



NORTHERN

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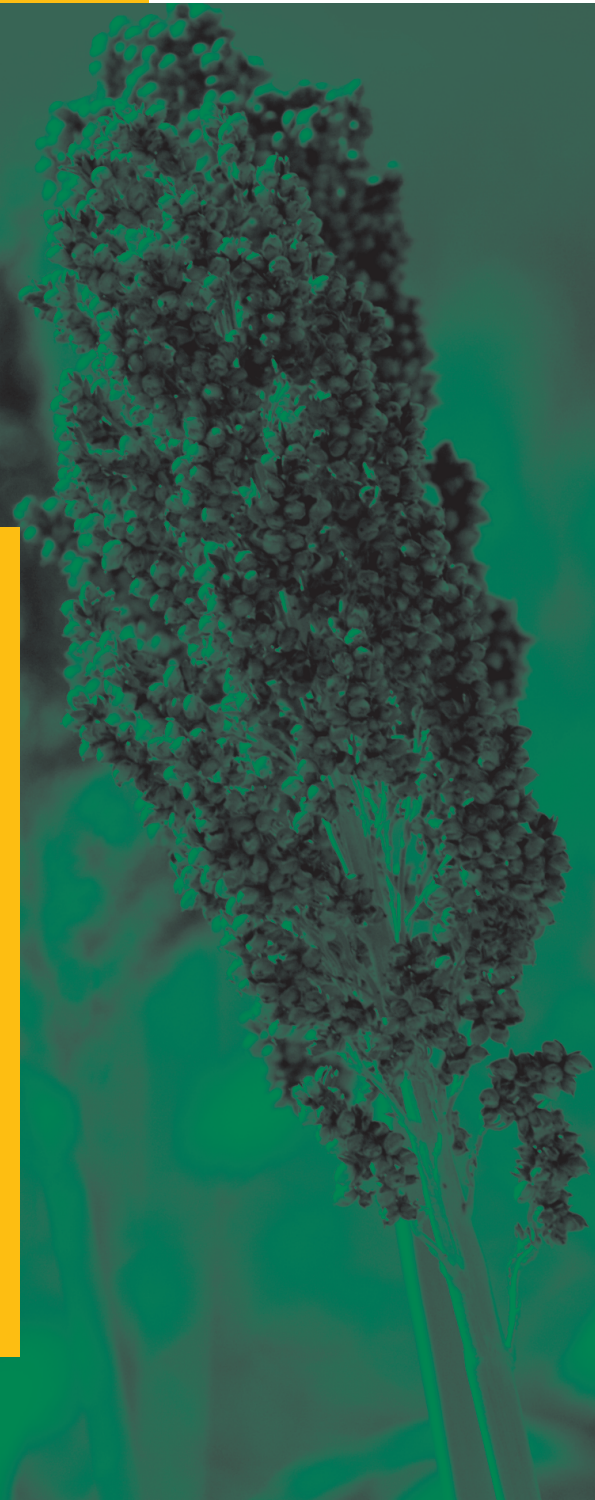
GRAINS RESEARCH
& DEVELOPMENT
CORPORATION

SORGHUM

SECTION 12

HARVEST

HEADER SETTINGS | ERGOT IN THE CROP?



Harvest

Harvesting must be done efficiently and rapidly while the crop is at its peak (Figure 1). The aim of the harvest operation is to deliver the grain in prime condition to its storage.

Timeliness of harvest is a crucial factor in ensuring maximum profit from the crop. The harvesting task requires planning, because all equipment must be set up correctly and operated efficiently.¹

The crop requires a warm, summer growing period of 4–5 months. As a guide, medium to medium-quick varieties will flower in 60–65 days when planted in October, and 50–55 days when planted in late December.

If drying facilities are available, harvesting can commence at 25% grain moisture, followed by drying to 13–14% moisture. Grain moisture should be 13.5% delivered into storage. For long-term storage, aim for moisture content of 12%. Heads harvested at various stages of maturity can complicate harvesting and storage.²



Figure 1: Sorghum harvest under way.

The availability of good on-farm storage can speed up harvest and allow attention to the post-harvest marketing of grain. Both aeration and drying facilities may also assist in progressing harvest. It is most important that storage facilities are clean and free from grain insect pests.

