Project Progress 2019

Universidad Regional Amazónica Ikiam, Ecuador

Roldán Torres

Certificate Course (Output 1)
Activities: Contents of the three blocks of the course are in preparation

Block 1: Traditional knowledge – Good showcases (see fact sheet below)

Block 2: Aspects of biodiversity
Metagenomic analysis for microbes identification related to biogeochemical cycles in vulnerable ecosystems. (Roldán Torres, Leopoldo A. Naranjo)
Restoration of forestry landscape (Pablo Cuenca)

Block 3: Methodology

Traditional knowledge is integrated in curricula (Output 2)

I) Forest areas in Tena - influence of microbial communities on forest succession

II) Agricultural areas in Palora - effect of agricultural systems on physicochemical parameters, microbes quantification and microbial biodiversity

Research on biodiversity topics linked to study programs and project partners (Output 3)

Influence of microbial communities on forest succession

- Bacteria and fungi isolation on primary and secondary forest with different land uses.
- Physicochemical soils analysis in primary forest and land uses (cocoa, livestock) in secondary forest.
- Metagenomics analysis of soil samples (identification).

Effect of agricultural systems on physicochemical parameters, quantification of microbes and microbial biodiversity

- Bacteria and fungi isolation on pitahaya and tea soils.
- Effect of agricultural system on microbial population (quantification) and diversity.
- Molecular identification and functional genes of isolated microbes.

The topics are linked to students final theses.

Network DiveCropS, knowledge transfer and information (Output 4)
Roldán Torres and Kassandra Bazantes visiting Rostock (Faculty of Agriculture and Environmental Sciences) for Plants and soil analysis as well as organization of the Workshop.

Miscellaneous