

## “Multi-graze feed option”

- High yielding, intermediate-height rape
- Low stem DM% and a plant maturity of 13-14 weeks
- Suitable for summer, autumn and early winter feeding
- Excellent aphid tolerance

SUGGESTED SOWING TIME	SUGGESTED SOWING RATE (kg/ha)	TIME TO FIRST GRAZING	NUMBER OF POTENTIAL GRAZINGS	POTENTIAL YIELD (t DM/ha)
Mid October to early November	3-4 alone, 3 with <b>Relish, Sensation, Tonic</b> or <b>Choice</b> . 1-2 with short term ryegrass	13-14 weeks	1-2	1st grazing 6-9, 11-13 total*
Late January to early March	3-4 alone, 2 with short term ryegrass	13 weeks	1	6-9 depending on sowing date

\*Depending on number of grazings

### Background

**Spitfire** is a modern multi-purpose rape that can be sown in spring for lamb or for cattle finishing or summer dairy grazing, or sown in mid summer to early autumn for autumn and winter grazing. **Spitfire** is an intermediate-height rape with a 90-100 day maturity that has excellent yield at first grazing and typical good regrowth.

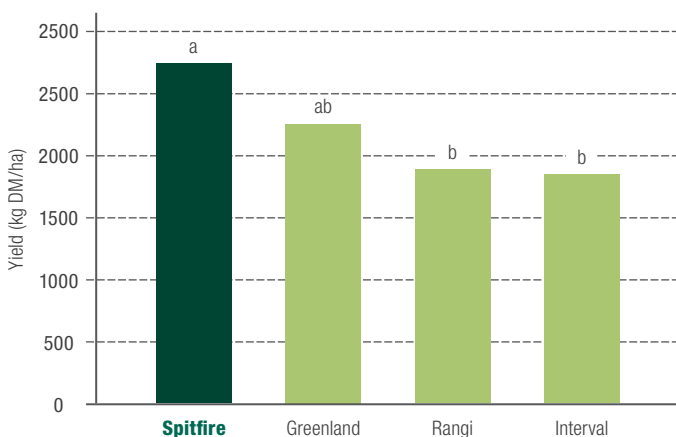
**Spitfire** is characterised by three key features; it has excellent aphid tolerance for a rape and has an unusually low stem drymatter (DM %). This characteristic is so pronounced that you can break the stem of **Spitfire** close to the ground by hand, with most other rapes you would need a pocket knife to do this. Thirdly, when **Spitfire** goes to seed it has a pale yellow flower unlike the bright yellow flowers found on traditional rapes.

If using cattle to graze spring sown **Spitfire**, plan for a single graze as the treading of cattle can reduce regrowth ability. With sheep, plan for at least two grazings, as a third summer grazing may not always occur. If more than two summer grazings are required then Winfred is the better option, especially with cattle.

### Production Data

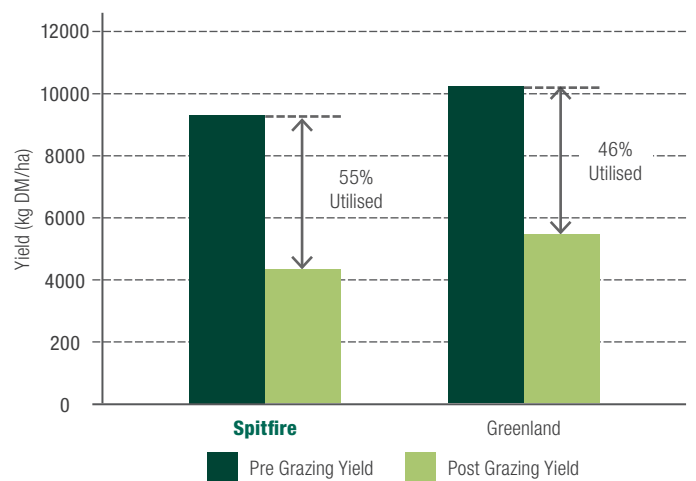
**Figure 1. Rape Regrowth Yield from First Grazing in Hawke’s Bay Trial**

Regrowth 55 Days After 1st Grazing (Trial Sown: 6th October 2010, 1st Harvest 11th January 2011)



Statistical Significance: Letters that are different indicate a statistical difference while the same letter indicates no difference.

