NSW DPI



FEBRUARY 2007

PRIMEFACT 314

(REPLACES AGNOTE DAI-22)

Cane tops as cattle fodder

John McKenzie

Former Program Leader (Dairy)

Col Griffiths

Livestock Officer - Dairy, Intensive Industries Development, Kyogle

Warning

Drought increases the risk of unacceptable residues in stock. Risks include contaminated feed, increased intake of contaminated soil, concentration of existing residues as animals lose condition, and many other causes. Refer to Primefact 312 *Drought increases residue risks* for details before purchasing stockfeed or making feeding decisions.

Sugarcane tops are a byproduct of sugarcane harvesting, comprising green leaves, the leaf bundle sheath and some immature cane.

Unfortunately, there is little accurate information regarding the nutritional value of sugarcane tops, owing to large differences in varieties, and whether it is one year or two year cane.

Nutritive value

Sugarcane tops are often conserved as hay during the harvest season (June–December) and fed to stock during drought conditions.

If sugar cane tops are to be used as cattle feed, it is important to recognise that they are low in nutritive value. There is a significant range in feed values depending on the background of the material, so the information in the following table should be used as a guide only. In the event that any quantity is purchased it is recommended that a sample be tested to determine the true nutritive value to allow for appropriate supplementation.

See Primefact 295 *Full hand feeding of beef cattle – quantities* and the feed evaluation database for nutritive values and information on laboratory testing.

The main factor influencing the nutritive value is the type of harvesting method used on the sugar crop. If the tops come from a crop harvested 'green' they will be of higher value as cattle feed than if they come from a 'burnt' crop.

As a livestock feed, cane tops will act at best only as a low quality roughage.

Depending upon the type of stock to which it is to be fed, sugarcane tops need to be supplemented with a grain and/or protein source. Seek nutritional assistance as to how much of each may be required in your instance.

It is important for intending buyers of cane tops to clearly establish whether the material carries chemical residues and to have a representative sample tested to check the feed value of the cane tops in question.

Typical nutritive value of sugarcane tops hay	
Dry matter	85%
Digestibility	27.5%
Crude protein	5.5
Energy (ME)	7.0 MJ/kg

Potential residue risks

Chemicals used in sugar cane growing could produce residue problems when the cane tops are fed to cattle. If abattoir testing shows a residue level to be above the maximum residue limit (MRL), that carcase is condemned and the producer receives no payment for that animal.

Until 1987, organochlorines (OCs) such as dieldrin and BHC were used in many cane areas to control pests. These chemicals are very persistent, and although soil residue levels may decline with time, OCs are still readily detectable in some cane soils.

Cane tops are discarded onto the ground at cane harvesting. During the baling operation some soil will be included in the bales – how much will

depend on paddock conditions and harvesting techniques. If this soil has OC residues in it, there is the potential for residues in cattle being fed the cane top hay to exceed the MRL. These cattle residue levels will depend on a number of factors, including the amount of cane top eaten each day and the body condition of the cattle. Preliminary chemical analysis of baled cane tops from a site known to contain dieldrin residues has shown levels of residues in the bales above the MRL.

Buyers of cane top hay should receive a clear assurance that the product has been harvested from areas which have *not* had OCs applied to them in the past. If the product is from an unknown source or from unknown areas where OCs have been applied, it should be assumed to contain residues. **Do not feed cane tops of unknown or doubtful status.**

For more information on residue risks, see Primefact 317 *Reducing residue risk when feeding sugar cane products.*

Further information

Further information can be obtained from your Local Land Services or through NSW Department of Primary Industries offices.

© State of New South Wales through NSW Department of Primary Industries 2007

ISSN 1832-6668

Replaces Agnote DAI-22

Check for updates of this Primefact at: www.dpi.nsw.gov.au/primefacts

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2007). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.

Job number 7098