



Pocket PEA

Chlorophyll fluorimeter

What can the Pocket PEA detect?

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

How do you use the Pocket PEA?

Place a **leaf clip 15 minutes before** the real measurement on the leaf to **adjust it to the dark**, preferable in the mid on the youngest fully developed leaf. Open the small hole in the clip to take the measurement, this takes but a **second**. Take regularly at least **5 scattered measurements** (in one plot) to reach a conclusion.

Scientific background & interpretation results

The sensor emits a strong flash of light. The excess of light makes the chlorophyll re-emit a part in the form of chlorophyll fluorescence.

If plant experiences abiotic stress:

- ➔ Photosynthetic apparatus potentially damaged = chlorophyll fluorescence will increase ↑
- ➔ Maximal efficiency of photosystem II (F_v/F_m) will decrease ↓

Pros & Cons

- + relatively cheap, fast, non-destructive, easy to use software
- not very sensitive to small amounts of stress, waiting time of 15 minutes after placing the clip

Price range: € 4000-6000

Company: Hansatech Instruments

More information? <https://www.hansatech-instruments.com/product/pocket-pea/>