

# SEED GERMINATION AND VIGOUR TESTING



*Analysis of barley germination*

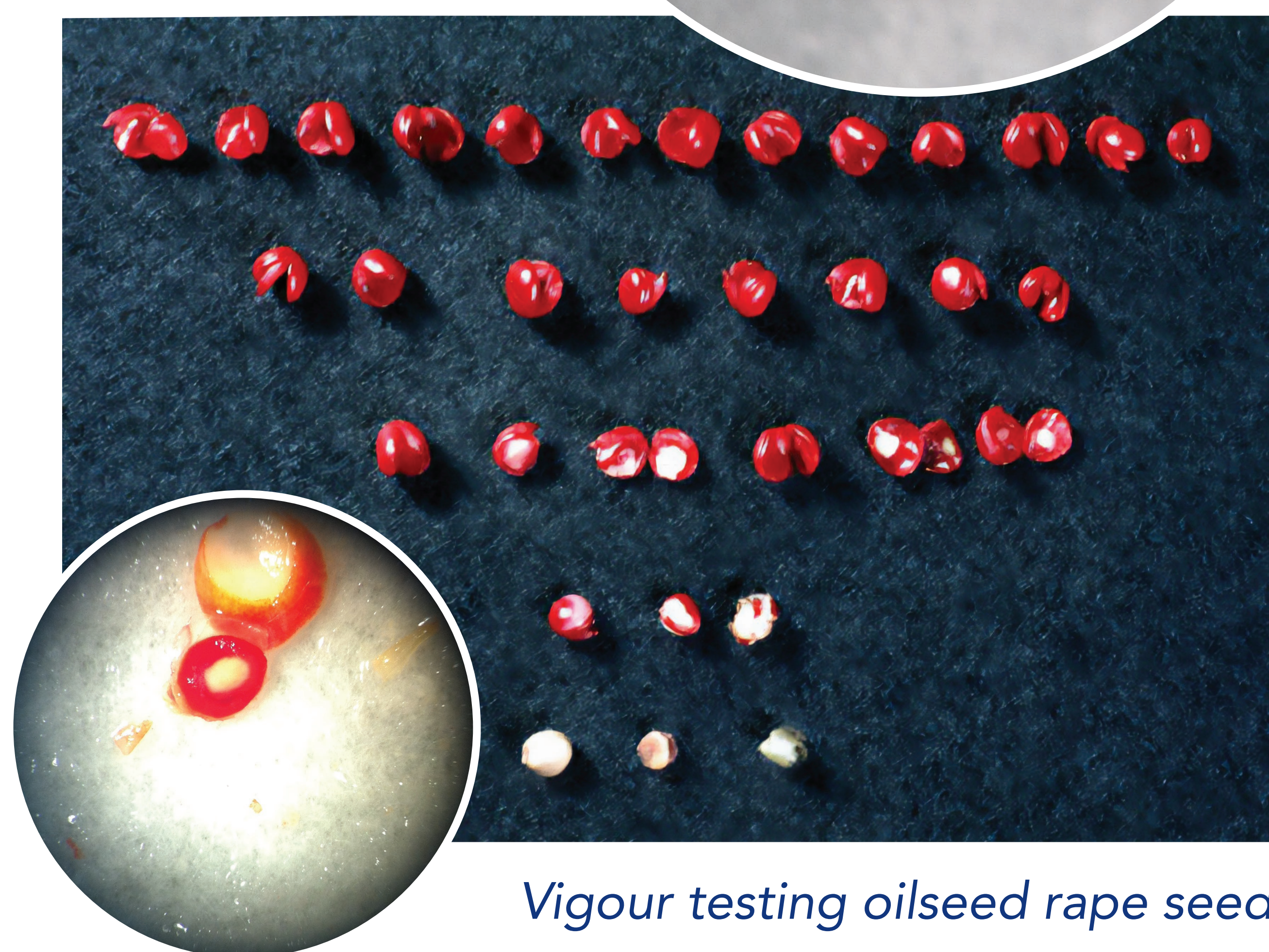
## Germination testing

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.



*Faba bean seedlings*



*Vigour testing oilseed rape seed*

## 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.