

Grassland and Maize Agronomy Update



MAY 2022



In this edition

- Product availability this Spring
- Product Focus - Leystar
- Spring Weed Control in New Leys
- Treat ragwort at the rosette stage
- Sycamore seedlings in equine paddocks
- Silage Update and Advice
- Why control buttercups?
- Reduce maize N applications by 20% and maintain yield
- Cost of nitrogen – don't feed the weeds
- Grassland Clopyralid labels.

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. You can claim two CPD points for subscribing to this email update.

Product availability this Spring.

We don't expect any significant supply shortfalls this Spring.

At most there may be minor incidents of reduced supply of one or two weeks on a small number of products in the height of the season but these will be temporary.

We have a wide window of application in grassland and the advantage of being able to top perennial weeds and spraying regrowth if optimal timings are missed.

If circumstances change then we will keep you informed.

Spot treatment of nettles.



Patches of common nettle are starting to grow, so between now and June is a good time to spot treat them.

Grazon® Pro is the market leading weed control solution for use via knapsack on unwanted perennial weeds found in grassland such

as nettles. It translocates well into the plant's roots meaning it gives lasting control and lessens the need for repeat spraying. It comes in a 1 litre pack which means 16 fills of a 10 litre knapsack. Grazon Pro is very safe to grass and has a short stock withdrawal period of just 7 days.



Product Focus.

Leystar[®]
HERBICIDE

With approval for use in new sown leys, established grassland, grass seed crops, forage maize, cereals, and cereals undersown with grass, **Leystar[®]** is a versatile product for the livestock / mixed farmer.

With three actives delivering effective translocation and a wide spectrum of weed control, Leystar will control

a range of key broad-leaved weeds in the above crops. Where high populations of fat-hen are present, do not rely on Leystar for control of this weed.

Leystar can be applied at 1.0 L/ha to new sown leys, grass for seed, maize, cereals and cereals undersown with grass, and at 2L/ha to established grassland.

Change to the Leystar aquatic buffer zone.

The previously given 5m aquatic buffer zone for Leystar[®] was incorrect, as when using at 1L/ha there should be no buffer zone. CRD was informed and a new authorisation for Leystar has been issued.

The Leystar product label will be updated to reflect this change, as the 5m aquatic buffer zone is only required for established grassland @ 2L/ha, while the current text wrongly suggests that it applies to all uses. When Leystar is used on maize and newly sown leys @ 1.0L/ha an aquatic buffer zone is not required as it doesn't fall under any LERAP scheme, irrespective of whether a watercourse has water or not.

Users can apply Leystar with the revised aquatic buffer zone requirement immediately as this reflects the current product authorisation, so it is permitted to use in this manner even if the printed label says differently.

Spring Weed Control in New Leys.

Reseeding grassland is a major investment, so it is important to nurture the new ley whilst it is establishing, and early weed control is a key part of this.

Leystar[®] and Envy[®] are essential herbicides for use in new sown leys. They both give broad-spectrum weed control and are very safe to grass. It is more economical and effective to treat weeds when they are small, rather than wait for them to establish and treat when they are larger.

Where there is a wide range of weeds growing including thistles and spring germinating polygonums, treating with Leystar would be a better option as it has activity on a broader

spectrum of spring germinating weeds. Where significant dock populations were present at the time of reseeded, and regeneration from dock root fragments is likely, treating with Envy is the better option, as this can be sprayed at a robust dose rate of 1.5litres/ha.

Both **Envy[®]** and Leystar are very safe to grass from the 3-leaf stage, but will kill clover. If having clover in the mixture is important, spray out the weeds first and stitch clover back in after three months.

Envy[®]
HERBICIDE

Treat ragwort at the rosette stage.



Toxic alkaloid compounds in common ragwort are poisonous to most livestock. Inside the ragwort plant, the alkaloid occurs in a non-toxic form, but after the plant has been eaten, it is first changed by the intestines and then broken down by the liver.

It is these breakdown products formed in the liver which are toxic. Livestock will not usually eat ragwort while it is growing, but when it has been cut and has wilted it becomes much more attractive and palatable. Cutting

ragwort encourages new and vigorous regrowth and the dying plants pose a great danger to livestock.

The rosette stage is the best time to control ragwort. If it is left to grow, flower and set seed, ragwort can spread quickly and become difficult to control. One of the best reasons to treat early is that smaller ragwort plants decay much more rapidly, allowing a quicker return of livestock, whereas spraying later in the year means livestock could be excluded for many weeks whilst waiting for the larger ragwort plants to die and break down. Grazing animals should be excluded from treated areas until any ragwort has completely recovered or died and there is no visible sign of the dead weed.

