

Nitrachek 404

Reflectometer



What can the Nitrachek detect?

Detection of **nitrogen deficiencies** possible, before visible symptoms are present.

How do you use the Nitrachek?

Take a destructive sample of plant, soil or water. Calibrate the Nitrachek with a standard solution. Dip a test strip in the plant sap, soil-water solution or water sample and measure the nitrate content. The analysis takes about 10 minutes. Take at least 5 scattered measurements in a small area and measure each sample 3 times to reach a conclusion after comparison with an optimal situation.

Scientific background and interpretation results

The sensor measures the nitrate content (ppm) based on an optical evaluation of the color scale.

If plant experiences nitrogen stress:

ightarrow Less nitrate will be present in plant or soil = nitrate content decrease \downarrow

Pros & Cons

- + cheap, fast, easy to use, easy to understand
- large variability in measurements, takes time to prepare a sample dilution, some equipment for dilution needed (test strips, standard solution), dilution has expiry date, must be stored and used under precise conditions, calibration between every measurement, test strip has to dry before measurement.

(NIAB WEMR)

Price range:	€ 200 – 300, with an extra cost for consumable
Company:	STEP Systems GmbH
More information?	https://www.stepsystems.de/171-1-Nitrachek.html





