

Greenseeker®

Optical pigment sensor



What can the Greenseeker detect?

Detection of **nutrient deficiencies** or **drought stress** before symptoms can be seen with the naked eye.

How do you use the Greenseeker?

Hold the sensor 60 – 120 cm above crop and pull the trigger while walking slowly through the crop. The longer you pull the trigger, the longer and more accurate the measurement. Take regularly at least **5 scattered measurements** (in one plot) to reach a conclusion in comparison with measurements in optimal conditions.

Scientific background & interpretation of the results

The sensor emits 2 different wavelengths of light and measures the reflection by the crop. Afterwards, the Greenseeker calculates the Normalized Difference Vegetation Index (NDVI), which is a measure for the amount of vegetation or ground cover.

If plants experiences nutrient/drought stress:

- ➔ Number of leaves ↓ or chlorophyll content ↓
- ➔ NDVI ↓

Pros & Cons

- + portable, cheap, fast, non-destructive, easy to use software
- does not distinguish between drought and nutrient deficiency, reports relative index (optimal reference values required for different crops), measuring distance not constant

Price range: € 500 - 1000

Company: Trimble

More information? <https://agriculture.trimble.com/product/greenseeker-system/>