



### Jeff Ball - Dannevirke Dairy Farm

Barkant turnips are used to promote summer milk production, at a time when grass quality is declining on the Dannevirke dairy farm of Jeff Ball and Tracy Hautapu. Their 175ha milking platform this year milked 460 cows.

Each year 15ha – three to four paddocks – is put in summer turnips. Earlier sowings are in Barkant, followed by later maturing Green Globe.

Turnips are grazed from January until late March, with cows fed 3–4kg/cow a day. “They go straight on after the morning milking. They are usually on there by 7.30am and come off at 9am. On the last paddock we usually leave them on all day and feed them 3kg of baleage as well, as this helps extend our round out for autumn.”

While they have trialled different turnips over the years, the couple have stuck with Barkant since it became commercially available 10 to 15 years ago. Barkant regularly yields 10 to 12 tonnes dry matter/ha, provides a relatively cheap, but high quality feed option and fits in well with the farm’s pasture renewal programme. “They are brilliant, absolutely brilliant,” Jeff says.



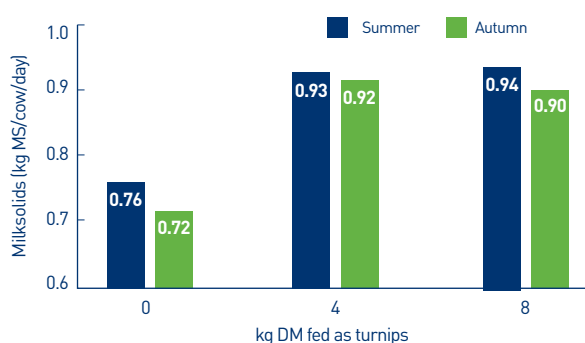
## High yielding, quick summer feed

### SUMMER TURNIPS

- Highest yielding summer bulb turnip available, a potential yield 15,000kg DM/ha
- High leaf to bulb ratio resulting in high levels of protein
- Shown in an independent animal trial to increase summer/autumn milksolids production by 25%
- Tankard bulb shape to enhance utilisation and reduce risk of choke associated with round bulbs
- Early maturing (60–90 days) for excellent summer feed

Barkant® turnips produce high quality feed with a high metabolisable energy (ME) value, meaning greater animal performance can be achieved. It is a high performance feed for lactating dairy cows supplying the energy required to boost milk production.

### EFFECT OF INCREASING ALLOWANCE OF TURNIPS ON MILKSOLIDS YIELD



(All cows given supplementary pasture at 25kg DM/cow/day)  
Harris, S.L., Clark, D.A. Waugh, C.D., Copeman, P.J.A. and Napper, A.R. 1998.  
Use of Barkant turnips and Superchow sorghum to increase summer-autumn milk production.  
Proceedings of the New Zealand Society of Animal Production 58: 121–124.

### HOW PROFITABLE ARE TURNIPS IN A DAIRY SYSTEM?

Profitability of turnips in a dairy system depends on:

- Value of milksolids
- Milksolid response
- Level of pasture substitution

### COSTS & RETURNS (\$ PER HA) OF ESTABLISHING A CULTIVATED BARKANT TURNIP CROP FOR DAIRY GRAZING

AVERAGE COSTS	YOUR WORKING	
Average Establishment Costs	\$1,399	
GROSS RETURNS		
Average yield (kg DM/ha)	13,000	
80% Utilised yield (kg DM/ha) (assuming 20% wastage) (13,000 x 80%)	10,400	
Milksolids/ha response (80g MS/kg turnip eaten) (10,400kg DM/ha x 0.08)	832 kg MS	
Gross returns (@ \$6.50/kg MS) (832 x \$6.50)	\$5,408	
NET RETURN		
Gross Returns - Average Costs (\$5,408) - (\$1,399) =	\$4,009	

Developed from the Forage Brassica Development Group, “Best Management Practices for Forage Brassica, May 2008 Workshop Handout”.