Abstract

LARSEN, KASPER GEHL¹ and JENSEN, ARNE SLOTH¹, ¹EnerDry A/S, Kongevejen 157, 2830 Virum, Denmark.

Status of ongoing studies of beet pulp feed value improvements by steam drying and latest installations around the world

Studies conducted by the University of Copenhagen, veterinarian depart of large animal section and EnerDry has proven that digestibility and thereby the feed value of beet pulp is improved significantly by steam drying. To analyze the feed value, the degradability of beet pulp and associated gas production in the rumen, has been analyzed. In order for the feed to be utilized it must be degraded before 12 hours, or it will be lost. The following was found:

The EnerDry steam drying process increased the degradability of sugar beet pulp over the pressed pulp (freeze dried) raw material during the early stages of fermentation (up to 6-12 hours), while the drum drying process did not or even tended to decrease degradability.

Sugar beet pulp dried by an EnerDry steam dryer has a more rapid rate of gas production and hence degradability during the first 6-12 hours of incubation (app. 40% higher) and reach a higher total degradability after 48 hours of incubation (app. 15%) compared to sugar beet pulp dried by drum drying. The Russian sugar industry is starting to introduce steam drying. The first sugar beet pulp steam dryer in Russia, was an EnerDry size H, which started operation in 2016. Furthermore 2 size J steam dryers will be installed summer of 2018. This will be the world's biggest beet pulp steam drying station with a total capacity of 142 t/h water evaporation

