**# Title of Dataset:** Biotic pressures and environmental heterogeneity shape beta-diversity of seedling communities in tropical montane forests

## Description of the Data structure

**Time of data collection:** Between August 2019 and July 2020

**Geographic location of data collection:** Podocarpus National Park and San Francisco Reserve, Ecuador

**DATA & FILE OVERVIEW**

## dataset’s name

**"seedling\_recruitment\_Ecuador2020\_PodocarpusNP\_MB\_ecography2023.csv":** Data on seedling recruitment collected during one year seedling monitoring along an 2000-m elevational gradient in southern Ecuador

**elevation:** meters about sea level of one of the three elevations (1000, 2000 or 3000 m a.s.l.), where the study plots were situated

**plot:** plot id (9 plots)

**plot:** subplot id (81 study plots)

**family:** taxonomic family of plant species; NA means that no seedlings were found in the subplot

**taxonomic\_ID:** scientific name of plant species or morphospecies id for undetermined plant species; NA means that no seedlings were found in the subplot

**type:** growth type or group of plant functional type assigned by the research project (PFTs are preselected tree species grouped to plant functional types predefined in the RESPECT project); NA means that no seedlings were found in the subplot

**plant ID:** individual plant ID according to (morpho)species; NA means that no seedlings were found in the subplot

**working ID:** id of seedling used repetitively in each subplot; NA means that no seedlings were found in the subplot

**after 4 months:** presence (1) of seedling at the first census; NA means that seedling germinated later or never was recorded

**date of 1. check:** date of the first census for seedling recruitment and biotic pressures, date format: dd/mm/yyyy

**herb1:** presence (1) or absence (0) of herbivory traces on each seedling at the first census; NA – no data available; n/a – no seedling was recorded

**fungi1:** presence (1) or absence (0) of fungal pathogens on each seedling at the first census; NA – no data available; n/a – no seedling was recorded

**comments I:** additional information on seedling at the first census; n/a – no additional information

**after 8 months:** presence (1) of seedling at the second census; 0 means that seedling was recorded at the previous census, but not survived till the second census; NA means that seedling germinated later or never was recorded

**date of 2. check:** date of the second census for seedling recruitment and biotic pressures, date format: dd/mm/yyyy

**herb2:** presence (1) or absence (0) of herbivory traces on each seedling at the second census; NA – no data available; n/a – no seedling was recorded

**fungi2:** presence (1) or absence (0) of fungal pathogens on each seedling at the second census; NA – no data available; n/a – no seedling was recorded

**comments II:** additional information on seedling at the second census; n/a – no additional information

**after 12 months:** presence (1) of seedling at the third census; 0 means that seedling was recorded at the previous census, but not survived; NA means that seedling never was recorded

**date of 3. check:** date of the third census for seedling recruitment and biotic pressures, date format: dd/mm/yyyy

**herb3:** presence (1) or absence (0) of herbivory traces on each seedling at the third census; NA – no data available; n/a – no seedling was recorded

**fungi3:** presence (1) or absence (0) of fungal pathogens on each seedling at the third census; NA – no data available; n/a – no seedling was recorded

**comment III:** additional information on seedling at the third census; n/a – no additional information

**CANOPY\_OPEN:** canopy openness at the subplot level; NA – no data available

**CANOPY\_CLO:** canopy closure at the subplot level; NA – no data available

**LAI:** leaf area index; NA – no data available

**SM1:** soil moisture, volumetric water content in the soil during the dry season (October 2019)

**SM2:** soil moisture, volumetric water content in the soil during the wet season (May 2020); NA – no data available

**METHODOLOGICAL INFORMATION**

See "Methods" section in the original publication for detailed information on data collection.

Data on climatic conditions on plot level is included in "Supporting information".