

Alternative Feeds for Pigs - August, 2012

The rising prices of corn and soybean meal are making pork producers nationwide bet on alternative feeds to reduce the cost of production

Researchers at Embrapa Swine and Poultry warn that the partial substitution of corn and soybean meal in diets is possible as long as certain precautions are observed.

In pig nutrition in Brazil, corn is used as feed energy source and soybean meal as the main source of protein (amino acids). Both are also responsible for much of the cost of production activity. According to the Central Intelligence Embrapa Swine and Poultry, which releases monthly economic data on swine and poultry, nutrition accounted for 77.88 per cent of the cost of production in June. For the year, spending on nutrition in swine production is about 11.82 per cent.

Embrapa Swine and Poultry has developed, since the early 80s, research on alternative feeds for pigs. There are many options for producers, ranging from cottonseed meal to rice and wheat. What determines the feasibility of an alternative food is its nutritional composition, physical state (dry, wet and liquid), presence of antinutritional factors, availability and price.

An example is **rice bran**, that can be used without restriction in the feed given to pigs. This product exists in Rio Grande do Sul, but is scarce in most regions of the country.

Research on alternative foods were developed with the goal of identifying unconventional ingredients to replace corn and soybean meal in feed for pigs and poultry without negatively affecting performance. Each ingredient should be used according to their nutritional characteristics so as to maintain the balance of the diets adjusting the levels and respecting restriction due to possible antinutritional factors. Nutritionists should be consulted for guidance on the correct use of ingredients.

From an economic standpoint, for foods that have no use restriction, the decision to use will be given for the cost of the ration containing alternative ingredient, balanced with the same levels of energy and nutrients from a diet based on corn and soybean meal. Therefore, you need to simulate an alternative formulation containing the ingredient, comparing it with a conventional diet of corn and soybean meal, to determine the economic viability of using or not the respective ingredient.

For some ingredients, its nutritional value compared to corn was determined.

For example: a) sorghum with high tannin content : it has nutritional value of 85 per cent of corn,

therefore, it is economically viable only if its price is at least 15 per cent lower than that of corn;
b) sorghum with low tannin content : has the nutritional value of 95 per cent of corn, therefore, is economically viable only if its price is at least five per cent lower than that of corn. For other foods, Embrapa Swine and Poultry provides feasibility calculations, as described below.

Embrapa Swine and Poultry still believe that this can be deployed in the country for a public policy that cultivates winter cereals as an alternative to corn and soybeans.

In Rio Grande do Sul and Santa Catarina there is a great potential for the planting of winter cereals to be used in animal feed, reducing the importation of corn and soybean meal from other regions of the country. Encouraging the planting of cereals such as triticale, lupins, rye, barley and feed wheat would be an important government policy for the use of farmland that are idle during winter, and that has the potential to supply part of the deficit in cereal feed.