Issues of trafficability should also be addressed, particularly on the heavier clay soils. Serious soil compaction can occur when soils are too wet. This can result in long-term soil damage reducing the performance of following crops.³

¹ NSW DPI (2005) Grain sorghum. Agfact P3.3.5. NSW Department of Primary Industries, <http://www.dpi.nsw.gov.au/agriculture/broadacre/summer-crops/sorghum/sorghum/grain-sorghum>

² QDAF (2011) Sorghum—nutrition, irrigation and harvest issues. Department of Agriculture, Fisheries and Forestry Queensland, <http://www.daff.qld.gov.au/plants/field-crops-and-pastures/broadacre-field-crops/sorghum/nutrition-irrigation-and-harvest>

³ N Moore, L Serafin, L Jenkins (2014) Grain sorghum. Summer crop production guide 2014, pp. 5–16, NSW Department of Primary Industries, http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/303485/Summer-crop-production-guide-2014.pdf

12.1 Header settings

Drum speed should be 750–900 rpm for conventional header and 550–650 rpm for rotary header:

- new threshing bars, use slower drum speed
- old threshing bars, use standard speed
- use sorghum extension fingers (Figure 2)



Figure 2: Sorghum harvest.

12.2 Ergot in the crop?

If ergot is present at harvest, prepare for delays due to clogging of machinery by honeydew on the heads (Figure 3). Be prepared to sacrifice some lighter grain in order to send as much ergot as possible out the back of the header—ergots are lighter than grain. Ergots are toxic to livestock; honeydew is not. Queensland and NSW grain receival depots allow for 0.3% ergot content by weight.

To estimate levels of ergot contamination a grain sample, spread half a cupful (~100 g) of grain on to a light-coloured background and separate the different colours and shapes. After removing sound grains, >20 ergots may constitute a problem.⁴

⁴ QDAF (2011) Sorghum—nutrition, irrigation and harvest issues. Department of Agriculture, Fisheries and Forestry Queensland, <http://www.daff.qld.gov.au/plants/field-crops-and-pastures/broadacre-field-crops/sorghum/nutrition-irrigation-and-harvest>

SECTION 12 SORGHUM

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FEEDBACK

MORE INFORMATION

http://www.grdc.com.au/uploads/documents/2010ASG_CSummaryPapersPDF/Griffiths_SorghumSilage_summary.pdf

<http://www.grdc.com.au/Media-Centre/GRDC-Podcasts/Northern-Weekly-Update/2014/01/024>

http://www.graintrade.org.au/sites/default/files/file/Commodity%20Standards/2013_2014/Section%2002%20-%20Sorghum%20Standards%20201314%20Final.pdf

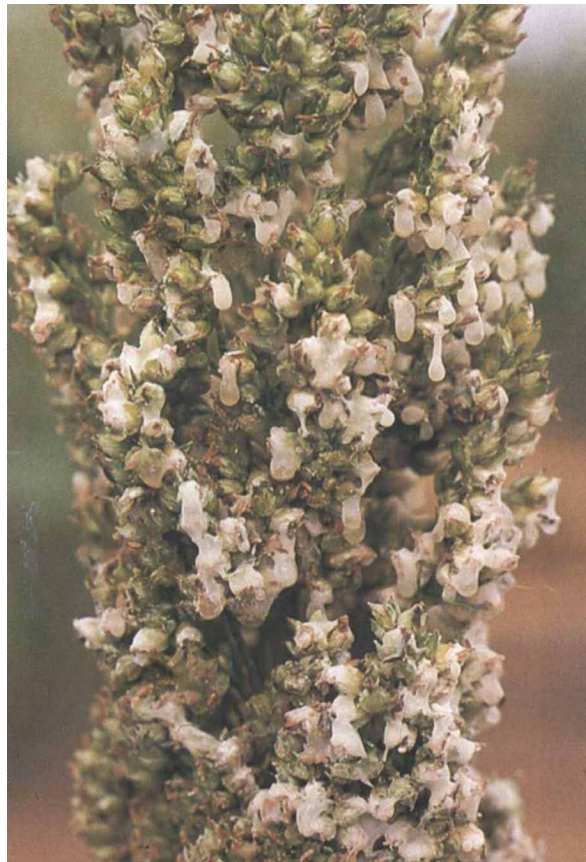


Figure 3: *Sorghum ergot*—honeydew on the sorghum heads.

The following laboratories may accept grain for ergot contamination estimation (costs may vary per sample):

SGS—Agritech Laboratory Services
214 McDougall Street
Toowoomba, Qld
Ph: +61 7 4633 0599
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Queensland Seed Testing Laboratory
c/- University of Queensland, Gatton
Ph: +61 7 5460 1487
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Seed Testing Laboratories of Australia Pty Ltd
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Ph: +61 7 3849 2744
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