Species abundances

By a collaboration with Keiichi Fukaya (Center for environmental biology and ecosystem studies at National institute for environmental studies, Japan), the laboratory of biodiversity and conservation biogeography (University of the Ryukyus) has estimated species abundances, at a magnificent scale, for all 10 km x 10 km grid cells across Japan and for all 1,200 native woody plant species by statistically modeling the biodiversity big data (Fukaya et al. 2020). There has been nothing comparable to this attempt before in terms of the taxonomic comprehensiveness and of the spatial scale and resolution. This achievement allows researchers to make better understanding of the highly unique biodiversity of the east Asian archipelagos, and also to assist highly effective and feasible conservation policy making with detailed spatial information of where and how many individuals of each plant species occur.

In J-BMP, we demonstrate the estimation results of species abundances for some examples.

■ **Reference** ■

Fukaya K., Kusumoto B., Shiono T., Fujinuma J., Kubota Y. (2020) Integrating multiple sources of ecological data to unveil macroscale species abundance. Nature communications, 11: 1695
https://www.nature.com/articles/s41467-020-15407-5

琉球大学理学部　久保田康裕 研究室
Lab. Biodiversity & Conservation Biogeography
University of the Ryukyus, Japan

kubota.lab.ryukyus@gmail.com
#536, Faculty of science,
University of the Ryukyus,
1 Senbaru, Okinawa,
JAPAN 903-0213