



Case Study: Daylight Wavelength Monitoring



The National Institute of Crop Science, South Korea has recently purchased two Daylight Wavelength Measurement Systems to study the effects of different coloured shading on the growth of ginseng crops.

Each system includes a DataHog logger with a range of light sensors to cover the UV, visible and near infra-red solar radiation ranges. All sensors are installed at crop height, one system under red shading, the second under blue shading. Variation in light levels across the wavelengths are automatically recorded throughout the day, along with relative humidity and air and soil temperatures. The inclusion of two SpectroSense2+ logging meters also makes the sensor system versatile for light ratio measurements and portability through the crop.

Equipment used

- DataHog2 loggers
- SpectroSense2+ meters
- 4-channel light sensors: wavelengths 400-480 nm, 480-560 nm, 560-650 nm, 645-760 nm.
- 4-channel light sensors - wavelengths 760-850 nm, 850-950 nm, 950-1050 nm, 400-1050 nm.
- UVA sensors
- UVB sensors
- PAR Quantum sensors
- Pyranometer sensors
- rht+ RH/Temperature probes
- Soil temperature probes



Acknowledgements and Contacts

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