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## LIMING OF DIFFERENT SOIL TYPES – EFFECT ON SOIL FACTORS AND SUGAR YIELD

## Chaulage de différents types de sols – influence sur les propriétés du sol et le rendement en sucre / Kalkung verschiedener Bodentypen – Einfluß auf Bodeneigenschaften und Zuckerertrag

## ABSTRACT

The aim of this investigation was to study how different soil factors and sugar yield respond to liming. The trial plan consisted of three treatments: 1. Unlimed, 2. Liming with 16 ton/ha factory lime and 3. 8 ton/ha lime stone. A total of 52 different soils were included in the investigation. The results show that sugar yield was significantly increased with 210 and 340 ton/ha following liming with factory lime and lime stone respectively. Calcium content and pH was also significantly increased. The increase in calcium content after liming was different in different regions, depending on the geological origin and mineralogy of the soils.

The soils that gave the largest response in sugar yield, 700 kg/ha, were characterized by high clay content, pH and organic content before liming, that is soils with no lime requirements according to the present liming recommendations.

The investigation has shown that liming recommendations must be based on several factors in addition to pH, e. g. mineralogy, calcium and organic content.