Triticale: grazing guide

WARATAH Seed Co. Ltd
The Seed Professionals

Dual purpose cereals

Grazing or dual purpose cereals have become a key component of many grazing enterprises, providing autumn and winter feed as well as the opportunity to conserve forage (silage or hay) or recover grain.

Grazing triticale is managed in a similar way to other grazing cereals and is used to fill the autumn/winter feed gap for prime lamb and beef enterprises.

Prime lamb enterprises utilise grazing cereals to effectively fill the autumn-winter feed gap
Photo: Di Holding

Grazing triticale is also suited to the dairy industry. In times of reduced water allocations producers have switched away from sub clover and rye grass pastures, which usually require two to three waterings, to dual purpose cereals, including triticale. These crops can be sown in early autumn and establish quickly, usually with only one irrigation. They can be grazed up to three times before being locked up for silage, hay or grain production.

Winter habit in cereals

All winter cereals can be grazed but only those with winter habit can be sown early and successfully grazed for an extended period during winter, and then managed for grain harvest.

Cereals that express a winter habit require a period of low temperature (cold requirement) during their vegetative stage before they progress through to stem elongation and heading (reproductive stage). This cold requirement is known as vernalisation.

When a cereal with a winter habit, such as Endeavour, is sown in early autumn it remains in the vegetative stage and doesn't run up to head until its cold requirement is met during winter. This makes it well suited to repeated grazing without severely reducing grain production.

Tobruk and Endeavour triticale have a winter habit and are well suited to being grazed when sown early.

When to start grazing

Triticale and other grazing cereals can be grazed from quite an early growth stage—when the root system is strong enough to hold the plant in the ground. Test this by holding the plant between the thumb and forefinger, then pull and twist. If the plant stays in the ground then the crop is ready to graze.

The start of grazing usually coincides with the plants starting to tiller, or about four to six weeks after emergence of the crop, depending on temperature and rainfall.

Stocking rates

Rotational grazing with a high stocking rate (20 t0 40 DSE) is the best method to achieve uniform grazing over the entire paddock. This will help maintain even crop maturity and harvest time. In large paddocks, use either large mobs on the whole paddock, or use temporary electric fencing to split the paddock into a number of grazing blocks and strip graze.

Continuous grazing can result in better animal performance compared to rotational grazing as the best feed on offer will always be selected.

When to stop grazing

Livestock should be removed from the crop once the stem elongation phase begins, or as soon as the first node is detected and Zadoks growth stage 31 (Z31) is reached. As the stems elongate, the developing grain head and flag leaf gets higher above the ground and grazing animals ingest them. As a result, grazing once stem elongation has begun (Z31) will reduce grain yield.

The timing of Z31 will vary depending on variety, sowing time, rainfall and temperature. Crop growth stage needs to be monitored if maximum post-grazing grain recovery is the aim. If grain recovery is not important grazing may continue.

Identifying Z31 or stem elongation

When monitoring the crop you will be looking for the first node. Select the largest, most advanced plants and carefully remove them from the soil. The main stem will be the largest and tallest. There are two methods you can use to detect the first node:

- Either very carefully peel back the leaves on the main stem to expose the node underneath and you will be able to feel the node or swelling with your fingers; or
- Use a sharp blade to split the main stem along its length and you will be able to see the swollen node.

When the main shoot is split and examined or exposed:

- If the tip of the developing ear is 1 cm or more from the base of the stem where the lowest leaves attach to the shoot apex the plant is at Z31.
- If the first node can be seen 1 cm or more above the base of the shoot, and the internode (length of stem between the first node and the second node) above it is *less than 2 cm* the plant is at Z31.
- If the first node can be seen 1 cm or more above the base of the shoot, and the internode (length of stem between the first node and the second node) above it is *greater than 2 cm* the plant is past Z31.

Top-dressing with nitrogen

Grazing cereals require adequate nitrogen nutrition to produce optimum quantities of fodder dry matter and regrow and produce grain.

Grazing triticale crops should be topdressed with nitrogen fertiliser between the first and second grazing to promote rapid growth.

Depending on the soil nitrogen status apply between 50 and 100 kg urea per ha.

Further reading

Cereal growth stages: the link to crop management. GRDC 2008, found at http://www.grdc.com.au/director/events/grdcpublications

Further information
Waratah Seed Co Ltd, 'Avondale', Henty NSW 2658.
To find your closest Waratah Seed Co Ltd member:
Email: info@waratahseeds.com.au or
visit our website: www.waratahseeds.com.au