The 2023 season at Hart

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The Mid-North region had a dry start leading into the 2023 growing season. Below average rainfall across summer months (Figure 1) meant that stored soil moisture was low at Hart and surrounding regions (Figure 2).

Significant rainfall towards the end of April saw the start of seeding for many growers with 20 mm of rainfall received over a four-day period. Seeding at Hart commenced with canola and long coleoptile wheat trials sown on April 21.

Follow up rainfall was marginal until late May, in some cases resulting in delayed and patchy emergence of many early sown crops. As a result, most of Hart's trial program was dry sown or delayed.

Above average rainfall (68 mm) was received in June causing logistical difficulty towards the end of sowing, however all trials were sown by June 20. By this time, Hart had received 100 mm of growing season rainfall (GSR), and early sown crops were developing rapidly.

During the 2023 growing season we were met with below average rainfall for all months other than June. Despite an early break, a dry finish to the season reduced the yield potential of late sown crops and harvest commenced early across the region. Harvest commenced on October 23 with Barley and concluded with our off-site trials on November 22.

Hart received 236 mm of growing season rainfall (GSR average 300 mm), equivalent to a Decile 4 (40th percentile). Annual rainfall totalled 355 mm, below Hart's 400 mm average.

Across the site, observations showed that the early, dry sown crops outperformed later sown crops despite establishing on marginal moisture. An extended season length and access to growing season rainfall early in the year played a critical role in yield potential, with later sown crops affected by limited rainfall in the second half of the growing season.

Photo: The Hart field site just prior to the Hart Field Day (September, 2023).

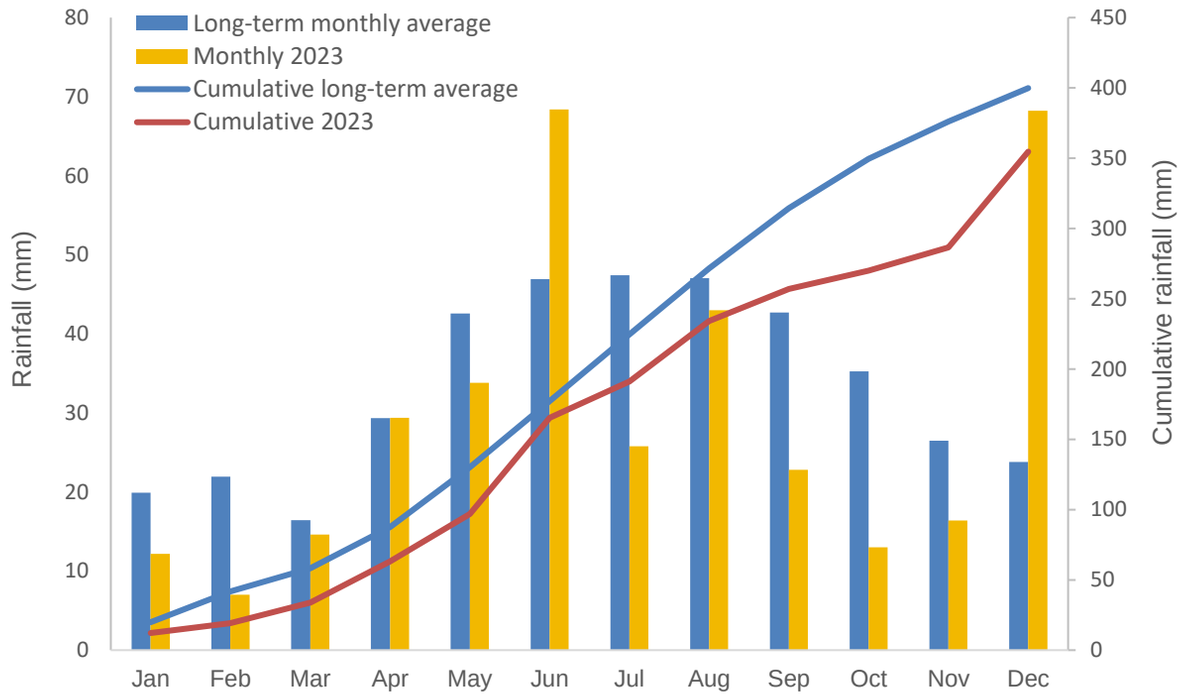

Figure 1. Hart rainfall graph for the 2023 season and long-term average. Lines are displayed to present cumulative rainfall for long-term average (blue) and 2023 (orange).

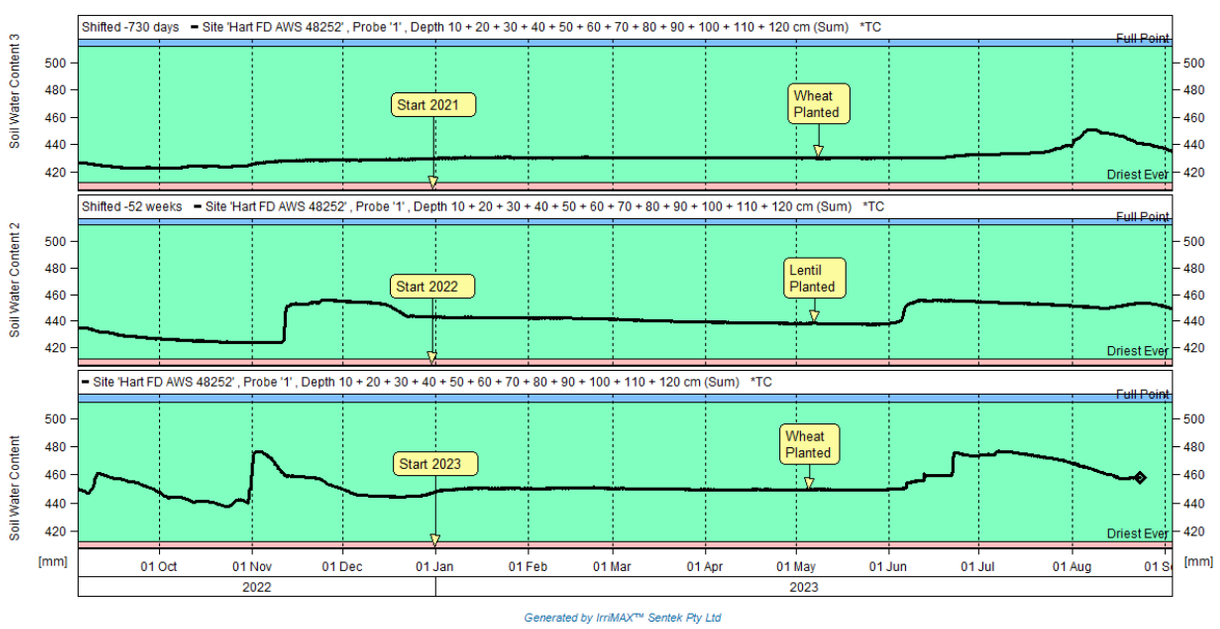

Figure 2. Soil moisture probe summed comparison (80 cm) for 2021 (top), 2022 (middle) and 2023 (bottom) at the Hart field site. Hart soil moisture data is free to view thanks to Agbyte. https://www.hartfieldsite.org.au/pages/live-weather/soil-moisture-probe.php

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