Catapult



- Mid-slow maturity, with a very flexible sowing window
- Safer option for sowing dry when germination date is unknown
- Wide adaptation, will fit the front end of most growers' cropping programs
- Good pre-harvest sprouting tolerance, better than Rockstar
- Excellent choice for wheaton-wheat situations
- Very good physical grain characteristics with an AH quality classification

Breeder's comments

Sometimes in breeding, you get unexpected but very exciting results. Out of a standard Mace[®] cross, Catapult[®] (tested as RAC2484) has emerged as a unique combination of features that we believe will help growers increase productivity, while providing flexibility that has not been available previously.

Growers are continually looking for earlier sowing options that don't compromise on yield, to complement high yielding main season varieties like Scepter[®] so that an increase in over-all farm yield is achieved. Catapult[®] may be viewed as a 'longer season' Scepter[®], allowing growers to achieve Scepter[®]-like yields when sown in late April/early May. When sown around ANZAC day, Catapult[®] has consistently out-yielded Magenta[®] and Cutlass[®]. The high yield potential relative to other varieties has been recorded across a large range of growing conditions and environments, highlighting Catapult's[®] very wide suitability for most cropping programs.

These days, much of the wheat crop is planted dry. In many instances germination of dry sown crops may be delayed considerably if the arrival of the break in the season is unknown, and therefore variety choice for these situations is very important. A variety like Catapult[®] is a great choice for dry sowing because it maintains its high yield over a wide range of germination dates, including well into May where it remains competitive with the benchmark variety Scepter[®].

Catapult $^{\phi}$ is also one of the best choices for use in wheat-on-wheat rotations, with very good yellow spot resistance.

Catapult[®] is very closely related to Scepter[®] and shares its physical grain quality characteristics of high test weight, low screenings and AH quality classification.

Seed availability

Commercial quantities of Catapult[®] may be available through AGT Affiliates, or your local retailer. Please consult the AGT website for AGT Affiliate contact details. Catapult[®] is able to be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing[™] initiative.

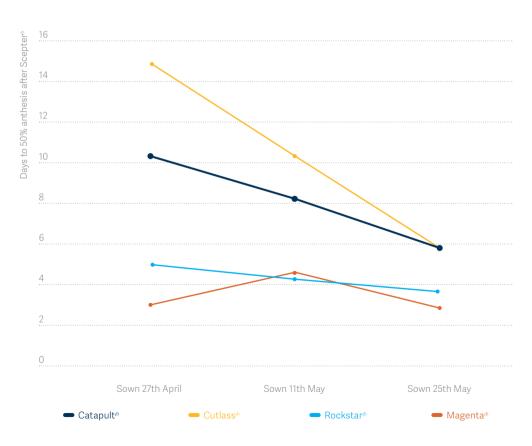
PBR and EPR

Catapult[®] is protected by Plant Breeders Rights (PBR) (denoted by the [®] symbol) and all production (except seed saved for planting) is liable to an End Point Royalty (EPR), which funds future plant breeding. Catapult[®] growers will be subject to a Growers License Agreement that acknowledges that an EPR of \$3.25/tonne + GST has to be paid on all production other than seed saved for planting.

Maturity & sowing window

Catapult[®] offers a wide sowing window (Figure 1). When sown towards the end of April, Catapult[®] has taken longer to reach flowering (anthesis) relative to Scepter[®], Rockstar[®], and Magenta[®], but quickens relative to Scepter[®] when sown into May. We believe that you should be able to plant Catapult[®] a week earlier than you would plant Scepter[®], with this planting window extending well into the back end of May, offering great flexibility to growers during the peak sowing period. Catapult[®], when sown in its primary sowing window in 2020, was on average five days slower than Rockstar[®], and ten days slower than main season variety Scepter[®].

Figure 1 Flowering date of Catapult[®] relative to Scepter[®]



Source DPIRD crop phenology project (average of three 2020 sites – Mullewa, Merredin, Katanning). For local predictions of flowering date, refer to DPIRD online prediction tool Flower Power www.agric.wa.gov.au/frost/flower-power

Grain yield

NVT (Figure 2) and AGT (Figure 3) early sown trials have shown that Catapult[®] achieved high yields when sown in late April/early May.

