

## Biomass allocation and root trait variation between open savanna physiognomies in Cerrado

The project aims to understand how the **belowground compartment** vary in three different tropical grasslands presenting different levels of productivity and nutrient content: *campo umido*, *campo sujo* and *campo rupestre*.

It is nowadays well established that belowground compartment is playing a major role in grassland **ecosystem functioning**, and that the integration of **root traits** is necessary to fully understand ecosystem processes.



**Objective:** in three different Cerrado (Brazilian savanna) open physiognomies, we aim to assess:

- **biomass allocation** (above and belowground),
- **root biomass distribution** and
- **root traits** (functional parameters)



**Methodology:** Aboveground and belowground biomass have been sampled in several sites in Brazil (21 sites). The work will consist in processing soil samples collected in *campo umido*, sorting and digitalizing roots, measuring root traits, analyzing data and writing the manuscript.

During the project the student will do bibliographic review, practical work at the laboratory to sort and scan roots and statistical analysis (using R).



**Schedule and organization:** The project will last 6 months. Samples collected in *campo umido* need to be processed in Brazil at the UNESP university (Rio Claro, SP, Brazil), ideally during the second semester of 2020 (around September) (max of 4 weeks).

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