



SHIROHIE MILLET GROWING GUIDE



Shirohie millet is a fast growing, high yielding, leafy plant for either grazing, hay or silage. Millet provides quick, high quality feed compared with forage sorghum although total yield and drought tolerance are lower. Millet is a safe forage as it does not contain prussic acid (HCN). Shirohie millet is the fastest growing of the forage sorghum/ millet group, providing quick grazing. Compared to forage sorghum, Shirohie millet can be planted at a lower soil temperature. Regrowth of millet following grazing is very good if soil moisture and nitrogen levels are sufficient.

Shirohie millet is a versatile forage crop providing forage for grazing and hay/silage production with the option of harvesting seed for the birdseed market. If growing Shirohie for hay or silage only, another strategy is to include a legume such as soybeans.



Millet crop in head (left)
and harvested grain (right)



Sowing:

Don't sow Shirohie until **soil temperature stabilises at 14 °C or above** – this can be measured on site with a normal thermometer placed at the sowing depth of 2-4 cm and checked at 8:00am for at least 4 days. Sowing at optimal soil temperatures will produce the quickest possible spring feed. It is best to be sure that soil temperature is above the minimum required as we have found that planting too early can result in slow establishment leading to weed competition. Millet does not tolerate frost, so wait until the risk of frost is over – in Glen Innes, this is often mid October or after depending on location.

Recommended sowing rates vary according to the situation – as a guide, 12 kg/ha for lighter/poorer soils in an average season up to 20-25 kg/ha for heavier, more fertile soils or for silage/hay production (higher plant density leads to thinner stalks). These rates are suggested (NSW DPI) when sowing seed of high quality (>95% germination) into a **fertile, fine and moist seedbed with even seed placement at a depth of approximately 2-4 cm** – adjust seeding rates upward where conditions are less ideal. In our experience, germination on drying black soil can be improved by sowing heavier and at the deeper level so that seed/soil moisture contact is increased – rolling may also assist in this. Weed control is very important to reduce competition as the crop germinates – Glyphosate can be used as a knockdown herbicide and 2,4-D amine after emergence (refer to chemical labels).

A major cause of unsatisfactory forage crop performance is poor plant nutrition. Nitrogen deficiency is a common problem on many soils. Both forage sorghum and millet are very heavy users of nitrogen especially. There must also be an adequate supply of phosphorus, sulphur, potassium and other essential nutrients. From our experience, quantity of feed can be greatly enhanced by adequate fertiliser applied at planting - subsequent topdressing with urea may also be advisable. Please discuss your particular situation with an agronomist. In our experience, fertiliser application may seem an expensive outlay but with sufficient moisture, will significantly improve returns.

Grazing Management:

Shirohie millet should not be grazed until plants are well anchored, 20-30 cm plant height as a rule of thumb. Under ideal conditions, this may be as soon as 6 weeks. Millet should be grazed frequently to prevent it from running to head, because feed value and palatability falls as it matures. Shirohie millet can be planted earlier and grazed earlier than forage sorghum and is a safer forage crop for sheep and cattle (does not contain prussic acid and does not require supplementation with sulphur or salt blocks).

Birdseed Market:

Harvested millet may be marketed for birdseed/seed. This is a very volatile market with wide fluctuations in price from year to year and within the season. The market is limited in volume but good quality seed (weed free) will normally attract good demand with similar returns to other summer crops. Yields of up to 2.5 t/ha are not uncommon with off-header price usually ranging from \$400/t to \$800/t depending on supply and demand. Pre-planting weed control and post-planting application of broadleaf herbicide (if necessary) are advised to achieve a quality product and a good return. Weeds such as bladder ketmia can make the seed very difficult to market. We have successfully grown and sold Shirohie for 30 years – anyone interested in producing for this market are welcome to contact us for further information.

Sources:

1. Forage Sorghum and Millet –Agfact P2.5.41- NSW DPI
2. Forage millet growing in Western Australia – Agriculture Western Australia
3. Irrigated summer fodder crops 2: Shirohie millet – Victoria DPI
4. Lonewood Trust



This guide is provided by Lonewood Trust (“Lonewood”, Reddestone, Glen Innes), producing quality local seed since 1970.

For seed and enquiries contact Elders, Glen Innes (02 67322500) or your preferred supplier.

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