

Estimates of mean seed-to-seedling transition probabilities for 68 Barro Colorado Island tree species for the period 1993-2012.

S. Joseph Wright, Osvaldo Calderón, and Andrés Hernández

All woody seedlings (with no lower size threshold) were censused annually in 600 1-m² seedling plots from 1994 through 2011. These plots are located 2 m from three sides of each of the 200 0.5-m² seed traps (Wright *et al.* 2005). Species-specific mean seed to seedling establishment probabilities were calculated as the mean flux of newly recruited seedlings per year per m² in seedling plots in years 1995 to 2011 (dataset 3 in Visser *et al.* (in press)) divided by the mean flux of seeds arriving per year per m² in seed traps (dataset 2 in Visser *et al.* (in press)) for the corresponding fruiting years after accounting for germination delays (Wright *et al.* 2005).

FILES

Seedling recruitment. The seedling recruitment dataset contains annual seed to seedling transition rates for 68 species from Barro Colorado Island, Panama. Data can be found in **BCIseed2seedling.csv**, a csv text file containing the data records on annual seedling recruitment rates described above. It contains the following columns.

Column

Species Species name

Seeds_year Total seed count, from January 1st to December 31st, for the corresponding year. There are 20 years and therefore 20 columns.

Recruits_year Total number of recruiting individual in seedling census the corresponding year. There are 18 years and therefore 18 columns.

Gl Germination lag, time in years between seed fall and the expected occurrence of recruits in the recruit census for each species. For example a germination lag of 2, means that seed falling in year t, will emerge as recruits in the seedling census of year t+2.

p_rec Annual mean seed to seedling transition probability

References

1.

Wright, S.J., Muller-Landau, H.C., Calderón, O. & Hernandez, A. (2005). Annual and spatial variation in seedfall and seeding recruitment in a neotropical forest. *Ecology*, 86, 848–860.