

## Msc Umwelt und Natürliche Ressourcen / Msc Environment and Natural Resource – Master Thesis

Arbeitstitel / Working Title	Drone-based Remote Sensing in Agriculture	
MRU / Forschungsgruppe	Forschungsbereich Biologische Landwirtschaft / Forschungsgruppe Weinbau	
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Abstract	By means of remote sensing with UAV-taken airborne NIR and RGB imagery the candidate will develop methods and strategies to detect biotic and abiotic stresses in the challenging crop <i>Vitis vinifera</i> . The work comprises artificial pathogen inoculations in the lab and on the field and monitoring the progress of disease with different imaging methods. Airborne imagery will be taken from our vineyards at peninsula Au-Wädenswil.	
Erforderliche Kompetenzen	The candidate should have a strong interest in physiological measurement methods, plant-pathogen interaction, image analysis including statistics and ArcGIS.	
Bemerkungen	The topic will be adapted to the current state of the project.	