

Séminaire / Seminar AMAP



Camille Ziegler is currently a postdoctoral researcher at UMR BIOGECO - Université de Bordeaux. Working on plant adaptive strategies to drought, he is interested in understanding the physiological mechanisms underlying species vulnerability to climate using experimental approaches in ecophysiology.

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Will the plasticity in hydraulic traits minimize the climate vulnerability of Afromontane tree species? Insights from an elevational gradient experiment in Rwanda

presented by

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<u>ABSTRACT</u>

The ability of tree species to survive rapid climate disruption will rely on their ability to shift their distribution range or tolerate newly emerging growing conditions. There is evidence that tropical montane forest tree communities are experiencing thermophilisation, the process by which heat- and drought-loving species increase in abundance in a given community. The rates of these migrations are however lagging behind the pace of climate change. Evolutionary adaptation may also fall short in the face of rapid warming and drying trends. For species to avoid local extinction, individual trees may therefore have to acclimate, but can they? In the Rwanda-TREE project (rwandatree.com), consisting in multi-species tree plantations established along an elevational gradient, we investigate the ability of trees to acclimate to a warmer and drier climate. In this talk, I will specifically present results of a study focusing on the plastic response of tree hydraulic traits and the emergent consequences regarding specie's vulnerability to climate.

KEY WORDS

tree hydraulics, phenotypic plasticity, drought-induced mortality, montane rainforests

Invited and animated by: <u>Type:</u> <u>Oral language:</u> Language of PPT:

Claire FORTUNEL Research results english / français english (recommended) / français



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