Master Theses (2011) - UFT

WEINBAU - VITICULTURE

Establishing of FTIR analysis in Forneck Lab UFT

Fourier transform infrared spectroscopy (FTIR) is a technique which is used to obtain an infrared spectrum of absorption and emission of a solid, liquid or gas. Different kinds of paramters (sugars, acids, …) has to be established and different berries (grape, raspberries, …) will be analysed)
Methods: new instrument ALPHA (Bruker Optics)
Timescale: Literature research (FTIR analyses: pitfalls and possibilities) – starting now; Instrument setup – starting now; measurement – starting August/September
Contact: Katharina Schödl (katharina.schoedl@boku.ac.at)

Comparing genotypes of phylloxera in "Drieschen" and vineyards via SSR markers

Using a hierarchical sampling method phylloxera is collected in "Drieschen" (leaf-forming rootstocks) and cultivated vine yards. After a DNA extraction all samples are compared via SSR markers regarding their genetically background. Subsequently genetic data are analysed via the software "Genepop".
Methods: field and labor work; PCR; computer analysis
Timescale: August 2011-January 2012
Contact: Nora Lawo (nora.lawo@boku.ac.at)

Quantitative Analysis of gene expression in Berry Shrivel infected grapes

Berry shrivel is a physiological disorder during berry ripening especially with variety Zweigelt. The causes are not known yet, therefore we investigate differences in gene expression in healthy and infected grapevine tissues.
Methods: RNA extraction, quantitative PCR, primer selection
Timescale: September 2011- February 2012
Contact: Michaela Griesser (michaela.griesser@boku.ac.at)

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