

Methane inhibitor works better on cows with maize diets

Research shows that DSM's animal feed additive Bovaer reduces methane formation in Dutch dairy cows by 27 to 40 per cent depending on the cow's feed.

The effect of the additive has been investigated around the world in a series of studies, says researcher André Bannink. 'But each research group finds a slightly different effectiveness.' One explanation is that what the cow eats matters. To test that hypothesis,

Wageningen Livestock Research set up an experiment with 64 Holstein-Frisian dairy cows under normal farming conditions. The methane reduction was determined for three variants in the ratio of grass and maize silage in the roughage and for two dosages of Bovaer (60 ppm and 80 ppm) for which DSM has applied for EU approval. 'Bovaer is effective in inhibiting methane formation and that effectiveness does indeed depend on the feed rations,' says Bannink. A low dosage of Bovaer (60 ppm) reduced methane emissions per kilo of feed by 27 per cent when there was no maize silage in the feed and by 35 per cent with the highest proportion of maize silage. The equivalent percentages were 29 and 40 per cent with a high dosage of Bovaer (80 ppm). There are no known negative effects of Bovaer, says Bannink.

The active ingredient in the additive, 3-nitrooxypropanol, inhibits an enzyme that methane-forming microorganisms in the rumen need for converting hydrogen into methane. 'If the cow is given a different ration, the fermentation conditions in the rumen change too,' explains Bannink. Info: andre.bannink@wur.nl

