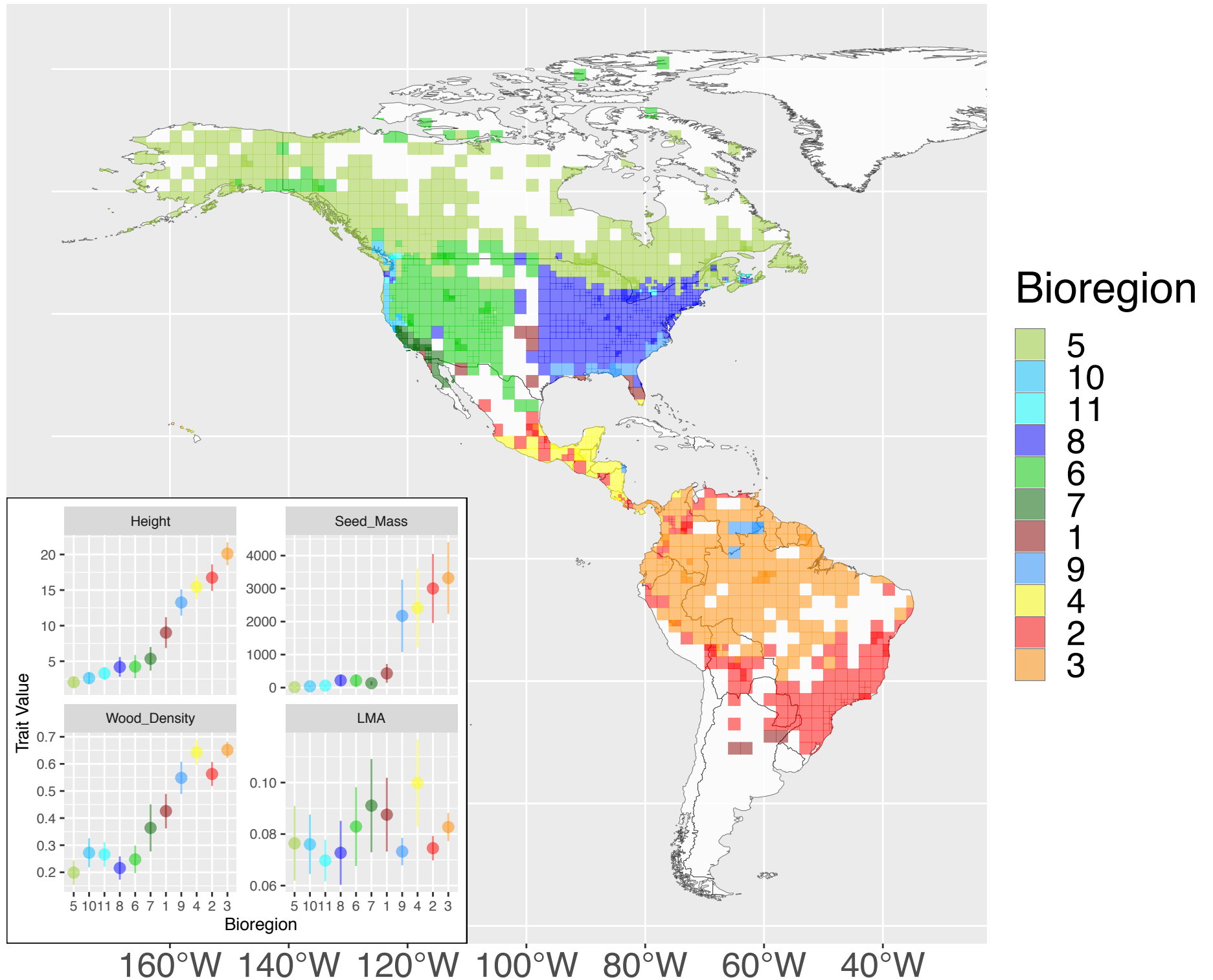
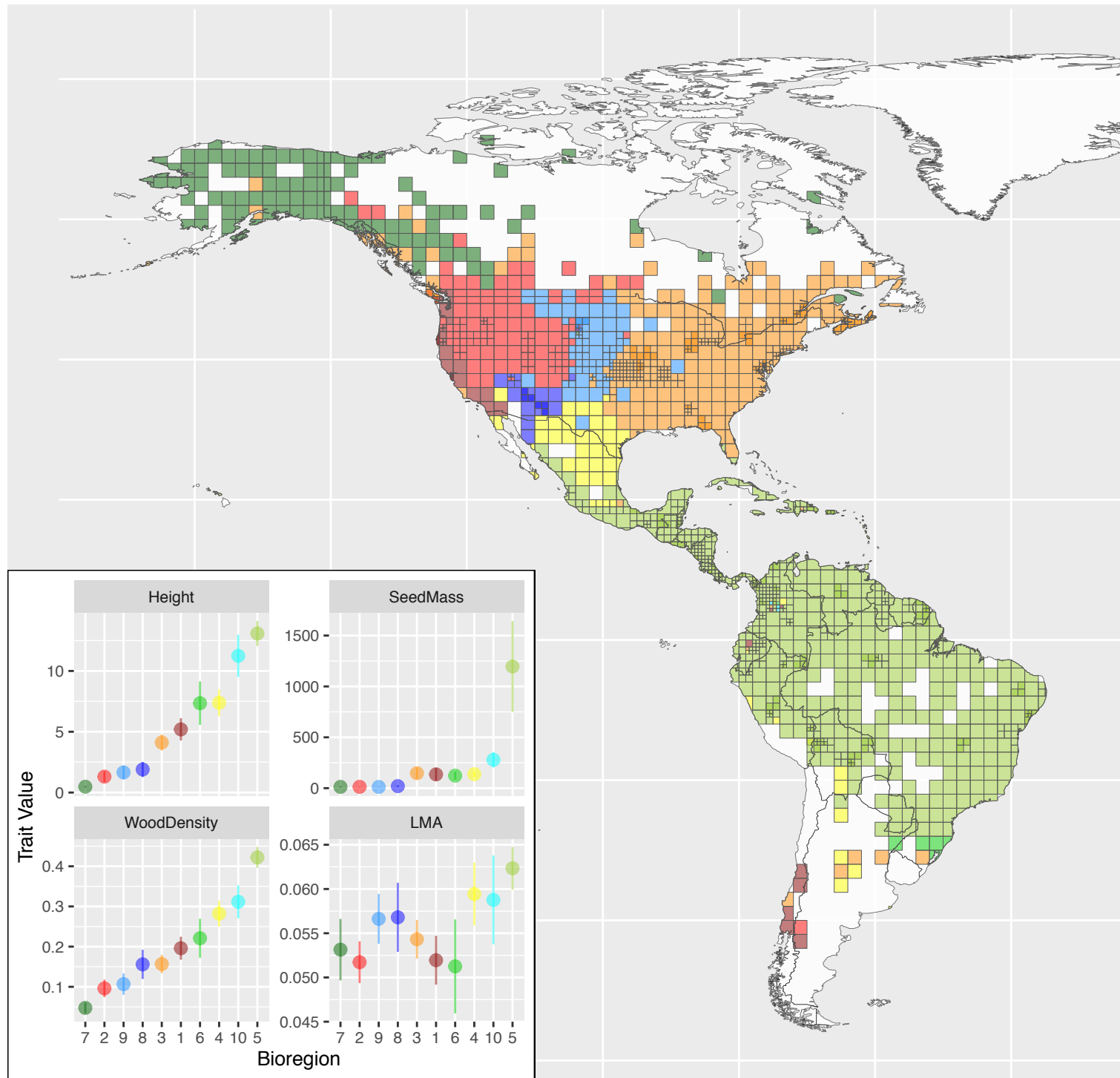


