

# COURTOIS, ELODIE

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## EDUCATION

### **2007 – Ongoing: Ph.D. student in ecology**

EDB laboratory (Evolution and Biological Diversity), Toulouse (France)

Title: The importance of defensive strategies in tropical plants in French Guyana: plant chemical environment via the emission of volatiles compounds and the diversity of defense strategies in a plant community

Supervisors: Jérôme CHAVE (EDB laboratory, Toulouse) & Didier STIEN (Material and molecule in Amazonian forest, Cayenne)

### **2006-2007: Master of Science in ecology**

University Lyon 1 (France), Ecology Evolution and Biometry

Project: Comparison of VOCs emitted by the bark and leaves of 7 tropical tree species in French Guyana

Supervisors: Jérôme CHAVE & Didier STIEN

### **2004-2007: Engineering School, Biochemistry Department**

INSA Lyon Engineers School (National Institute of Applied Sciences), France

### **2002-2004: Engineer basic studies (Mathematics, Physics & Chemistry)**

INSA Lyon

## COMMUNICATIONS

### **GDR Chemical Ecology Research group: 3 presentations**

October 2007, Rennes (France); October 2008, St Etienne (France) ; October 2009, Marseille (France)

**January 2007, Toulouse (France)**: *Plant defence syndrom*. Oral presentation in the INRA (National Institut of Agronomical Research)

**June 2008: Poster presentation at the ATBC Paramaribo (Surinam)**: *Comparison of plant volatiles emission for 33 species of tropical tree in French Guyana*. Winner of the Alwyn Gentry award for best student poster presentation

## SKILLS

**Field work in tropical area**: Sampling for chemical analysis, permanent seedling plots setting, traits measures

**Chemical work**: GC-MS analysis, SPME extraction, phenolic compounds and tannin assay

**Data analysis**: Statistical analysis and computer programing with R

**other**: member of the French Herpetological Society

*Peer-review papers*

1. **E. A. Courtois**, CET Paine, P-A Blandinieres, D Stien, J-M Bessiere, E Houel, C Baraloto, J Chave. 2009. Diversity of the volatile organic compounds emitted by 55 species of tropical trees: a survey in French Guiana. *J Chem Ecol*. In press.
2. M. A. Gonzalez, A. Roger, **E. A. Courtois**, F. Jabot, N. Norden, C. E. T. Paine, C. Baraloto, C. Thébaud, and J.Chave. 2009. Shifts in species and phylogenetic diversity between sapling and tree communities indicate negative density dependence in a lowland rain forest. *J. Ecol*. In press

*Papers in prep*

1. **E. A. Courtois**, CET Paine, P-A Blandinieres, D Stien, J-M Bessiere, E Houel, C Baraloto, J Chave. Volatil Organic Compounds emitted by the bark and the leaves of 55 tropical trees: a test of the optimal defense theory. In prep
2. **E. A. Courtois**, CET Paine, P-A Blandinieres, D Stien, C Baraloto, J Chave. Evolution of monoterpenes and sesquiterpenes in tropical trees. In prep.
3. F. Nicole, **E. A. Courtois**, Y. Guitton. Unbiased and unsupervised statistical tool for large GCMS data set. In prep.