

Pictorial guide to selecting Barley *c.v.* Golden Promise tillers at the correct developmental stage

Good quality donor material is essential for efficient, reproducible transformation. We have found embryos in the range of 1.5 to 2 mm in diameter, with a white or slightly creamy colouration, to be most suitable. The following guidelines will help select tillers which contain embryos at the correct developmental stage.

Spread of awns

Awns should be beginning to fan out from the tiller.

Grain fill

Grains must be filled – they should appear plump and rounded.

Testa pigmentation

Red (anthocyanin) pigmentation should be visible in discrete lines running the length of the otherwise green seed coat – this can be difficult to spot if red/ green colour blind.

Awn pigmentation

The tip of the awn should be yellowing, if this extends the full length, it is likely that the embryo is too mature and will be starchy in nature.

Notes

- Expect some variation amongst plants grown in different locations and by different people.
- These guidelines are cultivar specific.

