Grassland and Maize Agronomy Update



March 2021



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

Welcome to the update for the 2021 grassland and maize season.

Give weeds a

break

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New forage

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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.

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New forage app

We are launching a new and improved Forage App for Advisors and replacing the current Grassland App. All BASIS qualified advisors who are currently registered for the Grassland App will receive an exclusive email invitation to register for the new Forage App.

The new app covers all our Forage solutions

- Grassland & Maize herbicides
- Silage inoculants
- Maize hybrids
- Stewardship

You will need to delete the old grassland app and follow the link to download the new app, which will retain all the data in the Forefront T Stewardship Record Management Tool. To retain this information, you will need to use the same email address to log in and register to use the new app.



Planning Dock Treatments Ahead of First Cut Silage

Most grassland farmers have a target date for first cut silage, but they may not have a similar date in mind for an early season dock spray. Farmers should spray dock infestations in silage leys in April, three to four weeks before the mower goes in. Reasons for controlling docks before the 1st silage cut include:

 Docks are usually healthy and showing rapid growth, so translocation of herbicides is optimised

• Grass is better able to recolonise small bare patches following weed removal at the start of the growing season

• Extra grass yield can be achieved for the whole growing season

• Grass silage without weeds will produce better quality silage than grass

with weeds present

If a spray contractor is used, a date should be booked in to avoid missing the ideal spray opportunity ahead of silagemaking.

Docks have only 60-65% of the feed value of grass and can restrict silage fermentation, leading to lower dry matter intakes.

It can be tempting to spray docks when they are too small. They may be healthy and actively growing, but in established grass they are most likely growing from established roots. It is important to get enough herbicide onto the leaves in order to kill the roots. This can't be achieved if the docks are too small. The ideal time to spray docks with an effective translocated product such as <u>Doxstar® Pro</u>, is when the plants are actively growing, the size of a dinner-plate (approx. 20cm across) and before they begin the flowering process. Spraying three weeks before cutting allows the spray to reach down to the roots to kill the plant and for the leaves to decay ahead of the silage cut, meaning that they won't be taken into the clamp causing a reduction in silage quality. Spraying early in the season also means docks are likely to be at the same stage of growth, making it easier to treat them effectively.

Apply Doxstar Pro at 2 litres/ha in at least 300 litres of water, or up to 400 litres of water if dock numbers are high or the grass sward is particularly dense. Water volume is very important to achieve good coverage of the weeds. It is very tempting to reduce water rates, but this is likely to result in shorter term dock control. If the water rate is too low, the chemical may scorch the weed leaf and this will potentially reduce or even stop the uptake of the chemical into the leaf, which means it will never get to the roots resulting in top-kill only.

Adjuvants in Grassland

Adjuvants need to be approved by CRD, but only need to prove safety and not efficacy. In grassland, the edible part of the crop is constantly present, therefore residue studies are required if an adjuvant is to be used with a herbicide at full rate. Without these studies, the rate of herbicide is limited to 50% (half rate) when used in conjunction with an adjuvant. Corteva grassland herbicides are formulated so that no additional adjuvants are required, and Corteva do not support the use of grassland herbicides at half rate.

Weed Emergence in Grassland

Month	Period	Chickweed	Dandelions	Buttercups	Docks	Thistles	Nettles	Ragwort	New sown leys
March	Early								
	Mid								
	Late								
April	Early								
	Mid								
	Late								
May	Early								
	Mid								
	Late								
June	Early								
	Mid								
	Late								
July	Early								
	Mid								
	Late								
August	Early								
	Mid								
	Late								
September	Early								
	Mid								
	Late								
October	Early								
	Mid								
	Late								

Choose <u>Envy®</u> for Chickweed Control

At this time of year, chickweed can be very problematic in autumn-sown leys which were untreated prior to the winter. Envy is a perfect solution to this problem as it can be used on common chickweed and mouse-ear.

The combination of fluroxypyr and florasulam allows Envy to work well at low temperatures o where there are still large fluctuations between day and nnighttime temperatures, this means treatment with Envy will be more effective than straight fluroxypyr. Depending on weed size and density, Envy can be applied at between 1.0 and 1.5L/ha in 200L water.

