Grazing intervals Page 2 | **Grassland app decision tree** Page 3 | **Pioneer Brand 1188** Page 5

Grassland and Maize Agronomy Update

CORTEVA™ agriscience

May 2020



Welcome to the Corteva Agriscience™ Grassland and Maize Agronomy Update.

These regular technical notes are a seasonal commentary to help those interested in improving grassland and forage productivity on dairy, beef, sheep and equestrian enterprises.

Don't forget to claim your 2 CPD points for subscribing to this newsletter. If you are not a subscriber and want to sign up then please go to: **https://www.corteva.co.uk/contact-us/sign-up.html** and complete your details.

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Contents

#CortevaForage Twitter Competition - first winners announced

Congratulations to Bryan, Scott, Sally and Tom, who posted a picture of a dock infestation in last month's Twitter competition to win themselves a Corteva welly boot bag!

This Friday (15th May), we'll be running the next competition on our Twitter page, @CortevaForage.

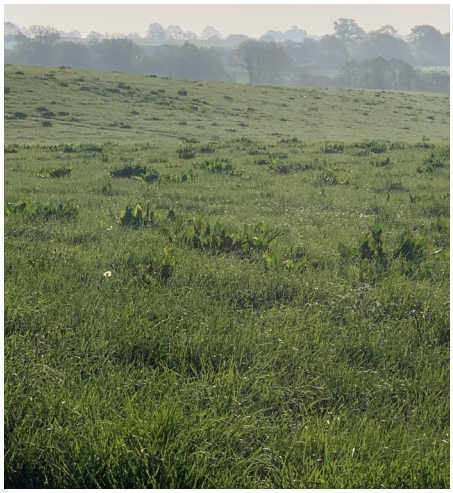
To win a Corteva welly boot bag, comment on our competition post with a photo of a thistle infested grass field. Everyone who enters will win a boot bag!

Go to our page and look for the pinned post, that'll be live from this weekend.

Dock control after first-cut silage

Docks replace grass in a field; a 10% infestation means 10% less silage in the clamp. Spraying docks two to three weeks after first-cut is an excellent opportunity to get good levels of control. If using a spray contractor, make sure they are booked in to achieve this timing, as by then, dock regrowth should then be at the ideal stage for control. This ideal stage means docks, with fresh green leaves all at a similar growth stage (dinner-plate sized), which makes them perfect for taking up a translocated herbicide. Treating at this time also means there will be less grass too, making it easier to hit the target weed plants.

Ideally apply Doxstar® Pro at least three weeks before second cut silage is made, so that the translocated herbicide has time to get right down into the roots to give thorough long-term control, but also to minimise the amount of weed biomass that will be cut and put into the silage clamp. This will help to minimise the reduction in silage quality too. Where docks are present, weed control is a small cost relative to the gain in extra grass and silage produced. If the interval between spraying and cutting is reduced e.g. around fourteen days, then control is unlikely to be affected, but weed biomass going into the silage clamp will be increased.



Grazing intervals and what they mean

Herbicides used at label rates and sprayed on grass are not generally toxic to livestock. However, most herbicides have grazing and feeding restrictions stated on the label that limit the use of the area for livestock feed for a specified time after treatment. All Corteva grassland herbicides have a grazing interval of just seven days, which is much shorter than for most other grassland herbicides.

Livestock that consume feed in areas treated with such herbicides will probably not become ill from ingesting the chemicals, but they could retain them in their systems. Attention must be given to grazing restrictions outlined on the product label, as these will prevent residues that could prevent the meat or milk from livestock from being marketed.

Certain unpalatable or poisonous plants, such as ragwort, treated with certain herbicides may become more palatable to livestock. Be certain that livestock are kept out of areas where poisonous plants have been sprayed until the plants have completely dried up.

Benefits of using a spray contractor

* Fully qualified e.g. PA1, PA2 and PA6 certification and often others too
* Experienced at spraying grassland and managing Aquatic Buffer Zone restrictions
* Appropriate, modern and well-calibrated machinery
* The farmer can get on with other jobs whilst the contractor does the spraying
* Contractors can supply product in some cases, so the farmer does not need to have storage facilities
* Contractor may take away and dispose of empty containers as part of their service

Forefront® T amendment notice

CRD has extended the notice of approval of Forefront® T (MAPP no. 15568).

