

## ULTRASTRIKE<sup>®</sup> PELLETED BRASSICA

Ultrastrike<sup>®</sup> pelleted brassica combines a weight build-up seed coating with the crop protection and plant nutrition additives of the Ultrastrike seed treatment (refer to pages 10 and 11). The pelleted seed coating is currently available for swede and turnip cultivars.

The combination of the weight increase and uniform sizing means Ultrastrike pelleted brassica seed can be sown using a precision drill. The uniform placement of seed produces an evenly distributed crop, allowing bulb yields to be maximised. Field trials have consistently shown that precision planted swede crops out-yield conventionally drilled crops, where plant spacings are not uniform (see trial results on page 15).



*Ultrastrike<sup>®</sup> pelleted brassica seed can be evenly distributed, as shown in this established paddock of Cleancrop<sup>™</sup> bulb turnip in Waikato, allowing crop yield to be maximised.*



### SPLITKOTE PELLETT

The seed pellet is uniform in size (3.25-4.00 mm) and shape, similar to a fodder beet pellet. The pelleting material increases the weight of the seed by approximately 500-700%. The pellet is hard and robust enough to avoid physical damage during transportation and planting.

After sowing, oxygen and moisture from the soil penetrate the seed pellet, initiating germination. As the seed expands, this forces the pellet to split before the seed begins to sprout. The seed pellet does not require any more soil moisture than what would be required to germinate non-pelleted brassica seed. The pellet does not persist in the soil and will break down completely over time.

## WHERE SHOULD ULTRASTRIKE PELLETTED SEED BE USED?

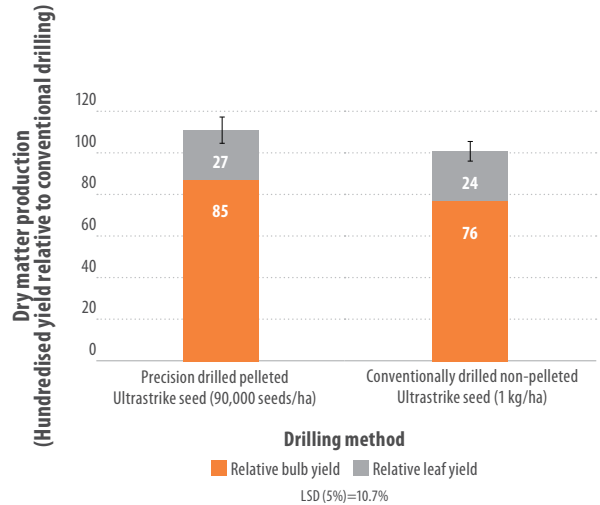
Ultrastrike pelleted seed coating is recommended for the precision planting of bulb crops, including swedes and turnips. The optimal sowing rate for swedes is 90,000 seeds/ha and 140,000 seeds/ha for turnips, planted in 50 cm rows. It is critical that a fine, firm seedbed is prepared prior to precision planting. Livestock should not graze Ultrastrike pelleted seed crops in the first six weeks after sowing.

## TRIAL RESULTS

### BRASSICA CROP YIELD OF PRECISION PLANTED SWEDE SEED IN CANTERBURY

A trial evaluating precision planting of Cleancrop™ Hawkestone pelleted swede (90,000 seeds/ha) compared to conventional sowing (1 kg/ha) was established in Oxford, Canterbury on 17 November 2018. Prior to grazing on 20 May 2019 (184 days after sowing) yield assessments demonstrated precision sown pelleted seed provided a statistically significant 12% increase in yield relative to conventional sowing.

*Trial conducted by PGG Wrightson Seeds*



### BRASSICA CROP YIELD OF PRECISION PLANTED SWEDE SEED IN SOUTHLAND

Ultrastrike<sup>®</sup> pelleted Clutha Gold swede seed was trialled against non-pelleted Ultrastrike Clutha Gold seed in three Southland trials (Wyndham, Tapanui and Ohai) in 2016/17. In these trials, Ultrastrike pelleted and Ultrastrike non-pelleted seed were drilled with a precision planter. The non-pelleted seed was sown using a precision planter set up for drilling filmcote seed.

Ultrastrike pelleted seed was more uniformly distributed with minimal 'missed seeds' or 'double ups', which helped maximise bulb yield. Although not statistically significant, in all three trial sites Ultrastrike pelleted seed demonstrated an average yield increase of 1,433 kgDM/ha (+ 10.5%). The trial results demonstrated the advantage pelleted seed can provide over precision planting non-pelleted seed.

*Trial conducted by PGG Wrightson Seeds*