**Figure 2. Utilisation of Rape in Canterbury and Hawke’s Bay under Lamb Grazing at Common Allowances**



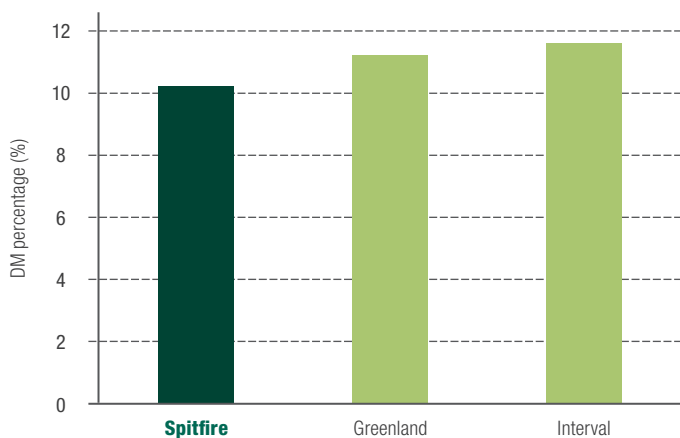
From Judson *et al.*, (2013). Proceedings of the NZ Grasslands Association.

## Additional Data

### Stem Drymatter Percentage

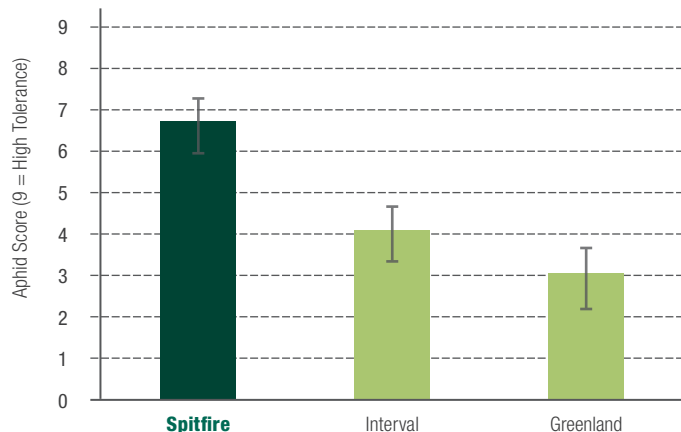
A unique feature of **Spitfire** is that it has a lower stem DM% than the majority of rapes available (Figure 3), this may lead to better utilisation and/or animal performance. Pleasingly, the low DM% does not limit its yield ability or its regrowth potential. However there is some evidence of the soft stems of **Spitfire** breaking off at ground level from treading, with a subsequent reduction in plant population this may reduce yield from regrowth.

**Figure 3. Stem Dry Matter Percentage of Different Rapes at 2007-08 Lincoln Trial**  
Sown 25th November 2007, 1st Harvest 11th January 2008



### Aphid Score

**Figure 4. Aphid Score at Kimihia Research Centre 2010-2011**



**Statistical Significance:** Those cultivars whose error bars do not overlap are significantly different from each other at the 95% confidence level. Those cultivars whose error bars do overlap are not significantly different from each other.

## Key Tips

- Grazing stem to the desired level at first grazing is essential as it will never be at a higher quality or easier to graze than at first grazing
- Graze **Spitfire** down removing the leaf and stem to at least a 30 cm stalk residual, this will optimise animal intake and performance per hectare while ensuring plant survival for future drymatter production
- **Spitfire** can be sown with other species such as **Tonic** plantain, **Relish** red clover and **Asset** Italian ryegrass however the higher the yield potential from the paddock at first grazing the more variable the result will be, e.g. this is very successful where the conditions may lead to a lower yielding rape crop



**Spitfire (left) showing strong plant health and quality compared with another rape (right) under the same management.**

