

The use of a Processed Humic acid product as a feed supplement in Dairy Production in the Netherlands.

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Introduction

Humic acids (HA) have antibiotic effects, increase nutrient resorption and stimulate the immune system in animals. Addition of humic acids as a feed supplement in rations is expected to increase overall efficiency. There have been positive reports for the use of humic products in cattle, poultry and swine.

Materials and Methods

On a organic dairy farm in Holland 4 groups of 10 dairy cows were selected for this study. Groups were mixed for age, lactation stage, gestation, production level and assigned to control, 2 gm HA/day, 3 gm HA day and 4 gm HA/day groups. The trial groups were fed *Lithicin*TM processed humic acid product derived from humic lignite from the U.S.A. containing 74% combined humic acids with 20% low molecular weight fulvic acid. Milk-, fat- and protein production levels were recorded every 14 days for a period of two months. After the first month, groups were shifted to another HA level.

Results and Discussion

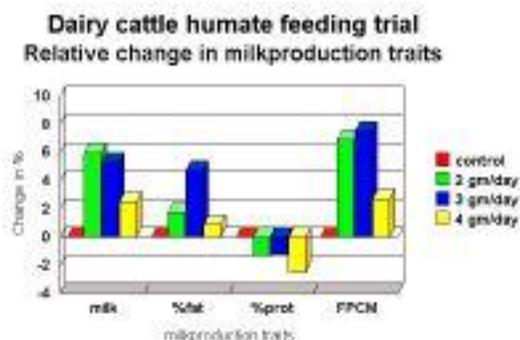
The milk production data showed improvement for milk, %fat and FPCM (fat and protein corrected milk) for all feed levels compared to the control group (fig. 1). There is only a slight decrease for %protein for all HA feed levels. A dosage of 2 gm HA/days is most effective for increased milk production, whereas 3 gm HA/day is more effective for increasing fat and FPCM. 4 gm HA/day is sub optimal as the higher dose responds with lower production compared to 2 and 3 gm HA/day groups.

Conclusions

The results show that processed humic acids have favorable effects on milk production traits for dairy cattle. However, for statistical conclusions more extensive studies are necessary and will continue in Cattle and other livestock classes. The product *Lithicin*TM offers organic livestock producers a “certified organic” feed additive with the potential to prevent disease and increase feed conversion at low cost with the potential health benefit of being able to reduce or increase butterfat levels with varying levels of *Lithicin*TM in the feed.

Table 1. Relative improvement (%) of HA feed levels compared to the control group.

Effect of *Lithicin*TM Sodium Humate as a feed supplement on milk Production traits of dairy cattle.



References

The European Agency for the Evaluation of Medical Products. Committee for Veterinary Medicinal Products, “Humic Acids and Their sodium salts”. EMEA/MRL/554/99-Final, Feb.1999