

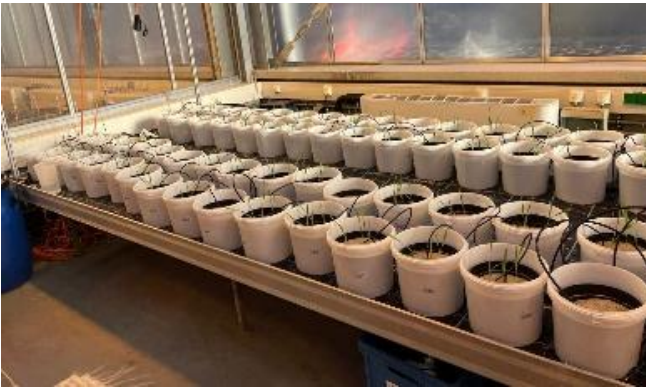
Amendment of poor soil substrate by carbon-rich soil additives for sustainable crop production

Ashwaq Najjar (Root Group), Supervisors: Dr. Arnd Kuhn, Dr. Christina Kuchendorf (IBG-2), and Prof. Dr. Nicolas Brüggemann (IBG-3), (Forschungszentrum Jülich), Prof. Dr. Sharaf Al-Tardeh (PPU-Palestine)

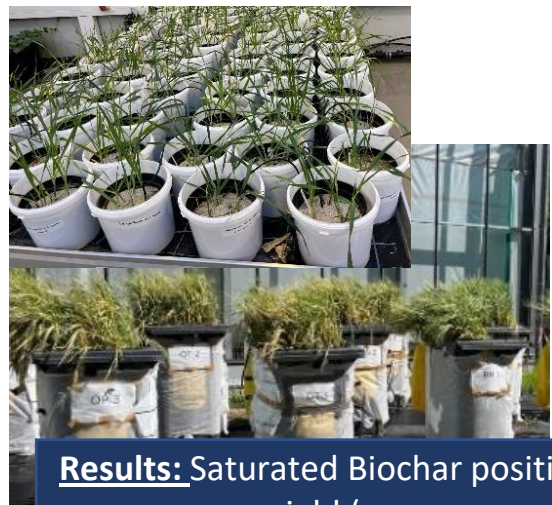
Global agricultural problems: soil salinity, infertility, pollution, carbon loss, leading to food and water security complications.

Plant and soil improved by:

1. Saturated biochar addition by Greenhouse experiments



2. Carbon-rich soil additives in greenhouse, crop garden and field experiment



Results: Saturated Biochar positively increases barley plant yield (e.g. more seeds per area)

