

ver the years, canola meal has raked in a lousy reputation in Asia. On paper the ingredient has excellent protein content and a solid amino acid profile but on poultry and pigs it releases 20% less energy levels and has 10% less digestibile amino acids when compared to soybean meal (sbm).

Soon Soon Oilmills Sdn Bhd CEO Neoh Soon Bin is all praise for the ingredient but blames processing methods.

"It has nothing to do with canola. It's just the processing that's bad.

Canola scores well in energy and digestibility. In fact, our trials show that canola can perform better than sbm," he told Asian Feed Magazine at his office in Penang.
Soon Soon Oilmills, after intensive research and development, has

come up with a high efficiency processing technology that makes

available canola's protein and amino acids while its anti-nutritional factor such as glucosinolate and myrosinase are reduced to a minimal. The High Efficiency Canola Meal product can be used at an inclusion rate of up to 15% in poultry without any negative impact. It can be used at 6% for starter pigs and 15% for grower and finisher pigs.

Getting the processing right gave Soon Soon Oilmills the confidence to expand its plant in early 2015. It doubled its canola production to 5000 tonnes per month for local use and for export.

"In the first three months of sales, our customers were skeptical. We didn't sell much. Then after tests it seemed to fit into a niche in the market." he said.

Part of the reason for the initial poor sales was an over reliance on sbm and bad experience from the use of alternate protein meals such as sunflower, sesame and groundnut meals. Over the last few decades the

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It's just Ca

Soy-based products

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Fine corn meal

advantages and benefits of sbm have become well-known to producers so much so that protein and sbm have become synonymous in the trade.

Meanwhile nutritionists, who are exposed to the benefits of these alternate ingredients, are finding it tough to encourage management to make the switch due to inconsistency and poorer quality relative to sbm.

"In Malaysia the entire poultry industry is relying on sbm. This is a a precarious situation. In 2014 the global shortage of methionine caused a slight panic. This forced us to look at other protein ingredients," he explained.

Soon Soon's High Efficiency HiFat canola meal stands out because it is a non-solvent extract product high in oil and with moderate protein. It is also high in digestible methionine and threonine, and is synergistic with sbm, which is lower in methionine and threonine, leading to cost savings in formulation.

## **Alternatives**

Besides canola Soon Soon Oilmills



Full-fat corn germ

alone there is a different range of products such as High Efficiency Dehulled sbm, High Efficiency Dehulled Full-Fat sbm and High Efficiency Hipro 46, to name some.

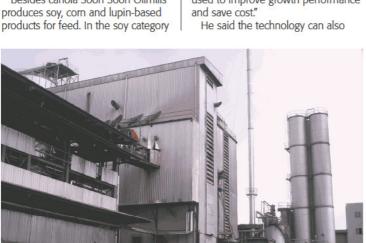
For corn there is Fine Corn Meal and Full Fat Corn Germ Meal, as well as Lupin Meal.

"Much of our success to date is due to our ability to innovate and produce products that are superior to existing products in the market. We see a product, and if we can improve on it and overcome production issues we go ahead with it," said Dr Neoh.

"For instance in poultry we were seeing sticky faeces, probably due to too high levels of sbm. We managed to fix most of these problems with our new canola meal."

He said the r&d team works closely with suppliers, customers and other manufacturing or research bodies to come up with new products.

"We have successfully produced a full range of high efficiency feed ingredients, which are proven to have higher nutritional content and can be used to improve growth performance and save cost."



The company's extraction and preparation unit at Westports in Port Klang, Malaysia.



Golden Canola

be applied to sunflower and other oil seeds such as copra and palm kernel, and the company is working on innovations using these raw materials.

"Sunflower is high in fiber, and is good for layer and pre-layer feeds as fiber expands the gut system and allows layer birds to eat more and lay more."

## Savings

Using these alternatives can also help producers save on costs. Dr Neoh said sbm should not be used at more than 30% in broiler diets. Other substitutes such as meat and bone meal, and fish meal are expensive. Because of this, producers tend to use sbm at more than 30% in animal rations. But trials have shown that if

## **Dehulled lupin meal**

Soon Soon Oilmills Sdn Bhd started producing lupin meal in mid-2015. It was first launched two years ago but production ceased as they were not able to find a consistent supplier.

The Soon Soon Dehulled Preemulsified Full Fat Lupin Meal has an amino acid profile similar to soybean meal. It is dehulled and coprocessed with lecithin to enhance its oil availability to young animals such as piglets and broiler chicks as well as aquaculture species where the digestibility of protein and phosphorus are higher than sbm. It can be used to replace fish meal and fish oil.

"This product can be used up to 15% in feed rations. It contains no trypsin inhibitor and is low in phytate and antigenic protein," he said.

End 2014 the company launched a new processing facility in Penang, which manufactures high efficient protein meals such as Soon Soon High Efficiency HiFat Canola Meal and Soon Soon High Efficiency HiPro 50 SBM, which has a minimum protein content of 49%.

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The company's extraction plant at Westports.

this is substituted with canola meal FCR can be lower.

"So we are not stuck with sbm. We are now seeing strong demand for lupin and canola meal," he said.

But there are producers who just want the lowest cost formulation, and those who want better feed but at a lower cost.

"The industry is fixated on cost. This is not conducive for progress. What about the value of raw materials where the nutrient content is increased and therefore the cost per unit energy or digestible amino acid is actually lower despite a higher price?

"Producers should instead concentrate on buying good quality raw material. Think of corn and sbm as nutrients, that is metabolisable energy and digestible amino acids, and not mere raw materials."

Dr Neoh is promoting nutraceuticals, or the convergence

of health and nutrition, for healthier animals and lower production cost. Think of lowering mortality and providing better immunity for the animals. The full-fat sbm is an example of this.

This shift in thinking can help the industry address consumer concerns and mistrust against the food industry. The feed industry must change as it is part of the food industry, he said. A<sub>F</sub>



Hi-fat Sunflower



Hi-fat Canola

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