**Direct Chlorophyll Determination**

Offers over 35 crop-specific settings with a generic setting for all others:
- Arugula *New!
- Barley
- Blackberry
- Boxelder
- Buttercrunch lettuce
- Cannabis
- Cherry
- Coffee
- Collard greens *New!
- Corn
- Crab apple
- Crimson king maple
- European birch
- Forsythia
- Grapevine
- Hops
- Japanese maple
- Kale *New!
- Kohlrabi
- Lilac
- Norway maple
- Paper birch
- Peas
- Peppers
- Purple leaf sand cherry
- Quaking aspen
- Rice
- Romaine lettuce *New!
- Sorghum
- Soybean
- Spinach
- Strawberry
- Swiss chard *New!
- Tomato
- Waldmann’s green lettuce
- Wheat

**Product Specifications**

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TYPICAL APPLICATIONS
- Chlorophyll concentration determination in plant leaves
- Assessment of nutrient status, fertilizer requirements, evaluation of stress, and optimization of harvest

NON-DESTRUCTIVE MEASUREMENTS
The meter measures the ratio of red and near infrared transmittance with a sample rate of less than 3 seconds, resulting in measurements that are non-destructive and nearly instantaneous. This facilitates rapid measurement of multiple leaves and monitoring of the same leaves over time.

LINEAR OUTPUT IN ABSOLUTE UNITS
Calibrated to measure chlorophyll concentration in units of μmol of chlorophyll per m². This eliminates problems with relative measurements like SPAD, which is not linearly related to chlorophyll concentration.

STORAGE CAPACITY AND GEO-REFERENCING
Memory allocated to data storage allows for 160,000 logged measurements. A mini USB port allows for direct connection to a computer to download data. An RS-232 port is available for external GPS connection, allowing field data to be geo-referenced. Storage capacity of geo-referenced data is 94,000 measurements.

GRAPHS (see front page)
Chlorophyll meters typically output an index that is non-linearly related to chlorophyll concentration (e.g., CCI or SPAD). The MC-100 outputs an estimate of actual chlorophyll concentration in units of μmols per m² of leaf surface. Thus, changes in the displayed output reflect true changes in chlorophyll concentration. For example, doubling a measured chlorophyll concentration represents an actual doubling in a plant leaf, whereas a doubling of a relative index does not necessarily represent a doubling of actual chlorophyll concentration in the leaf. This concept is illustrated for CCI and SPAD index measurements of rice leaves in the graphs on the front page.