The new expiry dates are:

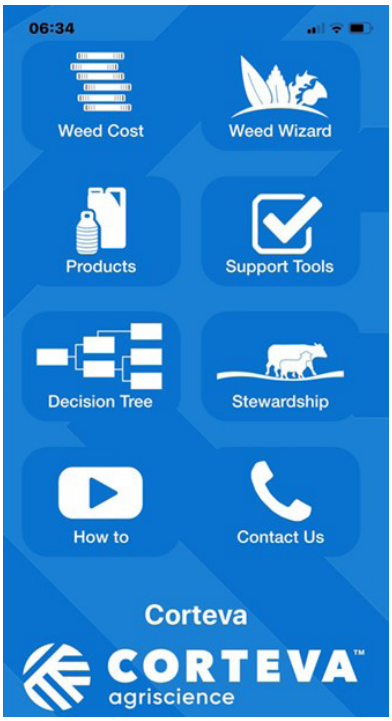
- **31 October 2020** for sale and distribution of existing stocks
- **31 October 2021** for the disposal, storage and use of existing stocks

A further extension is being worked on and we will update you when we know more.

Grassland App Decision Tree

The Corteva Grassland App features a decision tree which enables users to find the best solution for grassland weeds in different situations, whether it is a new ley or established grass, for grazing or cutting fields, or for boom or hand-held application.

We have produced a graphic to identify the best product to use in any particular situation:



Beyond the label weeds with Leystar®

Cleavers, mayweeds, creeping thistle, charlock and volunteer oilseed rape are all label weeds listed for Leystar® in new leys and maize. However, Leystar will also give good control of chickweed, hemp-nettle, shepherd's purse, corn chamomile and corn marigold in these crops.

Optimal size of key weeds controlled by Leystar in maize and new sown leys are listed in the table below:

Weed	Size	Weed	Size
Charlock	1 true leaf	Creeping thistle	1 true leaf
Chickweed	1 true leaf	Hemp-nettle	4 true leaves
Cleavers	1 true leaf	Mayweeds	1 true leaf
Corn chamomile	6 true leaves	Shepherd's purse	4 true leaves
Corn Marigold	6 true leaves	Volunteer oilseed rape	2 true leaves

There is also an excellent feature in the Grassland APP, which can give you this detail on all our products. To find it, select Products on the home screen and then the Weeds controlled (see the screen shot to the left).

For these additional weeds, the information we give should not constitute a recommendation but an indication of what level of control might be achieved. Call our Hotline if you want more information.

Forefront® T on bracken – what will it do?

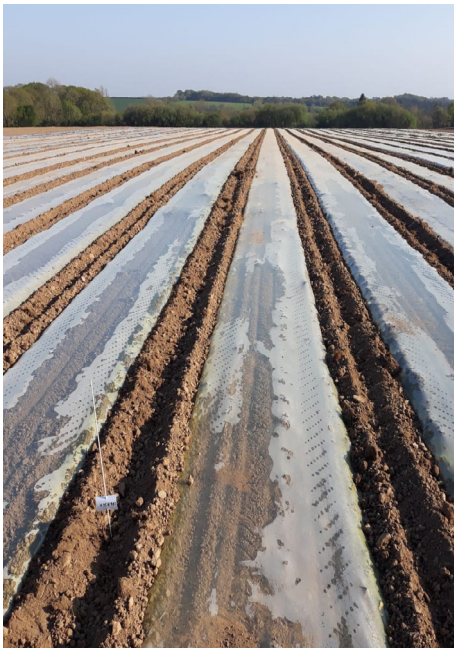
Bracken can encroach into grazing land from field edges. A Corteva trial showed that Forefront® T gave useful suppression of bracken when used on grazing ground used by cattle and sheep. In the trial, the best effect was a treatment to bracken once it had grown beyond a metre in height. When assessed the following year the average level of control was 75% but there was some variability within the replicated plots.

If you have any of your own observations on the effect of our products on bracken then please do call our Hotline as we would be interested to hear.

Bracken treated with Forefront® T should not be used for bedding or composting.

