

02 March 2015

Project Summary Report

The Effect of United Fisheries Fish Hydrolysate on Milk Taint, Cow Health and Production

Jim Gibbs, Lincoln University, and United Fisheries.

Introduction

United Fisheries produce a protein and oil rich hydrolysate from the by-products of the fish processing factory. The process uses the fish products with a plant enzyme to break the material down, then a common organic acid to stabilise the product at a low enough pH to prevent spoilage. The product can be used as a fertiliser or as a stock feed supplement, and Lincoln University in conjunction with United Fisheries conducted a five year research project on the production and use of product in New Zealand livestock systems, jointly funded by the national seafood industry (Seafood Innovations Ltd) and United Fisheries.

This project work assessed the feeding of the product to dairy cattle at a range of doses and time periods, including very high doses, to establish any effects on milk taint, cow health and milk production.

Dairy Use of Fish Hydrolysate

There were no ill effects of feeding the fish hydrolysate at any dose. The product was stable during storage on farm, and able to be fed mixed with dry feeds and with molasses, and was adapted to by all cattle quickly. There were no observed issues with either cow health or milk taint, and milk production was not negatively affected by any dose or period of fish hydrolysate feeding.

The product appears to be a safe and benign supplement when directly fed to dairy cows. Given the reduced dose that is likely to be consumed by dairy cows when the hydrolysate is used on farm as a pasture fertiliser, there are no anticipated issues with milk taint, cow health or production arising from the use of this product.



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