

LTE „CR“ Crop Rotation Rauischholzhausen, Justus Liebig University Giessen

IOSDV: International Organic Nitrogen Long-Term Fertilisation Experiment

Responsible: Prof. Dr. Bernd Honermeier (till 2021), Dr. Janna Macholdt, Justus Liebig University Gießen, Institute of Agronomy and Plant Breeding I, Chair of Agronomy & Crop Physiology. Further contact person: Yavar Vazirtabar.

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Beginning: 1982, still running until now

Soil and Climate

Mean annual precipitation 576 mm, Mean annual temperature 8.5 °C.

Soil type: Haplic Luvisol (*IUSS Working Group WRB*, 2014), developed from quaternary loess deposits. Texture: loamy texture, average clay content of 36%, Corg: 1.3 – 1.5%, pH about 7.7

Experimental Design

2 factors: **A**: N fertilization (1: zero/control, 2: reduced: 40+30 kg N/ha, 3: 60+30+50 kg N/ha), **B**: Crop rotation: 1: Winter rye-winter wheat-winter barley-oat, 2: same as (1) but with straw and catch crops, 3: same as (1) but oilseed rape instead of winter rye, 4: same as (1) but sugar beet instead of winter barley, 5: same as (1) but Fava bean instead of winter barley, 6: same as (5) but maize instead of oat.

Strip plot design. Number of replications: 3, Plot area: gross 8 x 5 m, net: 10 m².

References

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