Ready-to-eat meals for cows and sheeps

Moist grain crimping promises higher milk yield and less contamination from toxins

Feeding livestock is not a simple task. Farmers need nutrious fodder for their animals at a convenient price, but the production presents unpredictable factors: weather conditions at harvest, storage and treatment of the grain, contamination by mycotoxins etc. A solution could be: moist grain crimping.

It takes time and money to produce fodder – from the harvest to the ready-to-eat meal for the cow. Moist grain crimping, developped in Finland in the 1960s, can make the process more effective. It's a technology to preserve feed grain into livestock fodder by fermentation and results in less work for the farmer on the one hand, safer and healthier fodder for the animals on the other.

The moist grain crimping technology allows earlier harvesting. Photo: Rainer Sturm / pixelio.de

The technology allows harvesting on its very early yellowish stage (two or three weeks earlier). Thus, farmers are able to reduce drastically the fungi which might develop on the field during the ripening and produce mycotoxins in the plants. The harvesting can be started as early as 40 per cent moisture content or even more. Compared to dry grains, there is no dust in the air and lungs while crimping and feeding the livestock which will benefit the farmers' health. The very early grain harvesting furthermore allows to cultivate something else in the very same field. The livestock eats moist crimped grain very willingly. The particle size can be optimized for different type of livestock by choosing the right type roller or discs. Compared to hammer mills, the energy requirements are lower. Crimping with discs gives smaller particles if needed, for example feeding pigs. Very high moisture level in crimping process keeps the particles in fodder soft. The livestock is also healthier which means savings to the farms. High moisture crimped grain effects on milk producing as well: researchers have showed that milk production increases by eleven per cent.

By crimping into a plastic tube, it takes just one operation to crimp and preserve the grain for ready-to-feed fodder, adding proteins, minerals, vitamins according to the farmer's "receipt". Hence, no need for silos or dryers. The overall carbon footprint is much smaller: no extra freights to feed factories, no extra working operations. At the same time, farmers depend less on bought-in feeds and are safe from fodder shortages and fluctuating market prices.