Drought tolerance of six barley lines in a greenhouse trial

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Background

Dry springs are becoming more common in the region. We tested six barley lines from the breeding programme for how well they keep growing when water is withheld for three weeks at the tillering stage.

Synthetic example for the course Introduction to agentic AI. Not a real report.

Method

Each line was grown in 20 pots: 10 watered normally (control) and 10 with no water for three weeks. After the drought period all pots were watered normally again. Above-ground biomass was harvested and dried at the end of the trial. For each line we report the biomass under drought as a percentage of the biomass of its own control pots.

The greenhouse kept a day temperature of 20 degrees and 16 hours of light. One pot of line HB-09 was lost to a fungal infection and was left out.

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Results

Line	Biomass under drought (% of control)
HB-03	61
HB-09	55
HB-12	68
HB-17	82
HB-21	64
HB-30	59

Line HB-17 kept clearly more of its biomass than the other five lines, which ranged from 55% to 68%. We will test HB-17 in the field next season.

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