

Institute of Bio- and Geosciences (IBG-2)

Plant Sciences

Based on molecular, physiological and ecological expertise IBG-2: Plant Sciences develops integrated concepts of sustainable intensification of plant production towards a knowledge based bioeconomy.

Major topics are Integrative Plant Research (biodiversity, resource use efficiency, non-invasive analytics), Sustainable & Innovative Plant Production (resourcefriendly & integrated production systems), Science Policy and Political Consultants.

Non-invasive phenotyping methods are used to quantify the dynamics of plant traits by studying growth and transport as well as exchange processes between plants and their environment. Imaging approaches are used to quantify plant structure and function from leaves or roots to the ecosystem.

Techniques are applied in green houses and outdoor facilities, thereby using various sensor-platforms covering near-ground techniques as well as airborne platforms.

