Chen et al.’s manuscript “Seed traits and phylogeny explain plant’s geographic distributions” quantified the joint effects of key seed traits and phylogeny on species’ distribution based on a large-scale sampling of 1426 seed plants representing 501 genera of 122 families, using 4,138,851 specimens to model species distributional range size. The result showed that species distributional range was significantly constrained by phylogeny, and seed mass and its intraspecific variation, but their effects varied among species with different dispersal modes. Seed mass variability, seed dispersal mode and phylogeny together explained nearly half of the variance in species range size. This study highlights the necessity to include seed traits and the evolutionary history of species in niche models for predicting the response of plant geographic distribution to the climate change. These findings will improve our understanding on the mechanisms of shaping the geographic distribution of plant species.

The resubmitted manuscript was much improved, and all my concerns for the first review were addressed and resolved. The text is well written. The language is appropriate. The discussion and conclusions seem fairly well supported by their results. I think the manuscript would potentially deserve to be published.