

Slugs (*Deroceras sp.*)

Introduction

Slugs are present throughout NZ and can rapidly cause severe seedling loss in establishing pasture and crops. Take particular care with spray-drill or direct-drilling where surface trash is present.

Identification

There are eleven introduced species of slugs in NZ of which the grey field slug is the most common.

Slugs are present in most pastures throughout the year, causing some, but not significant damage. Populations are highest under favourable weather conditions: moist soil, moderate temperature and high humidity.

When undertaking pasture or crop renewal, slugs can be a severe problem, feeding on germinating seed and newly emerged seedlings. Spray-drilled pastures and forage crops are particularly vulnerable.

Slugs can move along the drill rows, killing seedling plants, and utilising the cover of surface trash. Slime trails are often visible with the early morning dew.



Slug and slug eggs.



Typical slug damage.

Effect of molluscicide on pasture establishment (MAF Normanby)

Treatment (autumn)	Ryegrass seedlings	Tall fescue seedlings
Untreated	270/m ²	17/m ²
Molluscicide	510/m ²	305/m ²

Source: Proc NZ Grasslands Assoc. 52: 237- 240 (1990), D. McCallum et al.

Prevention and management

The presence of slugs can be determined by leaving a wet sack out overnight in the pasture just prior to drilling. Count slugs the next day, with numbers above six considered potentially damaging to pasture and establishment.

When sowing into a known slug population the use of molluscicide baits either at sowing or just prior, can provide economic control (refer table).

Mob stocking can give high levels of slug control and can be used prior to, or immediately after sowing. To be effective aim for 1500 ewes/ha for one night, or 500/ha for three nights.