

## Thesis topics “Anatomy and Ecophysiology of Mangroves”

**WHAT?** To get a first idea about our research, you can have a look at our website: [www.vub.ac.be/APNA](http://www.vub.ac.be/APNA) (Mangroves and Biocomplexity > Hydraulic architecture of mangroves).

**WHERE?** Laboratory of Plant Biology and Nature Management (APNA) of the Vrije Universiteit Brussel and the wood laboratory of the Royal Museum for Central Africa in Tervuren

**TOPICS?** There are ample of unsolved questions and we would be happy to strengthen our team with motivated students to strive together to a deeper insight into the reason why mangroves are restricted to the (sub)tropical intertidal area. We approach this question via a combination of anatomical, ecological, as well as physiological research.

- Which parts of the water transport system have a functional significance and which do only have a genetic base?
  - Interaction anatomy-ecology-physiology
  - Hydraulic modelling to better understand this
  - Molecular mechanisms of the formation of the water transport system
- What is the impact of climate and local environmental conditions on the water transport system on a global scale?
  - Interaction genetics-anatomy-physiology-dispersal
  - Effect of extreme drought and frost on anatomy and physiology
- What is the link between anatomy of propagules and the dispersal of the different mangrove species?
  - Link anatomy-settlement success of propagules
  - Link anatomy and (long distance) dispersal
  - Advantage of long propagules vs. compact fruits

When you are interested or when you wish to have some more information, feel free to contact us.

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