Forefront® T applied to actively growing ragwort when it is at the rosette stage gives the best long-term control. Due to the nature of the biennial growth habit of ragwort, it is difficult to treat all plants at the ideal time, so a follow-up treatment may be necessary. Treating at the time of stem elongation of those plants in the seed production stage of the life cycle should be avoided.

Remember that Forefront T is not permitted for use on grassland that will be grazed by animals other than cattle or sheep, nor for grass which will be cut for forage, due to manure stewardship requirements.



Springtime typically sees flushes of sycamore seedlings in pony paddocks. Some sycamore seedlings contain the toxin, hypoglycin A, which when eaten by horses or ponies, can cause the sometimes-fatal condition equine atypical myopathy.

Sycamore is not a label weed for Corteva's grassland herbicides, but

spot treatment with Grazon® Pro or a boom spray with **Doxstar® Pro** or the **Pas®-Tor® Agronomy Pack** will give control of sycamore seedlings. For paddock owners who do not hold NPTC sprayer qualifications, then the amateur product SBK brushwood killer will give good control, alternatively, they can employ a spray contractor to treat paddocks for them with a professional use product.

Horse owners need to be aware of grazing intervals, as they may need to leave longer than seven days if poisonous weeds are present.

*Any recommendation for off-label or anecdotal control is only indicative and should not be considered a recommendation for use on the part of Corteva Agriscience. The user assumes full responsibility for use on these weeds.

Maize spring frost damage and soil temperature timings around seeding.

Following a cold snap, this spring, early season frost damage in maize is a very real problem.

When planning this year's maize crop and drilling we always recommend that:

- Maize should not be planted before the soil temperature reaches 10°C and is rising.
- Maize plants are susceptible to spring frost but although it can cause severe scorch it rarely kills the plant, as shown in figure 1.
- Most late spring frosts occur an hour or so before dawn and have usually gone within a few hours of sunrise. This means that a spring frost is unlikely to penetrate below the soil surface causing significant damage to the plant.
- In a typical UK spring the growing point of maize does not come above ground level for 18 days after the first leaf has emerged. As long as the growing point is not killed, the crop should recover. As an example, maize planted on 25th April will probably emerge 7-10 days later and the growing point a further 18 days after this, usually around late May. Figure 2 shows the damage caused above ground level in the plant.
- Dips and hollows in fields can cause localised problems as cold air can accumulate in these pockets. These frost hollows do not need to be very deep but can cause visible damage to the crop, as shown in fig 3.
- Do not confuse maize that goes purple following a frost with frost damage.



Fig. 1. Maize leaf scorched by frost.

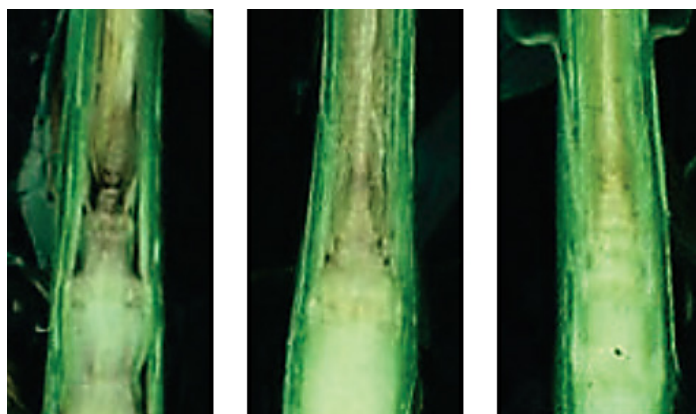


Fig. 2. Damage to the growing point.



Fig. 3. Frost hollow.

Silage Update and Advice.

With the high price of bought in feed and fertiliser, producing high quantities of top-quality feed has never been more important.

Try to avoid late applications of slurry either before first cut or on aftermaths. Try not to spread once the leaves have started to bend over. Nitrogen uptake from slurry is less predictable and the risk of

clostridial contamination is increased. Both will have an adverse effect on fermentation, increasing dry matter losses and reducing palatability.

