Sorghum’s flexibility in ration formulation (for example with soybean) allows nutritionists to decrease the costs and maintain good growth performance.

40% of the total French productions of grain sorghum are exported in Catalonia for pork farm. The introduction of sorghum in pork feed has reached 50%. For example, today Spanish ham producers commonly use sorghum grain in their farms. That is the reason why sorghum has very good nutritional value and brings necessary energy for poultry and laying hens. The unanimous opinion of nutritionists all over the world is that to introduce up to 55% in rations for turkeys and up to 70% in rations for broilers. Some studies have shown that whole and uncrushed sorghum grains may be almost identical for sorghum and corn (see table on the right).

3705 kcal/kg for corn (source: INRA). Protein digestibility and amino acid levels are higher in sorghum than in corn. The average sorghum energy was 3775 kcal/kg (2013: 3780 kcal/kg), against 3825 kcal/kg for corn. Moreover, the advantage of sorghum is its lower protein content compared with corn have been confirmed by the researchers. The sorghum grains have good available phosphorus content. Compared to corn, the requirement of supplemental inorganic phosphorus is less.

ARE THERE ANY PECULIARITIES TO KNOW ON SORGHUM GRAIN?

WHAT ARE THE NUTRITIONAL ADVANTAGES OF SORGHUM IN ANIMAL FEED?

Today, sorghum cultivation is increasingly becoming an alternative to corn in the situations of limited water reserved. The reasons are numerous. First of all, global warming effects and the need to preserve water resources are evident since last few years. Secondly, 80% of the Eastern Europe planting surfaces are not equipped with irrigation system. Sorghum crop needs low inputs level (pesticide and fertilization) which makes its cost of production competitive.

What is the tannin content of sorghum? The tannins are concentrated in the husk of the grains. Old varieties of sorghum have very high tannin values: between 1% and 7%. Today, those types of sorghum can be essentially found in Southern America, China and sometimes in CIS countries. It helps to limit predator damages in the field, as a high value of tannins makes the grain less appetizing. The peculiarity of this anti-nutritional factor of tannins, or polyphenols, is its correlation with protein digestibility. Polyphenols form resistance mechanisms to enzymatic attack in the gastrointestinal tract, which greatly reduces the digestibility of proteins. For poultry (Ehresman and Metayer, 1993), the presence of tannins linearly affects the energy value of sorghum: 1% tannins reduce by 7% the energetic value of sorghum and by 9% the level of protein value.

The tannin content of sorghum is a small grain with remarkable nutritional qualities.

Sorghum - a small grain with remarkable nutritional qualities.

www.euralis-seeds.com