

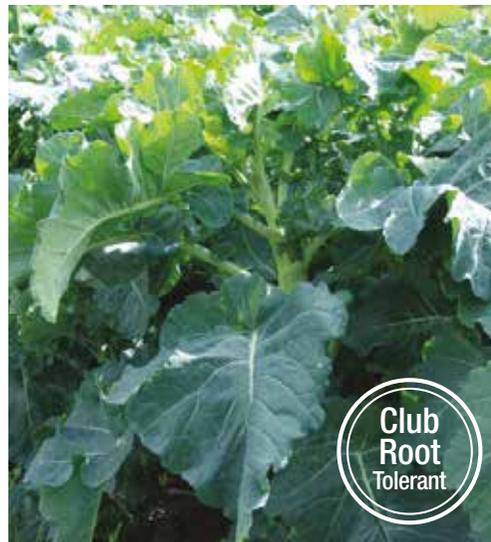
# Kale

**Kale** is a brassica traditionally grown for grazing by cattle in the autumn and winter. It can also be cut and fed to stock 'in house' or as an alternative can be ensiled as big bale kaleage. Kale is very useful as it can extend the grazing season. This crop is best strip grazed to avoid excessive wastage and ensure both leaf and stem are eaten. It is advisable to stagger sowing dates to ensure it does not over-mature. It is very adaptable and can grow on most sites throughout the UK. Kale can also be used as game cover (See page 12).

Sowing rate 2.5 - 7.5kg/ha

Pack size 1 kg

Treatment **Untreated & Cruiser SB Flea Beetle Treatment**



## SOVEREIGN

Club Root Tolerant

Sovereign is a high yielding, medium-tall forage kale with good club root tolerance. In agronomic tests conducted by the SAC in Aberdeen, Sovereign was shown to have good dry matter yields and excellent leaf-to-stem ratio, thereby increasing stock utilisation and animal performance. Successfully tested for winter hardiness and keeping ability, it has the potential to maintain good quality production over a longer usage period.

Sovereign does not produce the large thick stems common to giant kales even when planted at lower density, therefore increasing palatability.



"This is my second year growing Sovereign kale. It is an excellent quality variety with good yield and the cows do well on it so I'm very happy. More of the same for 2017!"

Mr Harry Miller, Great Orcheton, Ivybridge, Devon. October 2016



This is the fourth year of using Sovereign at Manor Farm to out winter dry cows. The ground received 25 tonnes per hectare of farmyard manure plus 60 units of nitrogen. The kale is very winter hardy and proven to have low disease levels with a great leaf to stem ratio."

Manor Farm, Yenston, Somerset. November 2016

### Kale Yield and Feed Quality

Average dry matter yield	8 - 10 tonnes/ha
Average fresh yields	60 - 65 tonnes/ha
Crude protein	16 - 17% fresh, 19 - 25% ensiled
Digestibility value	68D
Dry matter	14 - 16%
Metabolisable energy	10 - 11 MJ/kg DM
Sugars in DM	17%

### GRÜNER ANGELITER



A very high yielding variety with good winter hardiness and excellent feeding quality with fresh yields 15% higher than Caledonian kale and 10% higher than Bittern in German trials. Grüner Angeliter has been the mainstay forage variety of kale in New Zealand for many years and since its introduction to the UK has become equally popular over here. Its high yields make it ideal for utilisation by dairy and beef cattle and as winter feed for sheep.



Grüner Angeliter