

TECH SHEET:

Plantain Management

Well-managed plantain generally has a lower dry matter content than ryegrass pasture and contains less fibre. The metabolisable energy (ME) content is similar, although plantain may remain better quality than ryegrass during hot, dry summers.

As plantain leaves age over 2-3 years, they become more fibrous, less digestible, and the quality of the crop declines regardless of stem content. This is one of the reasons why relatively frequent grazing (at 25 cm height) is recommended.

Plantain also has greater mineral content of the following (P, K, S, Ca, Mg, Na, Zn, Cu, B and Co) than ryegrass pasture.

The milk solids response to plantain appears to depend on the quality of the pasture diet. If pasture quality consistently drops away in summer, then including plantain can increase per cow milk solids production.

At this stage there has not been any work done on the profitability of including plantain in a farm system, or what is the optimal proportion of the farm to have in plantain. Trial work and research is underway.

There has been some talk that dairy cows won't eat plantain at certain times of the year and, unfortunately, it is not known what may cause this. DairyNZ in the Waikato did three years of research work and found cows have never refused to eat plantain, however there have been times when it takes them longer to graze the feed available to the desired result.



- Plantain is an herb with a fibrous, coarse root system that produces 10-19 t DM/ha/year.
- Plantain tends to be more persistent than chicory, often producing the yields above for 2-3 years.
- Plantain should be grazed at 25-30 cm height.
- To maximise yield and persistence avoid overgrazing and treading damage on wet soil.
- Plantain is highly responsive to nitrogen fertiliser

Plantain should be first grazed no earlier than the six leaf stage (i.e. the plants have six fully grown leaves). This is normally 7-8 weeks after spring-sowing. This ensures that plants have well-developed root systems to improve survival.

Plantain needs to be planted into soils with an average temperature of between 20-12 degrees.



AGPRO HORTICULTURE
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SUGGESTED AGPRO SPRAY PROGRAMME

The AGPRO programme below aims to give a guide on how to get the best "keep the crop clean" from weed control, taking care of pest issues, and making sure you get the best out of your crop.

SPRAYOUT YOUR OLD PASTURE:

Product AGPRO Glyphosate 510	Application timing Sprayout early autumn or spring	Purpose Remove any weed competition	Rate/ha 3-5L/ha	Comments Check soil temperatures to coincide with sprayout
	r datamin or spring	'	,	and planting

SUGGESTED PROGRAMME POST EMERGENCE FROM 3-5 LEAF STAGE OF CROP:

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Product	Application timing	Purpose	Rate/ha	Comments				
AGPRO Bentazone	From 3-4 leaf stage	Remove certain broadleaf weeds	2.5-3.5L/ha	Use the lower rate when weeds and crop are smaller				
AGPRO Dicamba	Crop must be at least 6 months old	Removes large range of smaller broadleaf weeds	250-300ml/ha	Ensure crop is not stressed - rolling of leaves does occur				
AGPRO Haloxyfop	From 3-4 leaf stage	Control of winter and summer grass	750ml-2L/ha	Use higher rates on winter grass, annual ryegrass and volunteer cereals				
OTHER CHEMICAL ORTIONS.								

OTHER CHEMICAL OPTIONS:

INSECT PESTS

In late February to mid-March, holes may begin to appear in plantain leaves. These are caused by caterpillars (e.g. common carpet moth, white butterfly, diamondback moth). As the caterpillars do not feed on roots or growing points, their impact is largely aesthetic. If damage is severe, however, the caterpillars can be controlled with an approved insecticide.

Product	Application timing	Purpose	Rate/ha	Comments
AGPRO Lambda Cyhalothrin	First signs of	Prevent leaf damage from caterpillars	50ml/ha	Add AGPRO
	leaf damage			Wetter Penetrant

Some farmers have also suggested that grazing every 21-24 days in late February to mid-March may reduce the caterpillar population and therefore the need for spraying.



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