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Milk Urea Nitrogen

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Abstract

In order to obtain good quality milk, dairy farmers must take into account the composition of each feedstuff in the animal diet and make the final feed ration balanced in all its nutritional elements.

Dairy cattle farms are presently facing an adverse economic context, due to substantially increased animal feed costs. As a consequence, wasting feedstuffs, especially protein-rich ones, will most likely have a very significant impact on the financial performance of these farms. Excess protein in the feed ration will also have important environmental impacts and, most importantly, it might affect the quality of the milk.

The main objective of this study was to assess the concentration of MUN (Milk Urea Nitrogen) in milk from dairy farms located in the Azores islands of Terceira and São Miguel, from January to September 2011.

The present MUN assessment results do not point to either malnutrition or overfeeding unbalances in terms of the protein-rich feedstuffs used in the farms studied.

MUN determination was shown to be a very practical tool for monitoring the adequacy and efficiency of nitrogen use in dairy cows diets, mainly because of it being based on a relatively simple, inexpensive and fast procedure. Furthermore, given the properties of MUN as a milk quality parameter, we strongly recommend the addition of MUN determination to the list of routine analysis used in milk classification.