RYEGRASS STAGGERS: AN OVERVIEW OF THE NORTH CANTERBURY SITUATION AND POSSIBLE COSTS TO THE FARMER

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Abstract

Rye grass staggers places limitations on the management alternatives available to farmers over the late summer/early autumn period. When severely affected stock are unable to be moved. Stock losses of 2-10% have been recorded in North Canterbury. The direct monetary loss to a farmer with 2000 ewes, with an additional 4% death rate in stock due to rye grass staggers could be around $1440, about half of the farmer’s total expenditure on animal health for the year. Severely affected animals may also experience a production loss due to their inability to graze. To attempt to reduce these losses by providing other feed alternatives is expensive. For example, two months feeding of hay if purchased, would cost $5400.

WHAT IS RYEGRASS STAGGERS?

Rye grass staggers is a nervous disease of sheep, cattle, horses and deer caused by the ingestion of a fungal toxin associated with rye grass pastures. Although the endophytic fungus is present in the rye grass at all times, rye grass staggers is only a problem in dry years and between January and March when feed is in short supply. There is no relationship between rye grass staggers and grass staggers (hypomagnesemia) which is a magnesium deficiency occurring mainly in dairy cows.

While rye grass staggers occurs in many areas of New Zealand, this paper is concerned with the North Canterbury situation with particular reference to Cheviot county.

THE PROBLEM TO FARMERS

Stock severely affected with rye grass staggers are unable to be disturbed in any manner or they will collapse. This has serious management implications under rotational grazing due to the requirement of stock to be shifted onto new feed. With these movement difficulties, stock must therefore be set stocked over this period if rye grass pastures only are to be grazed. If stock are moved to ‘clean’ areas such as lucerne, grass species other than rye grass, forage crops or feed supplements, rotational management is then possible.

Stock losses do occur with stock severely affected with rye grass staggers. Collapsed animals are frequently attacked by seagulls and killed. Many of the affected properties in Cheviot county are in hill country areas where gully dams are formed for stock water storage. If these dams are not fenced off, stock deaths occur from drowning. It is also not uncommon for lambs to drown in a conventional stock water trough. Other stock losses occur through strangulation in fences and misadventure.

There is much debate over production losses attributable to rye grass staggers. Research data (Scales 1981) would indicate that there was no difference in lamb