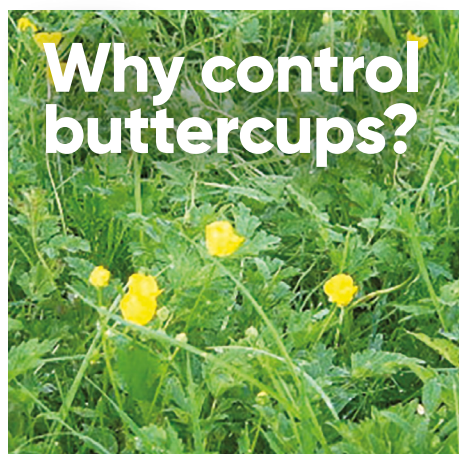
Aim for 28-35 % dm but do not wilt for more than 24 hours. Dry matter losses in silage still average 20%. With lower dm grass the largest area of loss is inefficient fermentation. As the dry matter increases the losses are more from heating. The Pioneer inoculant range will reduce dm losses by 5%. It

is important to understand the role of different inoculants and to choose the correct mode of action for the dry matter of the crop.

1188 Lower dry matter where fermentation is the largest challenge.

11A44 Higher dry matter where heating is the largest challenge.

Combination products for the mid-range to reduce both fermentation and heating losses i.e., **11G22**.



Livestock farmers may want to control buttercups for animal health reasons as they can cause contact dermatitis and stomach irritation.

Often the trigger for spraying a field of buttercups is once the farmer has noticed that the field has turned yellow as the buttercups flower. Best control of buttercups is achieved if they are sprayed before flowering. However, replicated Corteva Agriscience trials showed that good

levels of control of creeping buttercup can still be obtained during flowering and after flowering. Whilst control can be around 10% less than a pre-flowering application, this is still likely to be in excess of 80%. Although our grassland herbicides are not harmful to insects, if spraying during flowering, follow good agricultural practice by timing sprays for early morning or late evening when pollinators are less likely to be active. For best overall control, pre- or post-flowering applications of Envy® at 2.0 L/ha is preferred.

Reduce maize N applications by 20% and maintain yield.

The high cost of nitrogen fertiliser and tight supply is forcing growers to look at ways of reducing nitrogen rates and ensuring the maximum return from every kilogram of artificial nitrogen-based fertiliser that is applied.

This maize planting season, using a nitrogen stabiliser could stabilise enough N to allow growers to reduce applications by up to 20%, whilst still maintaining yields.



"The use of nitrogen stabilisers in the UK is growing, but is still reasonably limited, and this year the unprecedented high fertiliser prices and pressure on demand

is bringing their use to the fore, and there really isn't a better time to add them to your fertiliser programme," explains Corteva's Colin Bowers.

"Nitrogen stabilisers slow down the conversion of ammonium to nitrate, preventing nitrogen loss through leaching and denitrification, keeping more nitrogen in the rooting zone for longer, resulting in greater yield potential," says Colin.

Trials using **Instinct™** have shown a reduction in leaching of around 50%, and a reduction in denitrification through greenhouse gases of approximately 45%. Nitrogen is kept in the soil for longer, and for a maize crop, this has a significant impact on yields.

Instinct is usually applied through

a crop sprayer, either alone or with herbicides or UAN, but it can also be added to slurry spread or digestate and requires a single rate of 1.7l/ha. The most important element of use is ensuring good soil contact, so it should be applied before ploughing or when rain is due to ensure good incorporation.

Now is the time to take action to get the best out of your maize this year with reduced inputs.

[Read more about Instinct here.](#)

Instinct™

Optinyte™ technology

NITROGEN STABILIZER

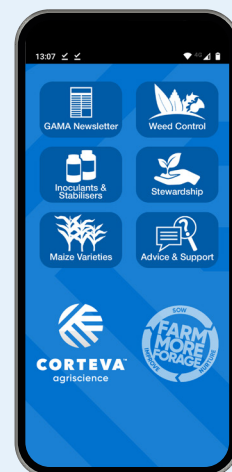
Farm More Forage App and Weed Wizard.

The Weed Wizard feature can be located under the weed control section of the app.



Use this feature to help identify many of the weed species typically found in grassland. We are aiming to expand the photo library to show the weeds at key stages – seedling, pre-flowering and flowering. The image library is being built at present.

If you have any suitable images we could include please submit your photos to ukhotline@corveva.com





Cost of nitrogen – don't feed the weeds.

With the cost of artificial nitrogen fertiliser at an all-time high, grassland weed control is more important than ever as farmers want to maximise the feeding value of the crops they grow, and not waste precious nitrogen 'feeding the weeds'.

Weeds will compete with sown grass species for uptake of applied nitrogen fertiliser. The presence of even low levels of some weeds in grassland will drastically reduce grass production, e.g. a mere 10% dock infestation can reduce grass yield by 10%.

Grassland herbicides containing Clopyralid.

