**Plant Ecology (320b) Date March 2024**

**Title: Optimizing Resource Use Efficiency and Grain Quality in Maize Agroforestry Systems: A Comparative Analysis of Soil Amendments**

**Supervisors: Jr. Prof. Dr. Andreas Schweiger, Jennifer Moore Msc.**

**Topic description:**

This thesis evaluates the impact of soil treatments (conventional, humus-building, conventional with biochar, and humus-building with biochar) on resource use efficiency and grain quality parameters in maize agroforestry systems. Through measurements of yield quantity and quality (kernel quality, biomass, carbon isotopic discrimination), it aims to identify optimal soil management practices for enhancing both agricultural productivity and product quality in sustainable agroecosystems.

**Duration of work**: 1-2 months

**Start of the work:** September

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