## SEED GERMINATION AND VIGOUR TESTING



Analysis of barley germination

## Germination testing

Determines the % of healthy, well developed seedlings when grown under laboratory conditions – providing a reliable estimate of seeds with the potential to develop into plants under favourable field conditions. The length of test varies with species with cereals typically taking 7 days and grasses taking upto 28 days.

Seed analysts are trained to recognise seedling abnormalities which may cause low germination or field success rates, such as disease, drying, mechanical and sprouting damage.





## Vigour testing – oilseed rape

Tetrazolium is a colourless chemical that reacts with living cells within tissues, staining them red – dead tissue remains unstained. For oilseed rape the seed coat is carefully removed leaving an intact embryo. The embryo is placed in a tetrazolium solution overnight to develop the colour.

The vigour test assesses the degree of staining and gives an estimation of seedling vigour. Results are reported as % viable, with subcategories for % high, medium and low vigour seeds.

High and medium vigour seeds are expected to perform well in the field, whereas low vigour seeds are likely to produce less vigorous plants, especially if field conditions are unfavourable.



Niab Analytical Services is one of the longest established services at Niab, providing commercial and statutory analytical services across a range of crops. These include potato virus testing, grain quality tests, variety identification, seed health, germination, plant disease identification and DNA fingerprinting.

Call **01223 342243** or email **labtest@niab.com** for order forms plus free postage-paid envelopes and sample bags.

Visit **niab.com** for a full guide to tests and price list.