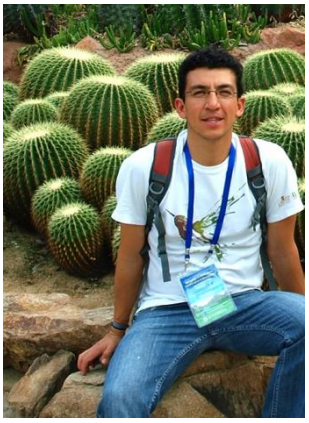
Séminaire / Seminar **AMAP**



Rafael is currently an Associate professor at PUCE, Quito, Ecuador. Working on insect-plant interactions and tropical community ecology, he is interested on the evolutionary ecology of the insects-plants interactions and its role on the survivorship and coexistence of common plant species in Yasuní Amazonian tropical rainforest.

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25 juin 2024
11h00 – 12h00

Salle 201, Bâtiment PS2, CIRAD-UMR AMAP,
Boulevard de la Lironde
Visioconference : Zoom link

Ant-plant interactions in the Amazon rainforest. A brief overview of certainties and new questions

presented by

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ABSTRACT

Mutualisms, beneficial interactions between two species, are widespread in nature and crucial at all levels of biological organization. They allow organisms to thrive in otherwise marginal habitats, reduce competition, exploit new niches, and buffer against environmental variability. A classic example is the relationship between ants and plants (myrmecophytes), where ants are attracted to specific plant structures (e.g., food bodies, extrafloral nectaries, or shelter) and in return, provide indirect defense against herbivores, pathogens, and invasive vegetation. These interactions range from opportunistic and facultative associations to specific obligate symbioses. Research indicates that ant symbionts offer defensive benefits to their host plants and also extend protection to neighboring plants. Additionally, they may supply essential resources such as water, light, or nutrients critical for development and survival.

While most literature shows the benefits of ants' mutualisms for a plant, an analysis of mortality rates of myrmecophytes in Yasuní National Park (Amazonian Ecuador) reveals counterintuitive patterns raising new questions on the overall impact of these animals on the physiology of its host plants.

KEY WORDS

Amazon; Myrmecophytes; physico-chemical defences; plant survivorship

Invited and animated by: Dr. Claire Fortunel (UMR AMAP, IRD)
Type: Research results
Oral language: français/ English
Language of PPT: English