

VARIETY DETERMINATION - For whom?

Knowing the variety is an important quality criterion for all participants - the breeder, the multiplier, the grower, the trader and the consumer:

- The **potato** variety provides information about the grow properties. This is of great significance to the farmer as well as to trading and consumption.
- In case of **cereals**, variety determination allows information about the quality. Especially in wheat, the variety determines the baking quality according to the "Descriptive variety list" of the Bundessortenamt (Federal Plant Variety Office, Germany).



VARIETY DETERMINATION - Which crops?

LUFA Nord-West, Institute for Soil and Environment in Hameln, has over 40 years of experience in the field of variety determination by electrophoresis.



Services for potato and wheat:

Variety identity:

The indicated variety will be analysed.

Variety identification: Unknown varieties are identified by comparison of the samples protein patterns with our extensive reference pattern archive.

Variety purity in potatoes:

It is determined whether a batch of potatoes contains more than 2% of foreign varieties.

Services for wheat:

Variety identity:

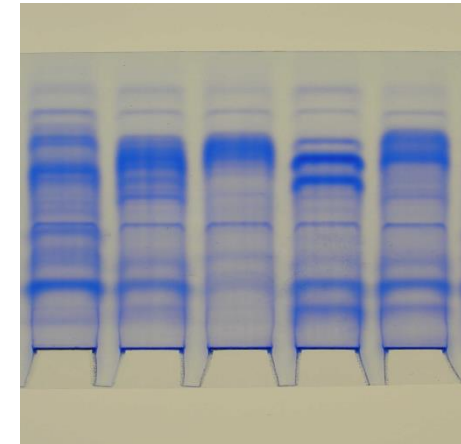
The indicated variety will be analyzed. Reference material is needed.

Electrophoretic determination of other crops can be performed on demand.

For details of the analysis process please download our information sheets for variety diagnostics, which you can find on our website (www.lufa-nord-west.com).

VARIETY DETERMINATION - How?

Each variety has its own distinctive protein pattern, comparable to a "fingerprint". The variety is determined by the **gel electrophoresis methods** of the storage proteins.



Storage protein patterns of different potato varieties

Quality assurance:

This method is accredited to DIN EN ISO/IEC 17025:2018-03.

FURTHER LUFA SERVICES

These analysis services could also be interesting for you:

- **Monitoring of Residues**
by analysing pesticides and many other organic residues
- **Analysis of Nitrate**
for the determination of the nitrate levels in potato tubers
- **Plant analysis**
Detect nutrition deficits or heavy metal contents in plant material

Don't hesitate to ask us for evaluation of your analytical results from a technical point of view.



Accreditation according to
DIN EN ISO/IEC 17025

AT A GLANCE

Your contacts at LUFA Nord-West:

Dr. Philipp Wedi

Manager of the variety determination laboratory and organic chemistry
Tel. +49 (51 51) 98 71 18
E-Mail: philipp.wedi@lufa-nord-west.de

Andrea Lickfett

Laboratory manager variety determination
Tel. +49 (51 51) 98 71 50
E-Mail: andrea.lickfett@lufa-nord-west.de

Finkenborner Weg 1a
31787 Hameln

Status 2024/05

Download of information sheets for variety diagnostics and analysis order from:
www.lufa-nord-west.com

LUFA Nord-West – is a company of LWK Lower Saxony

Security through variety determination!



by protein electrophoresis techniques for

- Potatoes
- Cereals

