



Daniela is a first-year PhD student between UMR AMAP, Montpellier and EcoFoG, Kourou. Passionate about tropical systems and species interactions, her Master's thesis focused on resource partitioning in tropical frugivorous understory birds in Costa Rica. Interested in how abiotic factors impact tropical assemblages, she examined the influence of natural and anthropogenic disturbances on butterfly community dynamics in Indonesia. Combining these research interests within her PhD, she now aims to disentangle the individual and joint effects of biotic interactions and abiotic drivers on tropical tree performance in French Guiana.

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Salle 201, Bâtiment PS2, CIRAD-UMR AMAP,  
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## **Role of biodiversity on tropical forest response to climate and anthropogenic disturbance**

*presented by*

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### **ABSTRACT**

Understanding how global change impacts tropical forest biodiversity and functioning represent a major challenge for ecologists. While biodiversity relates to forest resilience to drought and disturbance events on a global scale, its role in mitigating these effects at smaller scales remains unclear. To better understand how biodiversity influences tropical forest response to global change factors, a promising way forward is to investigate the role of local biotic interactions in combination with a trait-based approach.

My PhD work examines how biotic interactions influence tropical forest response to climate and disturbance. I study the joint effects of neighbours and abiotic factors on individual tree performance using Bayesian hierarchical models. I use species traits to test the diversity of direct and indirect ways they can shape tree performance. I leverage a large dataset on 35 years of tree growth and mortality from permanent plots at Paracou in French Guiana. This presentation aims at sharing the initial steps of my PhD work.

### **KEY WORDS**

Biotic interactions; Climate; Disturbance; Tropical forests, Modelling

**Invited and animated by:**

Claire FORTUNEL

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**Oral language:**

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