

## CV Dr. Andrea Matros



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### **Education**

*PhD, Biology / Biochemistry, 2002*

Martin-Luther-University of Halle, Germany, Natural Sciences Faculty

Dissertation: „Einfluss erhöhter atmosphärischer CO<sub>2</sub>-Konzentrationen auf den Sekundärstoffwechsel und Pathogenabwehrmechanismen von *Nicotiana tabacum*“ (English translation: „Influence of elevated atmospheric CO<sub>2</sub>-concentrations on secondary metabolism and pathogen defence mechanisms of *Nicotiana tabacum*“), magna cum laude

*Diploma in biology (Master), 1998*

Friedrich-Schiller-University of Jena, Germany, Biology and Pharmacy Faculty

### **Scientific work career**

*Leibniz-Institute of Plant Genetics and Crop Plant Research, Gatersleben, Germany, Research Group Applied Biochemistry, Mass Spectrometry for Proteomic and Metabolite Research; Principal Investigator, 2005 - present*

*Novoplant GmbH, Gatersleben, Germany, Protein Production and Purification; Postdoctoral Research Fellow, 2003 - 2004*

*Leibniz-Institute of Plant Genetics and Crop Plant Research, Gatersleben, Germany, Research Group Applied Biochemistry; Postdoctoral Research Fellow (EU-Project, Quality of Life and Management of Living Resources), 2002*

*Leibniz-Institute of Plant Genetics and Crop Plant Research, Gatersleben, Germany, Research Group Applied Biochemistry; Research Fellow, 1998 – 2001 (Post Graduate Grant 1999 – 2001)*

### **Research interests and expertise**

Andrea Matros graduated in biology at the University of Jena (Germany) in 1998 and began her scientific career, working on the impact of elevated carbon dioxide on secondary metabolites profiles using tobacco as a model. She received her PhD from the University of Halle (Germany) in 2002. Her postdoctoral work was focused on the application of protein purification and protein analysis to several problems in plant biology, including almost all aspects of biochemical characterization of proteins. Since 2005, she is working in the group Applied Biochemistry of the IPK-Gatersleben (Germany), being responsible for the mass spectrometric analysis within the proteomics and metabolomics platform. Instrumentation platform includes MALDI-TOF-TOF, nanoLC-ESI-Q-TOF, LC-TOF, and GC-TOF mass spectrometer for analysis. Recent projects focus on protein and metabolite networks in plant stress defense, development, and seed quality and protein composition. With respect to qualitative and quantitative protein profiling the development of nanoLC-based protein separation together with label-free quantification methods and mass spectrometry based imaging approaches are in the focus.