





Background

This unique barley has the visual difference (photo1 & 2) of compressed and reduced awns which can minimise the damage conventional hard spikey awns can do to soft, sensitive mouth skin, reducing animal stress and maintaining animal performance. Barley awns can remain quite sharp even in the stack.





Photo 1. Showing the hooded awned nature of **Monty** silage barley

Photo 2. Showing traditional barley

Monty shows very similar growth and maturity characteristics to conventional barleys, and when harvested at the optimal time, **Monty** produces silage with good levels of energy, sugars, soluble starch and digestibility.

Maturity will reflect the season but typically *Monty* will be mature for harvest in approximately 100 days in the North Island (if sown late September through into October). In Southland, with cooler summers, this could extend out to 115-120 days from a similar sowing date.







Production Data

Although yields will be influenced by a number of factors such as fertility levels, timing of sowing and on-going inputs, it has consistently achieved high grain and silage yields over many trials. Trials indicate that *Monty* is capable of producing 8-14 tonnes DM/ha silage crops in a wide range of environments under good management

Trials show yields equal to or better than Salute and other commonly used cultivars in the Manawatu, Southland and Canterbury (figure 1). Superior straw strength is also a feature of this variety (photo 3).

Monty also has good tolerance to most leaf diseases (figure 2), but like all barleys, prevention is the best way to minimise disease pressure.

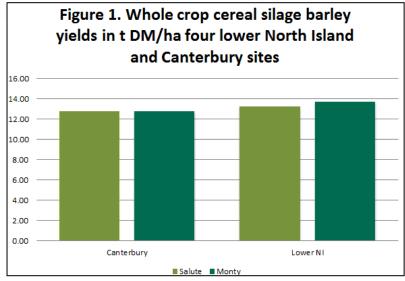


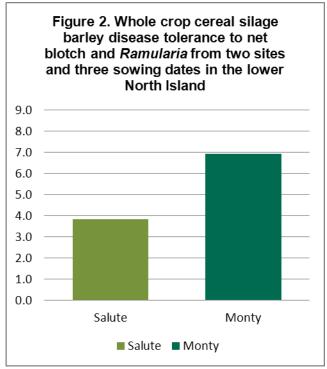
Photo 3. Monty showing superior straw strength vs another commercially available variety in the Wairarapa











Disease Score 1= poor 9= excellent







Monty Silage Barley - Management

Best results are produced by maintaining a proactive management programme rather than a reactive one, especially with a fast developing crop like barley. *Monty* should be managed similarly to other barleys.

A soil test including soil available Nitrogen (N) is essential to enable an informed decision to be made on N use, as this has a large influence on total yield.

Sowing *Monty* silage barley is typically sown during September to October in all regions but can be sown in August or November if conditions are suitable. Sow fungicide (Raxil) treated, and optionally Poncho insecticide treated, seed at approximately 150 kg/ha at 4-5 cm depth to establish 275-300 pl/m2 with a N based fertiliser (e.g 200 kg/ha of cropzeal 16 N or DAP). 100-150 kg/ha of urea can also be incorporated before sowing or top dressed soon after sowing in intensively cropped soils where fertility may be reduced.

3-4 weeks after sowing (GS 12, 2 leaf stage, weeks are a guide only) **Herbicide and Insecticide**; If not using Poncho treated seed, then use an insecticide to minimise Barley Yellow Dwarf Virus (BYDV). (e.g. Karate Zeon at 40 mls/ha, can be added with the herbicide). Select and apply appropriate herbicide. Weeds can affect both the yield and quality of cereal silage and can be sprayed at an early stage. Apply up to 150 kg/ha urea as a final fertilizer application (GS 22-29) mid tillering

5-7 weeks after sowing (GS 25, around late tillering, as rows begin to close over) **Fungicide, Insecticide, Herbicide**

Apply a fungicide to keep the crop clean as it begins to get more dense (e.g. Proline at 400mls/ha + Seguris Flexi at 600mls/ha) Add final herbicide if needed for late emerging or tough perennial weeds. Include final insecticide as young plants are sensitive to BYDV e.g. Karate Zeon.

8-10 weeks after sowing (GS 37-45 early flag or booting)

Fungicide; Apply a final fungicide (Proline at 400mls/ha + Seguris Flexi at 600mls/ha). In wet/or windy areas where lodging may be a problem during grain filling as head weight increases include the growth regulator Terpal at 1lt/ha (best to do slightly earlier rather than later) Check withholding periods for all chemicals.







13-15 weeks - Harvest (can be 10-14 days longer in cooler environments) Whole crop silage should be harvested when the grain is at the "cheesy dough or putty" stage and no moisture can be squeezed from the grain. The heads will have been out for 25-35 days and they will have started changing colour from green to light green-yellow. This gives an excellent combination of yield and quality at the ideal moisture content for good compaction (35-38% dm)



Nutrient Removal/Fertiliser Input

Approximate WCSS Nutrient Removal from a 10t/ha crop			
N	Р	K	S
150	30	170	20