Maize PACTS trials drilling

With good weather in our favour, we have been busy drilling the Pioneer Accurate Crop Testing System trials, with some maize varieites even starting to show.



Pioneer Brand 1188

A Key Advantage of Pioneer multiple species/ multiple strain grass silage inoculant Pioneer Brand 1188 over other grass inoculants.

The quality of grass silage is determined by numerous factors including:

* Grass quality
* Weather preceding and during harvest
* Fertiliser application rates and timings
* Harvesting speed and clamp management practices
* Feed –out practices
* Additive used

The ability of bacterial strains to grow and dominate the fermentation of any grass silage depends on:

* The quantity and types of water soluble carbohydrates available (i.e. the different types of sugar)
* The osmotic pressure which is a consequence of the dry matter %
* The pH levels as the fermentation proceeds
* The combination of bacterial strains and whether sufficient numbers have been applied

The ability of Pioneer Brand 1188 to utilise the biggest possible range of sugar types

The types of sugars (e.g. maltose, sucrose, cellobiose etc.) within grass plants vary widely depending on the proportion of different grass species within a ley i.e. perennials ryegrasses, timothy, clovers etc. One of the purposes of grass silage inoculants is to convert sugars to lactic acid more efficiently than would otherwise happen otherwise. Different inoculant products have a varying capability to utilise the different types of sugars found in grass. Pioneer Brand 1188 probably has the widest capability of any, see Table 1, which goes towards making it one of the most effective grass silage inoculants that can be applied to grass in the UK.

Table 1. Range of sugar types utilised by Pioneer Brand 1188 versus a leading single strain competitor product (source; Pioneer Brand Research).

SUGARS	L-arabinose	Ribose	D-galactose	D-glucose	D-fructose	D-mannose	L-rhamnose	D-mannitol	D-sorbitol	1.0 methyl-alpha-D-mannoside	1.0 methyl-alpha-D-glucoside	N-acetyl-glucosamine	Amygdalin	Arbutin	Esculin	Salicin	D-cellobiose	D-maltose	Lactose	Melibiose	Saccharose	Trehalose	Melezitose	Raffinose	Gentiobiose	D-turanose	Gluconate
PIONEER BRAND 1188	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Leading Competitor				X	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X		X		

Ask a question

Q What can I use to control Umbellifers (Apiaceae), such as cow parsley and hogweed in grassland?

A Although not label weeds, Grazon® Pro should give useful control of Umbelliferous weeds. If weeds have started to flower, then top them to remove the flowering stems, and spray the regrowth two to three weeks later.

Q Thistlex® has an Extension of Authorisation for Minor Use (EAMU) for use on game cover crops including kale. Can Thistlex also be used on rape-kale hybrid fodder crops?

A The EAMU only covers use in crops grown for game cover, which are classed by CRD as non-edible crops. The EAMU does not cover use in crops used for livestock consumption or livestock grazing.

Show dates.

Many shows have been cancelled due to the current Covid-19 situation. Corteva hopes to be back out and about later in the season, talking to farmers and agronomists and answering questions on maize hybrids, silage inoculants and how to tackle weed problems in their fields.

July 8th	**NSA Scotsheep** https://www.nationalsheep.org.uk/nsa-scotland/scotsheep/	Over Finlarg, Tealing, Dundee, DD4 0QE
October 18th	**NSA Sheep** https://www.nationalsheep.org.uk/events/diary/21750/nsa-sheep-2020/	Three Counties Showground, Malvern WR13 6NW

Earn BASIS Points.

2 BASIS points (1 crop protection and 1 personal development) will be awarded to those subscribing to Grassland and Maize Agronomy Update.

Please include course name 'Grassland Agronomy Update' and ref number: CP/84141/1920/g, on your training record and send to:

linda@basis-reg.co.uk

These details are valid until 31st May 2020.

For regular updates on agronomic issues, find us on Twitter: https://twitter.com/CortevaForage and Facebook: facebook.com/cortevauk

For further information please contact the Corteva Agriscience technical hotline on 0800 689 8899 or UKHotline@corteva.com or go to www.corteva.co.uk/grassland or download the Corteva grassland app available on apple or android.

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Discover more at corteva.co.uk