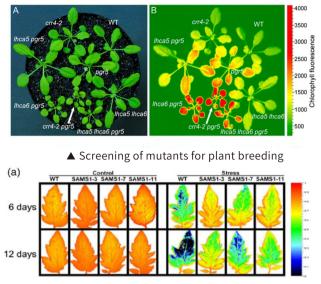


# PlantView 230F Modulated chlorophyll fluorescence in vivo imaging system

Biolight Biotechnology PlantView230F modulated chlorophyll fluorescence in vivo imaging system uses an ultra-high-speed digital camera with an imaging area of 150mm × 94mm and high temporal and spatial resolution. The system is highly integrated and can realize micro-measurement of algae cells to fluorescence imaging analysis of whole plant samples. Through professional software algorithms, the system can measure multiple fluorescence parameters and reflect the process and changes of photosynthesis and the physiological status of plant samples by measuring chlorophyll fluorescence. The measurement process is fast and simple, without damaging or disturbing the sample. It is a good helper for your experiments!





Effects of salt-alkali stress on plant growth

#### Profession

• The camera has extremely high sensitivity and time resolution and is used for transient expression detection of chlorophyll fluorescence;

• The system uses high-power pulsed LED light source to ensure that the sample receives uniform light under strong excitation light;

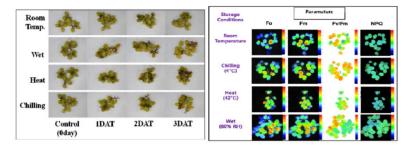
• The system is equipped with near-infrared and infrared light sources, which can measure the leaf absorption coefficient (Abs) and calculate the photosynthetic photosystem II (PSII) electron transfer rate.

## Smart

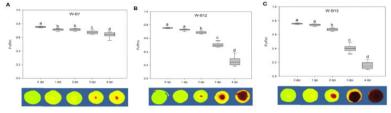
• One-click setting to obtain various chlorophyll fluorescence parameters required for experiments;

• Fully automatic intelligent instrument control, easy to use and fast imaging;

• A variety of experimental plans can be preset, modular design, and process-based operation.



▲ Effect of storage conditions on fruit freshness



▲ Effects of pathogenic bacteria on plant growth

#### Integration

The system is highly integrated and can perform fluorescence imaging of common plant whole plants, leaves, fruits, algae and other samples;
High-quality filters can also measure green fluorescent protein imaging, and the system functions cover everything from single cells to ecology, with a wide range of applications.

## Flexible

- $\boldsymbol{\cdot}$  The fixed measuring distance between the light source and the sample
- is 170mm. The camera and light source can

Automatically raises and lowers along the Z-axis to measure plants of different heights and sizes;

Measurement of plants up to 400mm.

## Smart software

- Can measure Fo, Fo', Fm, Fm', Fv, Fv', FM', Fv/Fm, Fv', Ft, ΦPSII, qN, qP, ETR and other chlorophyll fluorescence parameters
- · Dedicated data analysis software, intelligent bilingual mode between Chinese and English, free switching
- Users can customize the settings program, and data results are automatically stored and analyzed.
- It comes with GLP protocol, which can record, track and trace experimental data safely and reliably, protecting your data.
- Free software upgrade.

• The multi-user login function can manage permissions for different laboratory personnel to ensure the security of experimental data.

Camera	Ultra-high-speed digital camera	Resolution	1920×1200
Pixel size	5.86µm×5.86µm	Framerate	40FPS
Imaging area	141cm <sup>2</sup>	Light source table	Z-axis automatic lifting
Light Source	450nm, 660nm, 780nm, LED light source, lifespan >5000 hours	Light intensity	Measuring light: 0.5µmolm-2s-1 Maximum actinic light: 2300µmolm-2s-1 Saturated pulse light: 5000µmolm-2s-1
System	Windows7 and above	Size	750mm×350mm×350mm(H×W×D)

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