FACT SHEET

Canola, Juncea canola and Mustard Meals

A guide to ensure safe use of these meals

Key Points

- Traditional canola meal (from Brassica napus) is a safe and nutritionally sound source of vegetable protein for the feed industry;
- 'Canola quality' juncea meal is derived from varieties of juncea canola which have been bred and tested as a safe and nutritionally sound source of vegetable protein for the feed industry.
- For 'canola quality' juncea meal, feed buyers should receive appropriate assurances that the meal is from one of the approved 'canola quality' varieties.
- Traditional juncea (Indian mustard) meals are NOT suitable for stockfeed;

The use of canola meal in rations continues to gain wider acceptance as the positive nutritional benefits become better researched and understood.

It is important to differentiate canola meals from other similar meals, because not all meals are suitable for livestock consumption.

Canola Meal:

Canola was bred from traditional rapeseed (B*rassica napus; Brassica rapa*) with the objective of minimising the anti-nutritional components inherent in rapeseed.

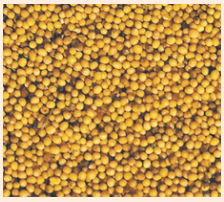
Consequently, canola seed, and the resultant meal, is low in glucosinolates and erucic acid, making it a safe and effective vegetable protein meal.

- **Canola meal is a safe and nutritionally sound source of vegetable protein for the feed industry;**

Juncea Meal:

Traditional Juncea *(Brassica juncea)* is a plant closely related to canola, but with inherently high levels of glucosinolates and erucic acid.

The positive agronomic benefits of juncea, such as greater tolerance to water shortage and heat stress, shatter tolerance, wide adaptation etc has led researchers to specifically develop varieties of juncea which have canola qualities, being low in glucosinolates and erucic acid (making them canola quality). Consequently, juncea meal from these 'canola quality' juncea varieties is suited to livestock consumption. "Canola quality" juncea varieties meet the agreed canola industry standard of a maximum glucosinolates at 30 micromoles/gram and erucic acid at a maximum 2%.



Unfortunately, there is no ready way to distinguish the meal from yellow seeded Mustard from that of 'canola quality' juncea, without chemical analysis.

To ensure a smooth path to market for 'canola quality' juncea, the oilseed industry has established a 'closed loop' seed sale and marketing protocol, whereby planting seed for these varieties of juncea is sold conditional upon the harvested seed being sold to agreed buyers, where the integrity of the seed, and resultant oil and meal, can be preserved throughout the supply chain. This ensures the meal can be marketed with confidence as 'canola quality' meal. In 2013, only 2 varieties of juncea were available on the Australian market that met the AOF specifications for 'canola quality' meal. These varieties are Xceed^{TM} Oasis CL , by Viterra, and SARDI 515M developed by SARDI and marketed by Smorgon Fuels. There are only limited suppliers of 'canola quality' juncea meal from these varieties, and stock feed buyers of 'canola quality' juncea meal should require appropriate documentation from the seller assuring the source and chemical composition of the meal.

- **'Canola quality' juncea meal is a safe and nutritionally sound source of vegetable protein for the feed industry;**
- **Buyers of 'canola quality' juncea meal should insist on appropriate documentation (such as certificates of analysis), validating the 'canola quality' nature of the meal.**

Mustard Meal:

Traditional Indian Mustard (also from *Brassica juncea*) has inherently high levels of glucosinolates and erucic acid, this greatly exceeding glucosinolates at 30 micromoles/gram and erucic acid a 2%. Consequently, these anti-nutritional components make traditional mustard meal unacceptable for stock feed.

- **Buyers should NOT use Mustard meal as animal feedstocks**

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