

SUMMER FORAGE CROP OPTIONS

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This Land Fact provides options to landholders considering planting summer forage crops. These can be grown to provide a bulk of quality feed to reduce the pressure on recovering perennial pastures, assist in controlling weeds and preparing a seedbed for planting pastures the following autumn, or for hay and silage.

Summer forages can produce large amounts of feed from a smaller area. Options available include forage millet, forage sorghum, pennisetum, cowpea, lablab and brassicas.

Soil temperature requirements

Different forage species vary in their minimum required soil temperature at planting. Millet requires 14°C or greater, forage sorghum 16°C, forage pennisetum 18°C, and cow pea and lablab require 20°C.

It is important that you measure the soil temperature where you intend to plant, using a soil thermometer. The different species should be planted when the soil temperature at 8am at the intended seeding depth is greater than the minimum required for each species. The soil temperature should also be on a rising trend and the risk of frost has passed.

Planting into cold soil reduces germination, slows emergence and increases susceptibility to disease. Forage brassicas can be planted into colder soils but they will take longer to establish and to first graze compared to when planted into warmer soils.

Millet

Millet is the first summer crop that can be sown in spring. It can be used when soil moisture or fertility is too low for forage sorghum. It is not as productive as forage sorghum types but produces better quality feed.

Millet should be grazed when 25-30cm high (5-6 weeks after sowing) and 10cm residue should be left in the paddock for strong regrowth. Millet is short lived with usually only two grazings possible as it runs to

head when hot and dry, usually by January. This problem is less likely to occur at higher altitude cooler tablelands locations.

Legumes

The legume species, cowpea and lablab, can provide high quality forage in late summer/autumn when feed quality can be particularly important. Lablab performs better in heavier soils while cowpeas are better suited to lighter soils. Lablab is later maturing and therefore gives better late autumn feed.

Heavy, prolonged grazing of cowpeas and lablab should be avoided. Remove stock as soon as the leafy portion of the plant has been eaten. Do not cut cowpea or lablab if recovery is required as grazing or cutting below 15cm will kill most plants.

Lablab



Forage Sorghum

Forage sorghum varieties are the most productive and fast growing of the summer forages when provided with sufficient nutrition. These should be cut or grazed between 60-120cm high to maintain best quality (7-12 weeks after sowing depending on the variety). The Sudan grass x varieties have quicker initial growth, have finer stems but reduced total yield.

Forage sorghum can present a risk of prussic acid poisoning. Prussic acid is not normally present in plants, but it can accumulate in forage sorghum and

Sudan grass types when young or moisture stressed and when shorter than 0.5m, or after rain when stunted plants and grazed plants begin to grow. Prussic acid is a potent, rapidly acting poison. Feed samples can be sent away and tested for prussic acid levels.

Providing sulphur and salt blocks to animals grazing sorghum will compensate for low sulphur and salt content, will improve feed use and help reduce prussic acid poisoning. Management of forage sorghum will affect growth and feed quality more than variety selection. Forage sorghums are not recommended for horses.

Forage Brassicas

Forage brassicas for summer production are best planted in early spring. Late sowings are highly dependent on summer rain and are more prone to aphid attack. Brassicas are generally more suited to higher altitude cooler tablelands locations. Forage brassicas can provide high quality feed through to next spring. Traditionally turnips and kales are sown later on summer rain to produce late autumn/winter feed.

Forage brassicas



Forage Pennisetum

Forage pennisetum, otherwise known as Pearl millet can provide useful summer feed through to autumn as it will not flower until April.

Forage pennisetum requires warm soil and good moisture before sowing. It will not tolerate waterlogging and prefers well drained light soil. It should be grazed when it is 30-60cm high.

Management considerations

Consideration should also be given to how the forage crops will be grazed for maximum benefit. The crops should be grazed while in a vegetative stage before they become too advanced and less palatable. It is a good idea to plant a few smaller paddocks, or use subdivisional fencing to allow a relatively short grazing period followed by a longer rest period allowing recovery to optimum growth stage.

Depending on the variety, summer forages may be used as a carryover feed into autumn while new pastures or winter forage crops are establishing.

When crops are being cut for hay or silage they need to be cut at the recommended growth stage for each crop to achieve the best compromise between fodder quality and yield.

All growing plants present a risk of nitrate poisoning. The greatest risk is when hungry stock are moved onto forage grass types or brassicas where high rates of nitrogen fertiliser have been applied, high levels of nutrient has been taken up by the plants and plant growth is slowed by cool or overcast weather.

It is important not to overlook all the usual agronomic considerations when considering planting forage crops such as weed pressure, soil health, plant nutrition requirements and the long term plan and impact on the paddock.

Ensure all logistical considerations such as access to seed, fertiliser and planting machinery is in order. The demand for forage seed is likely to be higher this season as producers are chasing quick feed and may want to let their perennial pastures recover.

More information

If you would like to discuss your particular circumstances you can contact the Northern Tablelands Local Land Services agronomists, Glen Uebergang on 0429 217 066, or Georgie Oakes on 0429 310 264.

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