Yield loss to Fusarium crown rot: Is there a better choice among wheat and barley varieties?

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• Crown rot (*Fusarium pseudograminearum*) constraint on cereal production in Australia; $97$ M/year in wheat & barley losses.

• Honey brown discolouration of crowns and white heads, pronounced with dry finishes

• GRDC project looking at management options including yield of current and new varieties under crown rot
Wheat variety responses to crown rot

• Trial replicated at Merredin
• Repeated 2015 and 2016
• Understand the crown rot risk, make appropriate variety selections
• Variety selection offers ~10% yield improvement

• Multi-targeted management approach:
  • Break-crops from cereals
  • Control grass weeds
  • New registered fungicide
  • Wheat and barley varieties
  • Sowing early
  • Sowing between rows
GRDC Grains Research & Development Corporation

5-year project DAN00175 – National crown rot epidemiology & management program