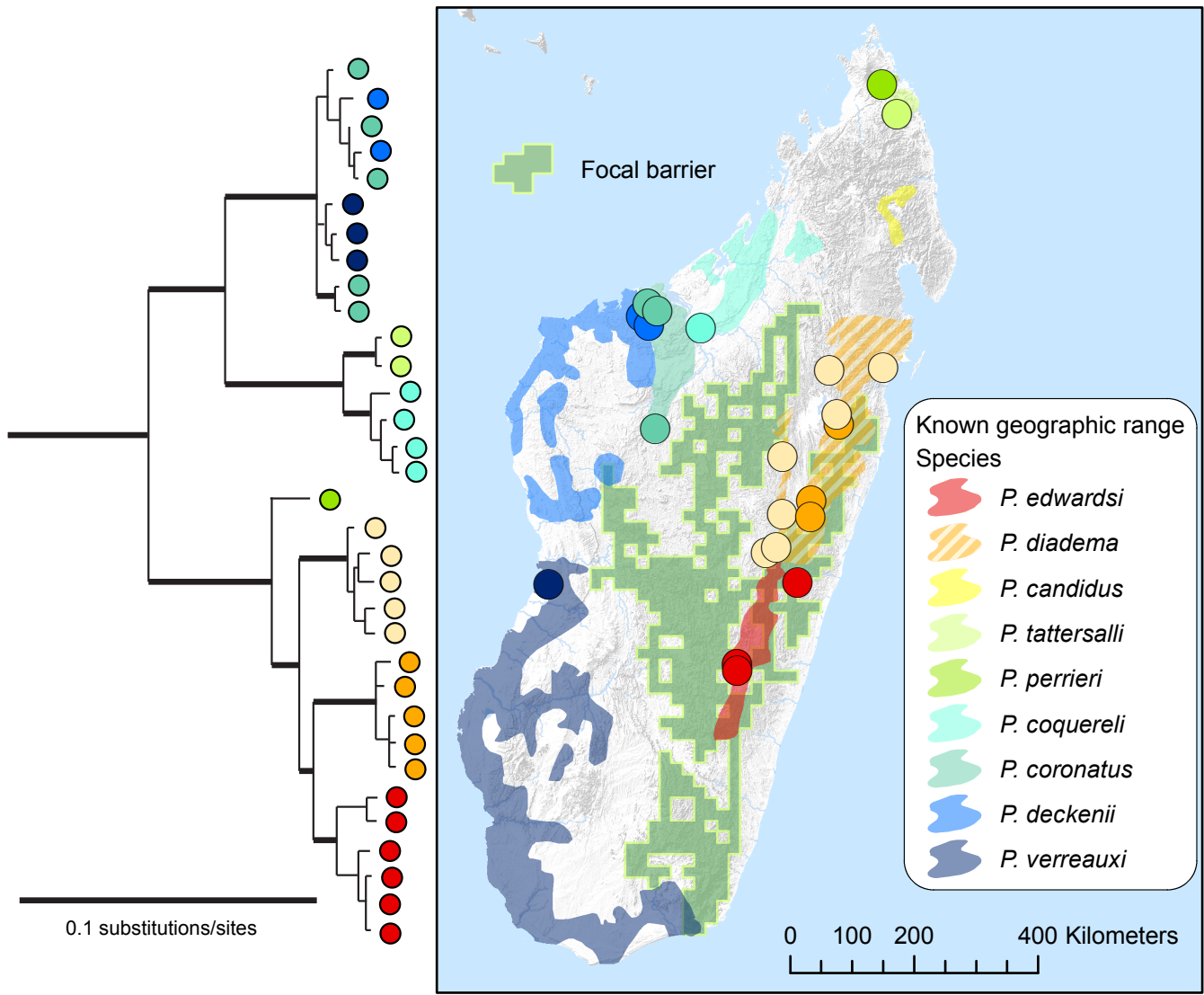




Use of the topographic ring model to identify candidate taxa for ring diversification around a focal barrier in Madagascar that is topographically “in between” (Figure 3) reference barriers for the Drakensberg Massif (South Africa), which has promoted ring diversification in a tree species, *Acacia karroo* [1], and the Tibetan Plateau (Central Asia), which has promoted ring diversification in a bird species, *Phylloscopus trochiloides* [2]. The focal barrier (right panel, map) is a mountainous subhumid bioclimatic zone surrounded at lower elevations by humid (east) and subarid/dry (west) zones [3]. This distribution of contrasting bioclimates is hypothesized to have promoted diversification in amphibians [4], reptiles [5], and lemurs [6-8], some of which form either complete or nearly complete ring distributions around the barrier. In *Propithecus* lemurs, mitochondrial data have been collected to reconstruct its phylogeographic history [8]. In agreement with our model prediction, these data suggest that the focal barrier has strongly influenced non-adaptive divergence among mostly contiguous species of *Propithecus*, showing evidence of continuous levels of genetic differentiation (from north to south) along either side of the barrier (left panel, phylogenetic tree; thick branches are supported by >0.95 posterior probability). Although there appears to be no overlap of terminal taxa in the south, this example illustrates how the topographic ring model may be used to properly identify and evaluate new instances of ring diversification. Genetic data and sampling locations adapted from Rumpler et al. [8]. Geographic range map obtained from IUCN [9].

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