



Feed Shortage 2018

Millet and sorghum

Summer cropping options

Millet and sorghum accumulate dry matter rapidly in warm conditions. They perform better than most other annual summer crops when soil moisture is limited, making them a good option when water is scarce.

Millet and sorghum have a high tolerance to water stress and low risk of insect attack and as a result produce more feed than most broad leaf summer crop options. They particularly stand out in their adaptation to water stress.

Millet and sorghum are generally direct grazed through the summer months, although both can be conserved. Choose the appropriate variety for your feeding options. Millet can be sown with complimentary crops.

Performance

With no limitations of water and nutrients, sorghum can produce 17–20 t DM/ha and millet 7–14 t DM/ha. However, under dryland conditions yields of millet and sorghum can be extremely variable and on commercial farms in southern Victoria these potential yields are rarely achieved. Millet and sorghum are both lower in crude protein (6–9%) than other summer crop options and higher in neutral detergent fibre (NDF), which will affect dry matter intake.

Millet and sorghum have poor nutritive value for the summer diet of lactating cows. The high fibre content does not improve the normally low nutritive value of summer pastures. However this year, with low fodder supplies, millet and sorghum may be able to supply high yields of forage where other crops will not.

Agronomy

Millet and sorghum are easy to establish but require a high temperature to germinate (14 to 16°C). This means they often cannot be sown until late spring to early summer. In some years in southern Victoria, cool summer conditions can restrict the growth of these crops.

Millet and sorghum are both efficient nitrogen users, having a higher N use efficiency (kg DM/kg N) than most broad-leaf summer forage crops.

Key messages

- ✓ Millet and sorghum produce high levels of dry matter
- ✓ They have high tolerance to water stress
- ✓ Lower nutritive value (ME and CP) than other summer cropping options
- ✓ Varieties can be direct grazed or conserved

In paddocks with high infestation of problematic broad-leaf weeds, using millet and sorghum ensures that selective sprays can be used as many times as necessary to secure their control. On the other hand, in paddocks where grasses such as couch or barley grass are a problem and their elimination is crucial before sowing new pasture, there are no selective herbicides to effectively control these in millet and sorghum.

If pests are a problem, millet and sorghum can be favourable as they have minimal pest and disease threats compared to sown brassicas.

Management

Stock should be gradually introduced to new forage, and never with an empty stomach. Best management of millet and sorghum requires short grazing period of 1–2 weeks and longer recovery period of 4–6 weeks is recommended.

Sorghum especially has the risk of prussic acid poisoning of stock if grazed at certain stages of growth. Speak to your nutrition advisor or agronomist to get further information.

Avoid potential stock health problems by carrying out routine vaccinations, drenches, etc. Supply ample clean drinking water, salt and sulphur blocks when grazing sorghum.

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