## **PlantScreen<sup>™</sup> Field Systems**



PSI's PlantScreen<sup>™</sup> field systems allow the user to monitor numerous aspects of plant growth, development and response to biotic and abiotic stresses in the plants' natural environment. The field systems can be designed and configured to meet the users' specific requirements with respect to the size and morphology of plants screened, whether they be turf grasses, mature maize plants or submerged rice plants. In addition, the natural environmental conditions to which the plants are exposed at the time of imaging can be measured and recorded in software. Every component of the field systems is designed to withstand the severest weather conditions, and to operate flawlessly without user-intervention.

The PlantScreen<sup>™</sup> field system is modular and designed so that features may be added as your screening requirements evolve. Optional imaging features include stations for:

- Morphometric and RGB Analysis
- Chlorophyll Fluorescence Kinetics Imaging
- Thermal Imaging
- Hyperspectral Imaging
- NIR Imaging

Environmental conditions that may be monitored during screening include:

- Photosynthetically Active Radiation (PAR)
- Atmospheric CO2 Concentration
- Relative Humidity
- Air Temperature
- Wind Speed



Schematic of a field system in development for monitoring submerged rice plants.

Our field systems are customized to meet your immediate and longer term requirements. Please contacts us, without obligation, to discuss your project. We guarantee confidentiality and that you will receive dedicated pre-purchase and post-purchase support.







RGB and Morphometric Imaging

Chlorophyll Fluorescence Imaging

Hyperspectral Imaging







Thermal Imaging

NIR Imaging

Sample Identification



Graphical Control Software