Figure 2 Grain yield of Catapult[®] and comparator varieties – NVT early sown data

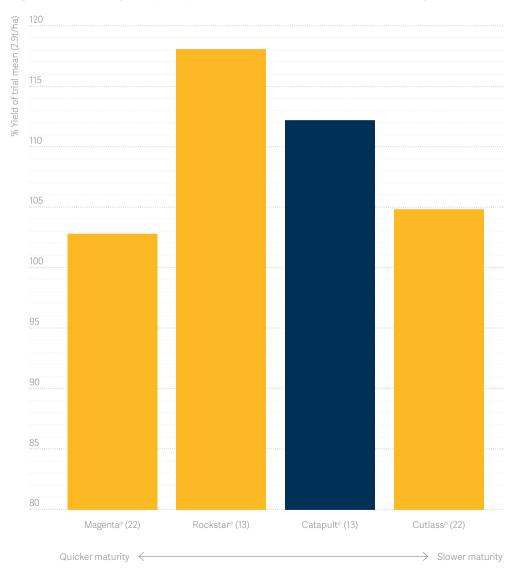
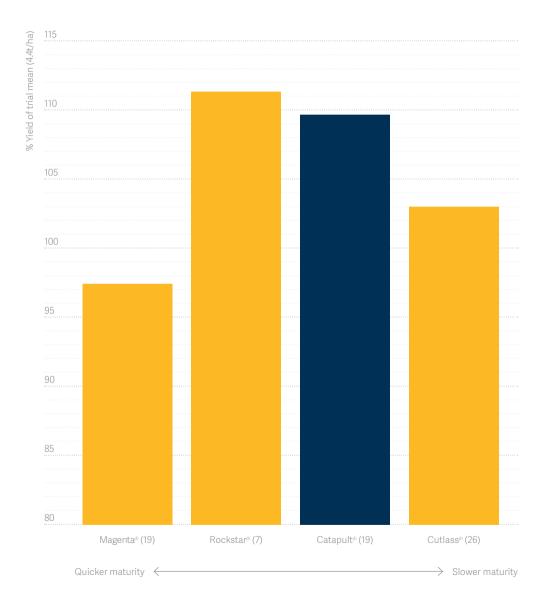


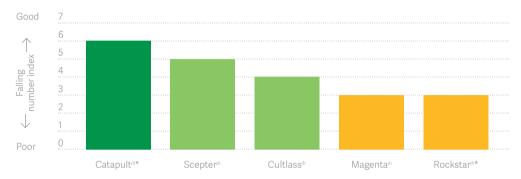
Figure 3 Grain yield of Catapult[®] and comparator varieties – AGT early sown data



Pre-harvest sprouting

Pre-harvest sprouting tolerance of wheat varieties is particularly important for those environments where there is a risk of rain at harvest. Catapult[®] has shown excellent pre-harvest sprouting tolerance, with a falling number index rating slightly better than that of Scepter[®], and much better than Rockstar[®] and Magenta[®] (Figure 4).

Figure 4 Falling Number Index as an indication of pre-harvest sprouting tolerance



Source

DPIRD falling number index ratings 2021 Western Australian Crop Sowing Guide

* Provisional rating

Falling number index is a rating on a scale of 1-9 that is designed to rate a variety's ability to maintain falling number after a rainfall event. The higher the falling number index rating, the more likely a variety is to maintain falling number

Table 1 Variety comparisons

| | Catapult [®] | Cutlass [®] | Magenta⊕ | Rockstar⊕ |
|------------------------|-----------------------|----------------------|----------|-----------|
| Quality Classification | АН | APW(N) | APW | AH |
| Stem Rust | MR | R | RMR | MR |
| Stripe Rust | RMR | RMR | MSS | RMR |
| _eaf Rust | S | RMR | RMR | S |
| /ellow Spot | MRMS | MSS | MR | MRMS |
| Powdery Mildew | S | S | MRMS | MSS |
| Nodorum Blotch | MS* | MRMS | MRMS | MRMS* |
| Black Point | MSS | MS | MSS | MSS |

R Resistant

MR Moderately Resistant

MS Moderately Susceptible

S Susceptible

VS Very Susceptible

* Provisional rating

Source / NVT consensus ratings 2020 and AGT

End Point Royalty Office

agtbreeding.com.au



Disclaimer / The information contained in this brochure is based on knowledge and understanding at the time of writing. Growers should be aware of the need to regularly consult with their advisors on local conditions and currency of information.