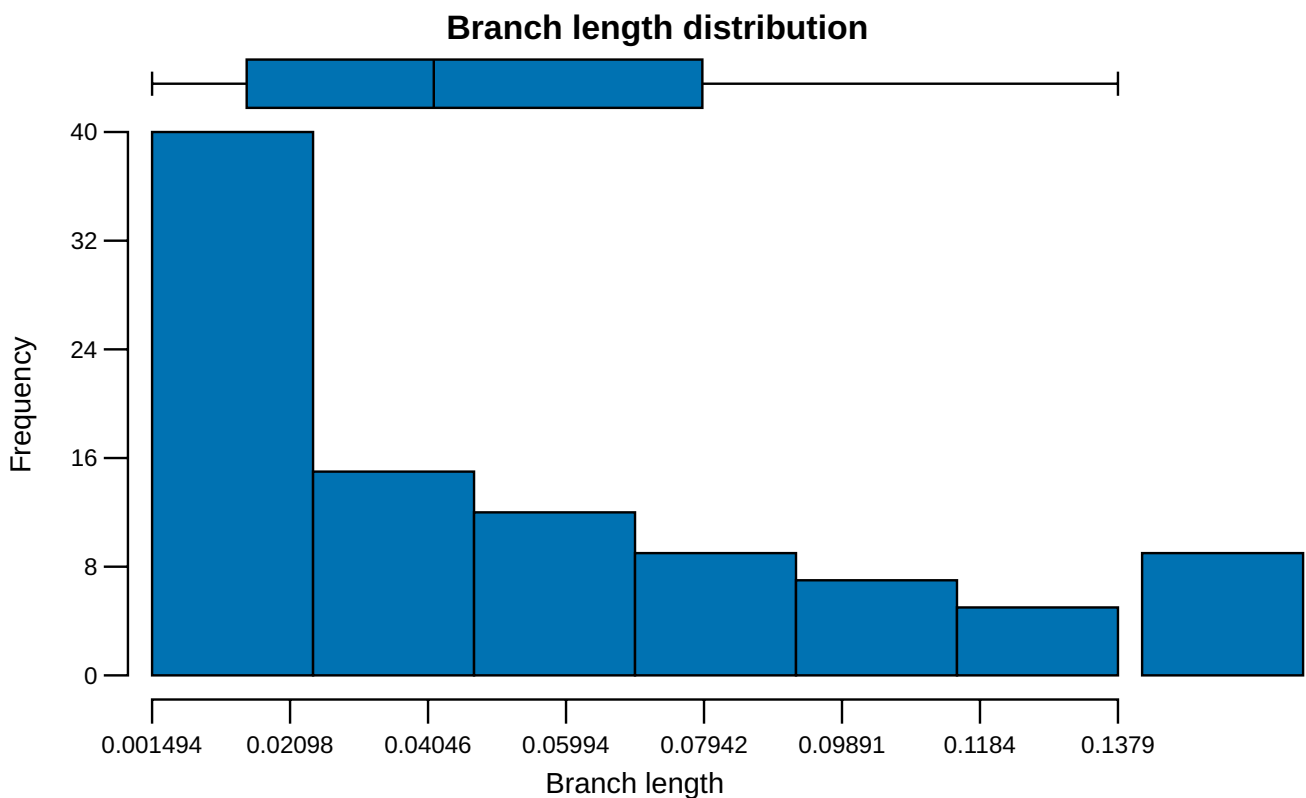


Figure 1. Distribution of branch lengths. The histogram shows the distribution of branch lengths in the tree. 9 values greater than 0.1379 are shown in the overflow bin. The box and whisker plot at the top represents the median branch length, the interquartile range, and the 89% HDI.

Tree shape statistics

The tree has **16** cherries (YHK model normalisation: -0.4472, PDA model normalisation: 1.79). The number of cherries does not differ significantly from the number expected under the YHK model. The number of cherries does not differ significantly from the number expected under the PDA model. [Figure 2](#) shows the expected distribution of the number of cherries under the YHK and PDA models.

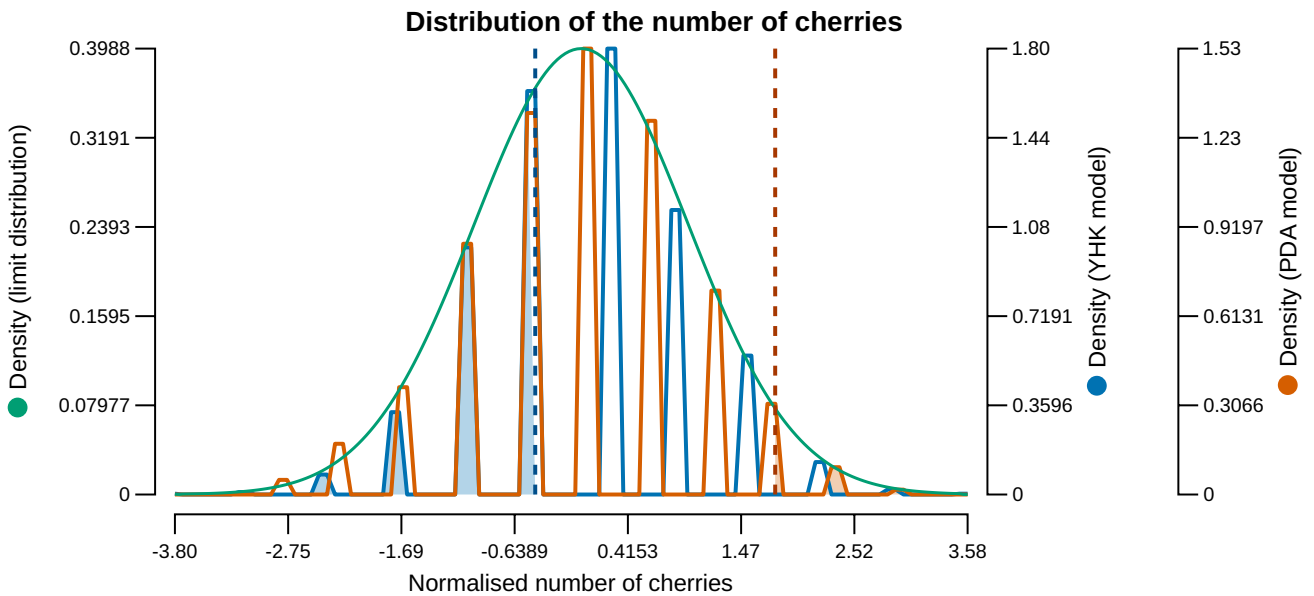


Figure 2. Distribution of the number of cherries. The curve shows the expected distribution of the (normalised) number of cherries under the null hypothesis for a tree containing 50 tips, computed using a Monte Carlo approach (2000 random trees were sampled according to the YHK or PDA model). The dashed line represents the observed value of the number of cherries, normalised according to the YHK or PDA model. The blue plot refers to the YHK model, while the orange plot to the PDA model. The green curve represents the limit distribution for the (normalised) number of cherries as the number of tips grows to infinity.