

# Newton Winter Barley Description

## **Background**

Newton barley was bred by SECOBRA Recherches in France and has been released for commercial use in Australia by Seednet.

#### Key Features

Newton is a slow growing winter type variety that requires winter vernalisation (cold period) to develop from vegetative (tillering) to reproductive (heading) growth.

Newton is a feed type barley with 2-row heads and white aleurone grain.

#### Morphological Description

In the vegetative phase Newton has very prostrate early growth, before elongating to produce a tall awned head / spike.

The auricles and awns of Newton spikes often have strong anthocyanin (purple colour) expression that persists through to the seed coat of mature grain.

Harvest maturity is at a similar time to mid-season winter wheat varieties, which is considerably later than spring type barley.

### Early developing tillers

During multiplication of Newton barley seed, a low frequency of early maturing tillers has been observed.

These tillers can be present at a frequency of about 2 plants per 100m2 and they initially elongate and develop quicker than other plants but the rest of the crop catches up about a week later.

These early developing plants are part of Newton barley, not off-types or contaminants.



Newton barley seed crop in south-west Victoria in September 2023 showing early developing tillers.

Main Newton plants left, early tiller right

