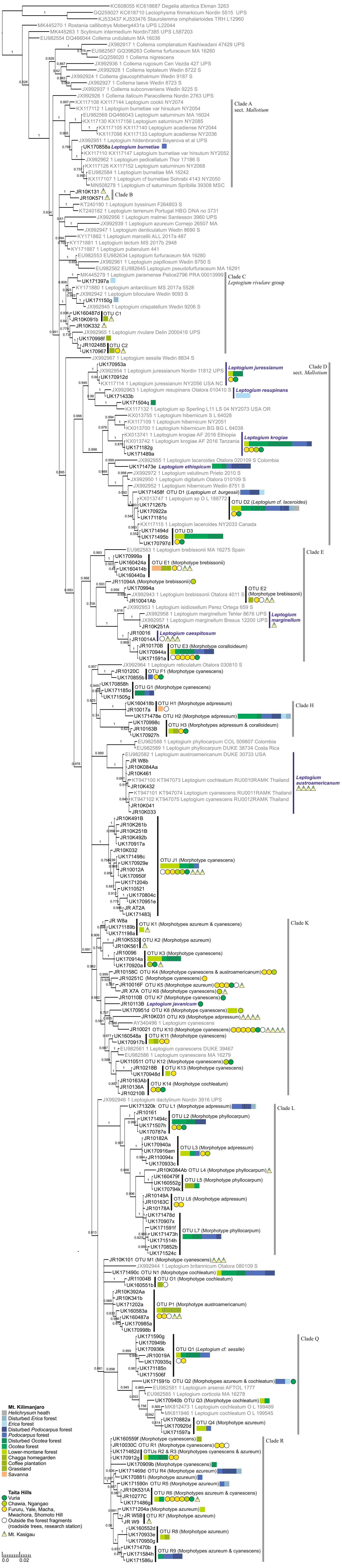

Figure S2. Bayesian tree of the genus *Leptogium* based on the mtSSU and 5.8S marker regions. Newly obtained sequences are in black, including one specimen representing each mtSSU variant; all specimens belonging to each clade are listed in Table S1. Established species are in blue. The colored shapes (rectangle, circle, triangle) show the distribution and abundance of the taxa in the studied regions and ecosystem types. On Mt. Kilimanjaro, each vegetation zone has its own color and the disturbed ecosystem types are further separated with grid; the width of the rectangle indicates the number of sample plots in which the taxon was present. In Taita Hills, each circle indicates presence in one forest fragment. On Mt. Kasigau, each triangle refers to presence on one collection transect, corresponding to the northern, eastern, southern, and western slopes of the mountain. The support values (posterior probability) are presented on the branches and the scale refers to nucleotide substitutions per site.