



Information on electrophoretic determination of cereal varieties

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 visualised using specific dyes. The protein patterns of the grains are strongly variety specific. 40 individual grains/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. The detection of an extraneous variety in a pure sample is guaranteed.

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

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

2. Test duration:

The analysis takes at least 3 days

3. Test report:

- a. Confirmation or non-confirmation of the declared variety
- b. Determination of the baking quality (according to „ Beschreibende Sortenliste Getreide, Mais, Öl- und Faserpflanzen, Leguminosen, Rüben, Zwischenfrüchte“; German Bundessortenamt).

Variety identification

In samples of unknown variety or of uncorrect declared variety, the correct variety can be identified as long as it is listed in the „ Describing list of variety of cereals, corn, oil fruits, legumes, root crops“; German Bundessortenamt).

1. Sending samples:

For variety identification, 200g of a representative sample are required

2. Test duration:

The analysis takes 5 - 10 days

3. Test report:

The name of the identified variety is reported