

Research activities



Graduate Studies

Studies in agricultural sciences at the Justus-Liebig-University Giessen, Germany. Diploma degree awarded: Dipl.-Ing. agr.

Doctorate

Doctoral studies at the Institute of Agronomy and Plant Breeding of the Justus-Liebig-Universität Gießen, Giessen, Germany. Thesis entitled "Lokalisierung des Resistenzgens gegen Gelbmosaikvirus (Barley Yellow Mosaic Virus) in deutschen resistenten Sorten der Wintergerste (*Hordeum vulgare* L.)" – ["Chromosomal location of the gene for resistance to Barley Yellow Mosaic Virus in German resistant winter-barley (*Hordeum vulgare* L.) cultivars"]. Doctoral degree awarded: Dr. agr.

Research assignments

Research scientist at the Institute of Grapevine Breeding Geilweilerhof in Siebeldingen, Germany working on: Screening of dye plant species

Research scientist at the Institute for Biological Control in Darmstadt working on: Proteases in insects, Proteolytical processing of *B.t.*-toxins in insects, Binding analysis for the characterization of the binding of *B.t.*-toxins to gut receptors in insects

- Activation of *B.t.*-toxins in Western corn rootworm (*Diabrotica virgifera virgifera*) for the characterization of potential resistance mechanisms
- Reference systems for the characterization of potential resistance mechanisms in European corn borer (*Ostrinia nubilalis*) to the *B.t.*-corn-toxin Cry1Ab
- Studies on the early detection of resistance development of the European corn borer (*Ostrinia nubilalis*) to the *B.t.*-corn-toxin Cry1A
- Bioassays for the efficacy of the *B.t.*-corn-toxin Cry1Ab against the European Corn Borer (*Ostrinia nubilalis*) – Development cycle of the the European Corn Borer

Scientific officer for research promotion at the Federal Office for Agriculture and Food

Research visits

Research visit at the Risø National Laboratory in Roskilde, Denmark working on: Identification of barley trisomics by giemsa-banding

Postdoc of the Japan Society for the Promotion of Science (JSPS) / Alexander von Humboldt-Foundation (AvH) at the Institute of Genetic Resources of Kyushu University in Fukuoka, Japan working on: Development of biochemical methods for selection on resistance to Barley Yellow Mosaic Virus

Research visit at the University of Montpellier (Université de Montpellier), Montpellier, France working on: Quantitative analyses of flavonoids in yellow dye plant species

Publication / Presentation / Poster – <http://www.dyeplants.de/pdf/Aktivitaeten.pdf>