

KIT 1.1

Minimise the impact of high temperature at flowering and grain fill on grain yield and stability.



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| Impact | Growers manage their farm businesses to minimise the impact of flowering heat stress on yield. |
| Summary | <ul style="list-style-type: none">• Growers understand how much the impact of heat stress on yield is costing their businesses.• Growers understand their options to manage heat stress.• Varieties with increased tolerance to heat stress. |

SCOPE

INVESTMENT OUTCOMES

Improved pre-season planning for heat stress

Growers make optimal crop choice and sowing decisions in heat affected cropping regions.



- 1.1.1 Growers have access to varieties with improved yield under heat stress.
- 1.1.2 Growers use accurate information on the pattern and severity of heat stress in their region to guide variety selection and sowing decisions.
- 1.1.3 The grains industry has access to accurate information about the relationships between the severity and timing of heat stress and the impact on yields of major grain crops.
- 1.1.4 Plant breeders have tools to effectively improve the heat tolerance of major grain crops.

Informed in-season management decisions

Growers optimize canopy management and type and timing of crop inputs to minimize the impact of heat stress.



- 1.1.5 The grains industry has improved in-season forecasting tools to better predict heat stress and guide risk management decisions.
- 1.1.6 Growers have improved knowledge of how different crop input and canopy management practices influence yield under heat stress.
- 1.1.7 Growers have access to novel and innovative in-season heat mitigation products.

Effective post-heat event responses

Growers make informed decisions regarding extracting value from heat affected crops.



- 1.1.8 Growers have access to tools to predict, monitor and quantify yield loss associated with heat stress.
- 1.1.9 Growers have knowledge of the economic value of different salvage options which can be applied to heat-affected crops.