APPN

Austrian Plant Phenotyping Network

ENHANCING THE AUSTRIAN PLANT PHENOTYPING COMMUNITY

ONE OF THE GREATEST CURRENT GLOBAL CHALLENGES is to improve food production in order to feed a rapidly growing human population without degrading more natural resources. At the same time, plants are the primary producers of the world's ecosystems and increasingly utilized as raw material for a new generation of sustainable products and renewable energy. In light of climate change, many agronomically important regions worldwide suffer from intensifying droughts, increased salinity or plant diseases constituting additional challenges for future scenarios of sustainable agricultural production.

PLANT PHENOTYPING - a rapid and broad characterisation of plant growth and stress responses alike - has seen a recent advancement in automation and sensor technology.

A phenotype, which is formed during plant development and is a result from the interaction between the genetic code (genotype) and the surrounding environnment, expresses the structure and function of a plant.

Currently the understanding of the genotype-phenotype link is hampered by insufficient technical capacities and conceptual frameworks. **Therefore, advances in plant phenotyping are key factors for success in modern plant breeding and basic plant research.**

WHO IS APPN? The APPN initiative is an Austrian network of biologists, breeders, technology developers, imaging experts, statisticians and bioinformaticians working in the field of plant phenotyping.

CONTACT US

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WHAT DOES APPN DO? The APPN aims to unite the Austrian plant phenotyping community in order to facilitate

- ✓ **research collaborations**
- ✓ **development of plant phenotyping infrastructure and methodologies**
- ✓ **networking activities**

The goal is to increase the visibility and impact of plant phenotyping and to facilitate communication between stakeholders in academia, industry, government, and the general public. APPN actively supports the preparatory phase of the European ESFRI project EMPHASIS and intends to serve as the national node.

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