

Information on electrophoretic determination of cereal varieties (Status: 05/2024)

The determination of wheat, barley and oat varieties is performed using gel electrophoresis.

The grain proteins are extracted from the individual grain, separated electrophoretically in a polyacrylamide gel and visualized using specific dyes. The protein patterns of the cereal grains are strongly variety specific. 40 individual grains per sample are analysed electrophoretically. By this number of grains it is guaranteed that extraneous are detected if present at over 5 % in a pure sample.

More information material on the topic "Electrophoretic variety determination of potatoes and cereals" can be ordered from LUFA Nord-West, Institute for Soil and Environment.

When sending samples, please note the following:

Variety identity

1. Sending samples:

For determination of variety identity, 200 g of a representative sample are required.

The declared or assumed variety has to be indicated. Reference material needs to be supplied or the lab has to be asked in advance about availability of reference material.

2. Test duration:

The analysis takes circa 15-20 working days.

3. Test report:

Confirmation or non-confirmation of the declared variety