

# PlantLink Researcher in the spotlight

## Tina d'Hertefeldt

October 2016

*Dr Tina d'Hertefeldt is a researcher at the Department of Biology at Lund University. She is a plant ecologist, who is currently working with plant/soil interactions under increased rainfall variability, and ecological impacts of biomass production for bioenergy. She is the Managing Editor of Nordic Journal of Botany. Since 1<sup>st</sup> of July she is the Assistant Director of PlantLink.*



### **-What is currently on top of your research agenda?**

*Biomass for bioenergy, especially from the aspect of plant traits and sustainability.*

*Also analysis of the material that we sampled in the Amiga project, Assessing and Monitoring the Impacts of Genetically modified plants on Agro-ecosystems ([www.amigaproject.eu](http://www.amigaproject.eu)).*

*At the moment we are establishing a field experiment in the project Eco-serve ([www.ecoserve-project.eu](http://www.ecoserve-project.eu)) where we will look at the distribution of <sup>13</sup>C from litter to the soil community, in order to evaluate adaptations to agro-ecological conditions that are changing due to increased rainfall variability under climate change.*

### **-Tell us about your latest publication?**

*It was a collaboration with LCA-modellers on potential additional benefits of growing willow for bioenergy (Climate regulation, energy provisioning and water purification: Quantifying ecosystem service delivery of bioenergy willow grown on riparian buffer zones using life cycle assessment; Styles, D., Börjesson, P., D'Hertefeldt, T. et al. *Ambio* (2016). doi:10.1007/s13280-016-0790-9).*

### **-What led you into your particular field of research?**

*An interest in plant traits and plant strategies from an ecological viewpoint. I started with resource-sharing in large clonal systems and went on to study the importance of plant traits in different systems: feral plants, weeds, transgenic crops and biomass plants.*

### **-What are the implications of your research for the society?**

*I have a strong foundation in fundamental research and somehow it has linked to questions that society is interested in, such as biomass provisioning for renewable energy or sustainable production of transgenic crops. My main implication would be to show that there are complex sides to the*

*technical solutions we see today, and to implement a systems approach with expertise from different disciplines , for example ecology, agronomy and environmental engineering.*

**-Finally, let's say you got unlimited research funds; where would your research be five years from now?**

*It would be to incorporate research on plant traits and biodiversity as part of sustainable biomass production for bioenergy, with interactions between agronomy, environmental engineering and ecology. To evaluate costs and benefits of a higher biomass outtake from natural systems, and the potential for environmental benefits in production systems. Continued studies of how individual traits affect plant performance in natural vegetation systems.*