



Growing Forage Cereals for Green Chop Silage



With correct management, forage cereals can produce significant volumes of high quality dry matter in a short space of time. In such situations, trials indicate some forages can produce up to 30% more dry matter than annual ryegrass during the autumn/winter early-spring period.

Green chop refers to a silage made at an earlier maturity and harvested while the plant is still in a leafy stage, before showing signs of head emergence, or going into the reproductive phase. Referred to as the “boot stage”- this provides the best combination of protein percentage and dry matter yield. Earlier harvest will provide a higher protein percentage but less yield and conversely, a later harvest will yield more dry matter but less protein and quality.

There are some general principles to the growing, management and harvest of forage cereals that apply to either triticale or oats.

Establishment

Autumn sowing can commence from late February onwards. Later sown crops eg late April/May will not have the same yield potential by early spring as crops sown early autumn. Sowing rates differ between oats and triticale due to a differing grain size. Generally oats are sown between 90-120 kg/ha and triticale between 140-160 kg/ha. Lighter rates will allow more plant tillering, heavier rates will provide more early dry matter. A later sowing date will require the heavier rate of figures mentioned.

Broadcasting or roller-drilled crops generally establish less successfully as birds find the grain attractive, therefore seed depth of at least 25 mm, but no more than 50 mm is desirable.

Direct drilling can be successful providing general principles of this method are followed eg slug bait should be used. Test with a wet sack. Target the higher sowing rates and increase early nitrogen rates if direct drilling.

Fertiliser

A soil test will give you the best guide as to your requirements. A starter fertiliser such as DAP or Cropmaster 20 at 200-250 kg/ha at drilling will significantly enhance early growth and plant development. A 68 T dry matter crop will require approximately 100 kgN/ha, either from the bag or soil reserves. The second and final application of N can be applied at late tillering (red band height), bringing the total nitrogen applied to 100 kgN/ha. Low N availability generally produces a lower protein in silage analysis.



Herbicides

If establishment has been successful, weeds are normally suppressed to a level where a herbicide is not required. Where this is not the case, herbicides such as MCPA can be applied after the fourth leaf stage.

Fungicides

Some forage cereals can suffer from fungal leaf diseases. This is more common through the late spring and summer months, particularly in warm, lush conditions. Crops should be monitored closely in these situations and fungicides applied if needed to maintain green leaf and subsequent silage quality – note withholding periods.

Seed Treatment

Most autumn sown cereals are sown as bare seed, but in areas with a history or a known insect problem such as Argentine stem weevil, an insecticide treatment such as Gaucho should be considered.

Harvest

Green chop silage requires a wilting process similar to spring grass silage. Ideally, the crop should be wilted down to around 30% dry matter to ensure ideal ensiling. Fine chop and seal well in a pit or stack, or round bale and wrap. Inoculants are beneficial in aiding curing and resultant quality.