

Analysis of plant pigments with Cobra SMARTsense

Article no: P4100969



Principle

Not only flowers of plants but also their fruits and leaves are dyed due to pigments. In this experiment, the different pigments of flowers and leaves are investigated. This experiment is performed with a colorimeter. This device sends light of a certain wavelength through a solution and measures by how much the intensity has decreased after passing through the solution.

Benefits

- Especially understandable and didactically prepared description of the experiment (reference to everyday life etc.) including protocol questions
- Compact, easily transportable experimental set-up
- Suitable for demo experiments and lab course experiments
- Flexible test setup thanks to wireless data transmission

Tasks

1. Extraction of various plant dyes and measurement of their absorption with a colorimeter
2. Extraction of dyes from different plants

Learning Objectives

- Diversity of plant pigments
- Detection with a colorimeter

Scope of delivery

Cobra SMARTsense Colorimeter - Sensor for measuring colours and turbidity 0 ... 100 % / 0 ... 400 NTU (Bluetooth + USB)	12924-01	1
Macro-cuvettes, PS, 4ml,100 pcs	35663-10	1
Cuvette rack, PE, 16 places	35661-10	1
Mortar w. pestle, 70ml, porcelain	32603-00	1
Ethyl alcohol, absolute 500 ml	30008-50	1
Water, distilled 5 l	31246-81	1
Filter paper,580x580 mm,10 sheets	32976-03	1
Graduated cylinders, Boro, various sizes	36629-00	1
Graduated pipettes, various sizes	36602-00	1
Pipettor	36592-00	1
Beakers, Boro, low form, various sizes	46052-00	1
measureAPP - the free measurement software for all devices and operating systems	14581-61	1