

# Quality of 'Choice' chicory and 'Tonic' plantain

Optimal grazing management of chicory and plantain involves maximising leaf growth while minimising growth of the lower quality stem. Well-managed crops generally contain <25% stem.

Compared with ryegrass pasture, well-managed chicory and plantain generally have:

- lower dry matter (DM) content
- less fibre
- more soluble sugars and minerals (e.g. P, K, S, Ca, Mg, Na, Zn, Cu and B)

The metabolisable energy (ME) content of plantain is similar to ryegrass pasture, although plantain may remain better quality than ryegrass during hot, dry summers (Table 1).



*Second year chicory sward containing >25% stem. It is recommended that chicory is grazed before this point to maximise yield of high quality leaf*

**Table 1.** Herbage quality of chicory, plantain and pasture.

	DM (%)	Protein (% DM)	Soluble sugars + starch (% DM)	Fibre (% DM)	ME (MJ/kg DM)
Choice chicory	7-15	16-27	10-22	20-28	11.5-13.0
Tonic plantain	9-20	16-28	11-17	23-36	11.0-12.0
Pasture (spring to autumn)	10-30	15-25	8-15	40-55	10.0-12.5

*DM = dry matter; ME = metabolisable energy. Quality may be outside these ranges depending on pasture/crop management.*

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

**Table 2.** Herbage quality of Tonic plantain at different rotation lengths during summer.

	Fibre (% DM)	Digestibility (% DM)
25 cm height (2-3 week rotation)	30	69
35 cm height (3-4 week rotation)	40	66