Be aware that labels for ALL authorisations of products containing clopyralid with a label use on grassland will soon have additional restrictions.

There is a growing role for manure to part replace peat in some manufactured composts, and more home-grown vegetable production drawing on local livestock / equestrian businesses for manure. The use of mulches and not digging in manures is practiced by a growing number of gardeners which can lead to longer break-down times of plant material and any clopyralid residues if present.

As a result of this we are advising that clopyralid containing products (**Thistlex**[®], Pas-Tor Agronomy Pack or Leystar) should not be used on grass which will be cut for animal feed (i.e. fresh cut grass, silage, hay and

haylage), fodder or bedding nor for composting or mulching within one year of treatment, and should not be used on grassland grazed by horses and ponies. This will significantly reduce the likelihood of clopyralid residues in manure from having a consequence where its use may end up on sensitive crops.

Labels for clopyralid containing products used on grassland will be updated to reflect these changes in use. Labels will change from 1st January 2023, to prevent issues occurring in the chain from hay to manure to gardens, to ensure gardeners don't have issues with herbicide residues affecting sensitive vegetable crops.

More details can be found in a dedicated topic sheet in our FarmMoreForage App.

Forefront[®] T

HERBICIDE

Stewardship training reminder.

The Forefront T online training module is an easy-to-use online course for:

- **BASIS Crop Protection Certificated Agronomists (Full or Grassland) who already advise on the use of this product**
- **BASIS Crop Protection Certificated Agronomists who are interested in advising on Forefront T use for the first time**

The course offers an opportunity to learn/refresh knowledge, and to earn 2 BASIS Points at a convenient time. Anyone who completed the course and claimed BASIS Points in the 2020/21 points year can re-take the course and claim again for the 2021/22 points year.

The course will take experienced Forefront T Advisors up to 35 minutes to complete. Those wishing to become Forefront T Advisors for the first time should allow an additional 10-15 minutes.

If you wish to take our Forefront T Stewardship Course for Advisors, please contact

ukhotline@corteva.com

Events.

The forage team from Corteva Agriscience are delighted to be back out and about at shows and events this year, talking to farmers and agronomists and answering questions on maize hybrids, silage inoculants and how to tackle weed problems in their fields. Catch-up with the team next at:

- **Royal Welsh Grassland Event – 12th May 2022**
royalwelshgrasslandevent.com/
- **Scotgrass – 18th May 2022** scotgrass.co.uk/
- **NSA Scotsheep – 1st June 2022**
nationalsheep.org.uk/nsa-scotland/scotsheep/



Ask a question.

- Q.** Is Thistlex available this year?
- A.** Like many companies we are being affected by global and now local logistics issues. However, Thistlex stocks will be available in time for the thistle control season.
- Q.** Does Envy give good control of all buttercup species?
- A.** Envy will provide good control for both meadow and creeping buttercup. There is less information on bulbous buttercup as this species is less common, but control is slightly less on this species.

BASIS Points.

2 BASIS points (1 crop protection and 1 personal development) will be awarded to those subscribing to Grassland Agronomy and Maize Agronomy Update. Please include course name 'Grassland Agronomy Update' and ref number: CP/11459/2122/g, on the training record and send to cpd@basis-reg.co.uk These details are valid until 31 May 2022.



We're here to help you Corteva's Technical Services Team

For technical advice and support, contact the technical hotline or your local Corteva Area Manager.



Georgina Clayton



Nicola Perry

Technical hotline: **0800 689 8899** Email: ukhotline@corteva.com
or visit: www.corteva.co.uk/grassland or download the Farm More Forage app available on apple or android. For regular updates on agronomic issues, find us on [Facebook](#) and [Twitter](#) or search for [@CortevaUK](#) on social media. Orders: custserv@corteva.com
General enquiries: 01462 457272 Email: CortevaUK@corteva.com You can also visit [our website](#) for additional contact numbers.



USE PLANT PROTECTION PRODUCTS SAFELY. Always read the label and product information before use. For further information including warning phrases and symbols refer to label.

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© 2022 Corteva. Doxstar® Pro contains fluroxypyr and triclopyr. Envy® contains fluroxypyr and florasulam, Forefront® T contains aminopyralid and triclopyr, Grazon® Pro contains clopyralid and triclopyr, Leystar® contains fluroxypyr, clopyralid and florasulam, Pas®-Tor® Agronomy Pack contains clopyralid, fluroxypyr and triclopyr, Instinct™ contains nitrapyrin, Thistlex® contains clopyralid and triclopyr.