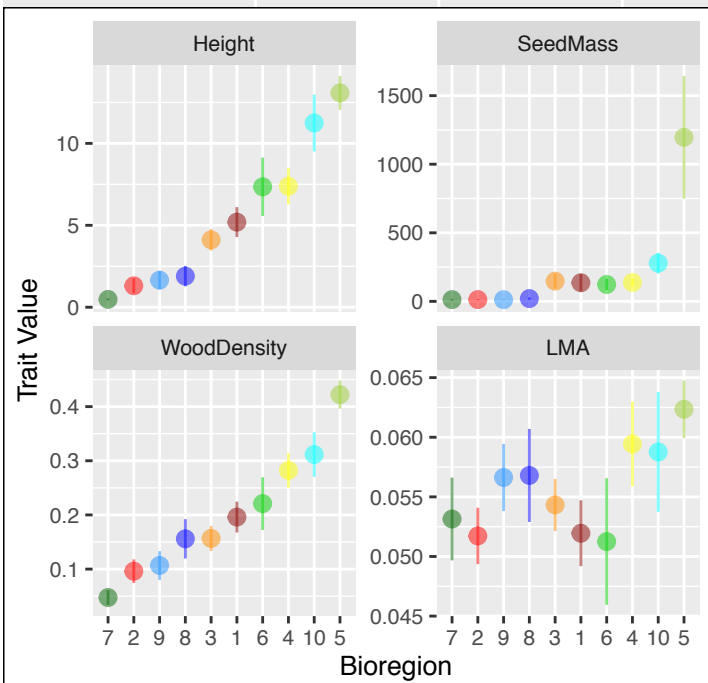
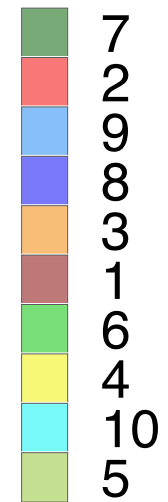
# ERICALES



# FABALES



Bioregion



160°W 140°W 120°W 100°W 80°W 60°W 40°W

Figure S6. Biogeographic clusters (bioregions) identified with the Infomap Bioregions algorithm (see Methods) for both Ericales (86 sp.) and Fabales (220 sp.) taxa with complete trait information. Bioregion colors and numbering were chosen arbitrarily by the algorithm for each plot; however, bioregions have been ordered in the legend and inset plots by increasing average height within that cluster. This generally corresponds also with increasing average seed mass and wood density, but not leaf mass per area (LMA). Inset plots show average ( $\pm$  SE) trait values within each cluster for each functional trait, as indicated. Both Ericales and Fabales show similar numbers of bioregions, and these also generally map to similar geographic areas. Bioregions tend to show consistent trait patterns, although there is a sharp discontinuity within both clades for seed mass, with tropical (extra-tropical) clusters showing much greater (lower) seed mass. Clade-specific differences in trait values associated with bioregions are also observed. Notably, Fabales taxa group primarily into a single tropical cluster, whereas Ericales do not.