

IDENTIFICATION OF BARLEY VARIETIES FROM THE GRAIN

A 1-DAY REFRESHER TRAINING COURSE

Wednesday 26th April 2017

TIMETABLE

This is a one-day refresher training course for member firms of the MAGB and AIC who have attended previous courses or may have some experience of crop inspecting. We will examine the physical characteristics used to identify barley varieties from their grains and look at the most recent varieties on the AHDB Recommended Lists. This is a practical course designed to enable delegates to identify most varieties in all work situations e.g. intake, grain storage, point-of-sale on the farm and in the field.

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- 10.00 Meet and introductions. Coffee & biscuits. Welcome.
- 10.15 Talk: Characters of the barley grain used for identifying varieties.
- 11.00 Practical study: Examination of the characters of harvested ears of named barley varieties using the varieties newly added to 2017 HGCA Recommended Lists.
- 11.45 Practical study: The effects of threshing - practical examination of threshed grain samples of named varieties.
- 12.30 **LUNCH**
- 13.00 Practical study: The latest additions to the HGCA Recommended Lists of Barley varieties. "Test examinations" of unnamed threshed grain sample.
- 14.00 Talk: New developments in barley breeding and trends in barley growing.
- 14.15 Practical study continued - "Test examinations" of unnamed threshed grain samples.
- 15.15 Tea & biscuits.
- 16.30 Closing remarks. Certificate of Training Achievement. Disperse.

Grain characters will be demonstrated using a range of plant material including barley ears and harvested seed. Course notes will include full descriptive information on all the varieties on the current AHDB Recommended Lists.

Location: Boortmalt Board Room, Bury St Edmunds;

Trainers: Mr Bob Jarman, Cambridge BotanicS Ltd and NIAB

EQUIPMENT

Bringing the right equipment on the day is essential: Delegates will need the following:

- **Essential: A x10 or x20 hand lens (x20 is preferable) available from most good optical/camera shops.** Hand lenses will be available to borrow on the day. Hand Lenses can also be ordered on the internet from the Natural History Bookstore (search under Hand Lenses) or The Loupe Store. Amazon offer an excellent hand lens with integral light for £7.99: the Illuminated Loupe (Led light) 40x-25mm (it says x40 but it is UK x20). The Opticron 18mm x20 lens costs about £25.00. The aim of the course is to teach the characters using x10 to x20 magnification
- **Essential: A *Stanley* type disposable blade/scalpel/tweezers** – available from any DIY store (*Stanley* blades will be available on the day) or a pair of very fine pointed forceps/tweezers.
- **Useful:** a digital microscope with built in LED lights that fits a lap-top's USB port. These can give a magnification of 10-200x and can take digital still photos. They are available through *NIKKAI computers* and sold at Maplin shops. They cost £40-60.

Other useful equipment:

- a mounted "Borrowdale" needle

Binocular microscopes and a digital microscope will be available on the course for detailed teaching and examination of specimens and characters. Delegates are welcome to bring their own portable microscopes. Compact sporting or opera type binoculars can be used effectively as a hand lens by looking "close-up" through the objective lens not the eyepiece (i.e. the wrong way round!).

PRE-COURSE PREPARATION

No pre-course preparation is needed. However, 10 minutes looking up the structure of the flowering parts of grasses on the internet or browsing through the introduction to a plant identification field guide would be very useful.