

Canola hay & silage – cutting time & feed quality

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Key Points

- Canola crops harvested for forage in 2007 are likely to exhibit good energy and protein levels.
- While there are some animal health risks associated with feeding canola, given the thousands of tonnes of canola hay and silage fed out, the risks are very low.
- Some of this forage may have high nitrate levels so appropriate steps should be taken to mitigate this risk when feeding to livestock.
- Dry matter yields and feed quality will decline significantly after flowering in drought affected canola crops.

Yield & Quality

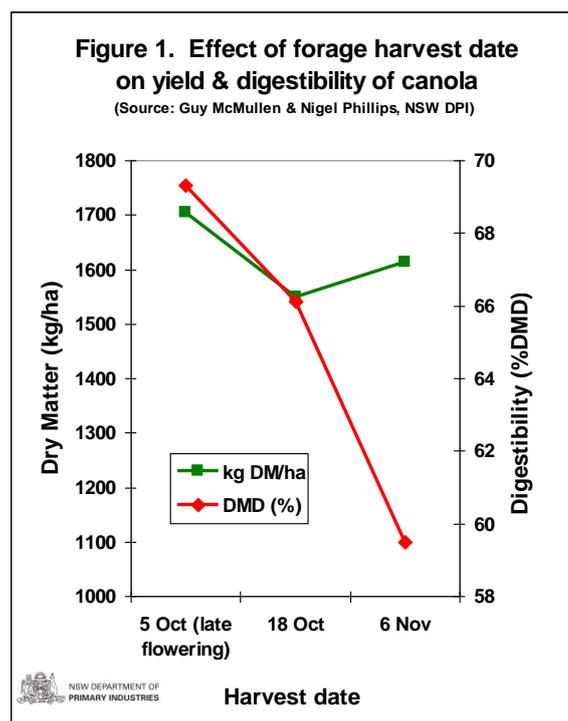
The feed quality of canola crops harvested for forage in 2006 was generally high (Table 1). The corresponding animal performance when fed out was also reported to be good. Feed Quality testing of 2007 canola crops exhibit similar levels.

Table 1. Feed quality of 2006 canola at cutting.

	Average	Range
Digestibility (DMD%)	69.4	57 - 76
Metabolisable Energy (MJ/kgDM)	10.0	7.9 – 11.6
Crude Protein (%)	21.0	12 - 31
Nitrate (mg/kg)	2540	52 – 8394

Without sufficient soil moisture for the next 3 to 4 weeks canola crops are unlikely to produce grain and maximum forage yield and feed quality will be obtained by harvesting at flowering. Figure 1 shows the decline in both yield and digestibility of a standing canola crop east of Wagga in 2006. Dry matter yield increased slightly after mid October which was all lower digestibility stem and seed pod material. Leaf mass continued to decline after flowering. This is reflected in the digestibility fall after flowering which is substantial.

As a general rule, a drop of 1% in digestibility will result in a 3% to 5% drop in animal performance when fed. Cutting canola crops after flowering will in most instances result in an increased cost per mega joule in the final product.



Animal Health Issues

All feeds, grains and forages, come with some potential for animal health problems. This is also true of canola. While there are some potential animal health risks from grazing canola crops or feeding canola forages, the instances are very infrequent and the number of animals affected usually small. Some animal health issues appear to be associated with flowering canola crops.



However, these risks need to be put into perspective. Thousands of tonnes of canola, including flowering crops harvested as hay or silage, have been fed to livestock over the last few seasons with only a handful of animal health issues reported. Given this, delaying forage harvest until after flowering will result in lower yield and feed quality in order to mitigate a very low level of animal health risk. Regardless, care should be taken when feeding canola to minimise these risks.

Perhaps the greatest risk is nitrate poisoning when grazing standing crops or hay. Nitrate poisoning is less likely with silage which can lose from 40 to 60 % of the nitrate content during fermentation. Nitrate levels can vary widely and are determined by many paddock and seasonal factors. Nearly all cases of nitrate poisoning are associated with hungry animals and/or a rapid change of diet. If in doubt, a laboratory test for nitrate can be conducted.

Producers should also carefully check chemical records to avoid any chemical residue issues before baling or grazing crops.

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