

## DoubleTake Triticale – A Cereal Forage for Autumn Sown Multi-Grazing and/or Spring Silage

**DoubleTake** is an autumn/winter/spring planted multi-grazing/silage triticale (a wheat-ryecorn cross) bred by Crop and Food Research, to provide increased autumn, winter and spring production flexibility and reliability.

**DoubleTake** is adaptable to a wide range of uses from an early-sown single species crop to later sown grass/cereal combinations, and for silage and/or grazing options. It is very effective at smothering weeds and has a strong fibrous root system, improving soil structure, useful in organic management situations.

### Definitions

**“Whole crop”** cereal silage – harvested when grain has reached the “cheesy dough” stage, 35-40% DM, producing a high yielding and high **energy** silage.

**“Green chop”** cereal silage – harvested just as heads begin to emerge (late boot stage). This produces high yielding silage with good **protein** and energy levels. (Yield levels are approx. 60% of whole crop, but 50-60 days earlier).

### Typical Uses:

**Grazing/whole crop:** Plant early autumn (March), graze 1-2 times in winter, close in late winter/early spring for whole crop harvest.

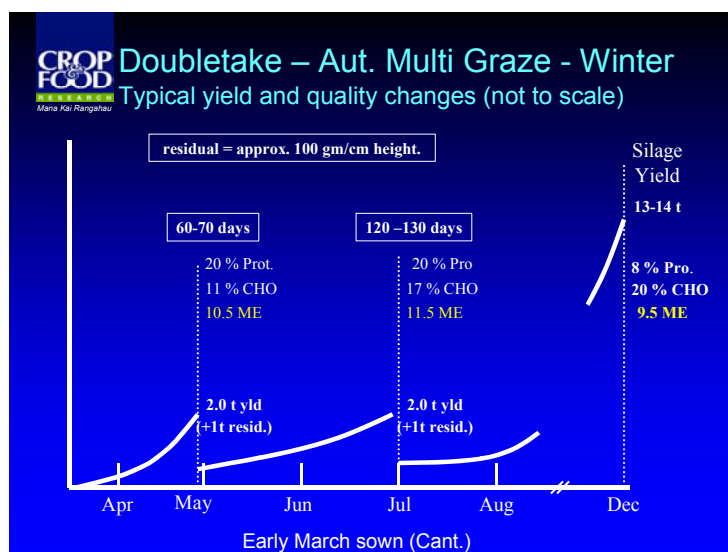
**Between Maize:** Plant ex-maize, green chop harvest prior to maize planting.

**Grazing Only:** Plant early autumn (March), graze 2-3 times over winter.

**Whole Crop Only:** Plant winter/early spring (Jul-Aug), harvest whole crop early summer.

Recent trials at Winchmore, sown mid March, recorded heifer liveweight gains with **DoubleTake** 12% ahead of Tama and 37% ahead of ryecorn. **DoubleTake** has good levels of protein for pre-lambing grazing.

Multi-grazing keeps forage quality at a high level by increasing plant tillering, resulting in higher leaf to stem ratios and reduces stock damage and wastage. Early autumn planting (late Feb/early Mar) will produce more grazing than late autumn planting.



## Establishment

**DoubleTake** is best sown in very late February to early March, but can be sown at anytime in the autumn or winter. Sowing rate should be 130 to 150 kg/ha, highest with large seed size and/or sowing date delays. 150 kg/ha of Cropmaster 15 or equivalent at sowing will achieve increased early DM production and better winter hardiness. **DoubleTake** tillers well and is initially quite flat. **As always, performance will reflect sowing date and paddock fertility with DoubleTake responding well to nitrogen fertiliser and soil moisture.**

## Grazing

**Free-draining soils are ideal for winter multi-grazing.** Wet heavy soils will create pugging and reduce potential regrowth performance. **DoubleTake** has a prostrate growth habit and is more winter active than forage oats, giving increased tiller production and winter growth. Allowing greater grazing management flexibility. Light grazing (from 25-30 cm down to 10 cm) will achieve greater DM production and quality than traditional single bite cereal forages. Back fencing encourages tillering and more vigorous regrowth. Production and regrowth will be influenced by sowing time, winter severity and soil type.

## Spring Management for Silage

**DoubleTake** should be managed like a feed wheat grain crop. During grain fill, high yielding crops increase dry matter at 200-250 kg DM/ha/day, providing they have sufficient green leaf, nutrients and water. **Base inputs on expected yield potential.**

## Grazing

**Crops should be grazed lightly (to 10 cm) in early spring and then shut for silage,** but this will depend on spring feed demand and reserves. Grazing more heavily or later will reduce the DM production of the following silage crop.

## Fertiliser

**Spring nitrogen applications should reflect the expected potential yield.** A 15t DM/ha silage crop needs to be treated similarly to an 8 t/ha feed wheat crop. After grazing, apply at least 50 kg N/ha N (e.g. 205 kg/ha crop 15) to stimulate and retain tillers. At GS 29 (late tillering) a further 75-100 kg N/ha should be applied as a main yield application. GS 37-39 (flag leaf emergence), a further 50-75 kg N/ha could be applied as the final yield application.

## Growth Regulators

**Most crops will need growth regulator applications.** The FAR wheat recommendation of 1.25 l/ha of Cycocel plus 200mls of Moddus at GS 31 (1<sup>st</sup> node) is suitable for **DoubleTake**, but increased rates could be used to prevent lodging in potentially adverse conditions.

## Fungicides

**DoubleTake** is moderately susceptible to a race of stripe rust and a fungal disease called *Cercosporidium graminis*, a weak pathogen on grasses that can also infect ryecorn and oats. *Cercosporidium* symptoms are similar to speckled leaf blotch on wheat, pale lesions developing tiny black spots. Broad spectrum fungicides control this disease.

Stripe rust can appear on the leaves and head around booting or later on grazed crops. It is easily controlled with fungicides. **Apply a half rate with any growth regulator and another full application no later than early flag leaf emergence (GS 39),** to allow for with-holding periods. Strobilurin fungicides generally give less knockdown but longer protection and increased harvest window length by delaying maturity.

## Harvesting

- 1. Whole crop – harvest at the “cheesy dough or putty” stage of grain maturity (35-40% DM).** This gives a good combination of moisture content for fermentation, yield and quality. Earlier harvest will produce lower yield and a sample that will create liquid stack run-off. Later harvest will cause compaction quality problems. Fine chopping to 15-25 mm is recommended. Baleage should be harvested early at close to 35% DM to reduce wrapper damage. Direct chopping is preferred as windrowing can cause moisture loss (up to 1% DM/hr) and soil contamination problems.
- 2. Green chop – harvest at the boot stage (just before the first appearance of seed heads).** This gives the best combination of protein, energy and yield when targeting a balanced supplementary feed. Silage should be wilted to approximately 30% moisture.