Envy is very safe to grass and has a stock exclusion period of just seven days. It will kill clover, so where there is a heavy population of chickweed, spray the ley and re-introduce the clover 12 weeks later.

Forefront[®] T Stewardship online training

Our <u>Forefront T</u> online training module is an easy-to-use online course and has recently been updated.

The Learning Objectives of this course are:

To improve Forefront T product knowledge

To understand the benefits of the Forefront T Stewardship programme

To understand the Importance of Manure Management and Following Crops

To gain knowledge about using the Forefront T Stewardship Records Management Tool in the Corteva Forage App for Advisors To enable Advisors to meet the standard required for Forefront T Advisor Certification

It is ideal 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 2019/20 points year can retake the course and claim again for the 2020/21 points year. The course will take experienced Forefront T Advisors up to 45 minutes to complete. Those wishing to become Forefront T Advisors for the first time should allow an additional 15 minutes.

Anyone who has not received an invite already can email ukhotline@corteva.com and ask to be added to the course.

Two new online training courses on weed control in new leys, and weed control in established grassland are planned for 2021.

Give Weeds a Break!

These breaks are usually referred to on product labels as "intervals". They include cutting intervals, rolling intervals, harrowing intervals and grazing intervals.

Cutting, rolling and harrowing intervals are intended to give weeds a chance to recover from the physical damage caused to them by these field operations, so that they are growing actively at the time of application of the herbicide treatment.

Cutting intervals are advisory and typically vary between 21 and 28 days. This is the period where by the maximum translocation of the product has occurred ensuring optimal root kill. It also allows time for weed biomass to decay to reduce the amount that might be cut post-treatment and then put into the silage clamp, for example.

The minimum cutting interval after spraying should not be less than the interval specified for grazing. If you do cut earlier than 21-28 days, the final levels of control could be less than those indicated by the product label and the amount of biomass cut and put into the silage clamp will be increased.

Grazing intervals have a 2-fold purpose. Firstly, the interval is to ensure that the animals don't graze the freshly sprayed weeds and secondly, if the animals come back into the field early, they will potentially cause physical damage to the weeds and this will hamper the translocation process.

Timelines for post-spraying grazing intervals are statutory and must be abided by. Animals must be excluded from fields for the period specified on the label. This period is determined by residue studies and decline curves. Typically, this will vary from 7 days to 14 days depending on the product and in the absence of ragwort. Where ragwort has been treated, grazing animals must be kept out of the field until the ragwort has died and fully rotted down. It is not unusual for this to take 6 or 7 weeks and even longer if the ragwort is sprayed after stem extension.

Think about the impact of cutting water rates.

To gain the most from herbicide treatments, it's important to follow the label instructions and use correctly. Each product has its own application requirements. Water volumes are equally important in grassland spraying and cutting rates below the minimum is likely to result in shorter-term control of perennial weeds, due to not getting good coverage of big perennial weed leaves. The higher concentration could also scorch the leaf on contact and restrict the uptake of the chemical.

Weed Control in New Sown Leys

Grass re-seeds typically take place from mid-March onwards. Many grassland herbicide product labels stipulate that grass should be 'established', i.e. over 12 months old at the time of treatment. The number of available herbicides for newly sown leys is limited, so <u>Leystar®</u> and <u>Envy®</u> are essential tools for use in newly sown grassland. 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 be treated when they are bigger.

Where significant dock populations are present soon after reseeding, treating with Envy is a good option, as this can be sprayed at a robust dose rate of 1.5litres/ ha. Later in the spring when there is a wide range of seedling weeds growing, including thistles, treating with Leystar would be better as this has a broader spectrum of activity. Both Envy and Leystar will kill clover. So, if having clover in the seed mixture is important, it may be necessary spray out the weeds first and then stitch clover back in after 12 weeks.

Introducing <u>Optinyte™</u>

Reducing nitrogen use on farms and nitrate levels in water, are key elements of the continued drive to improve the sustainability of agriculture. – a nitrogen stabiliser from Corteva – can help farmers meet both the demand for improved water quality, and a reduction in greenhouse gas emissions from fertiliser.

Optinyte works by slowing down the conversion of ammonium to nitrate, preventing nitrogen loss through leaching and denitrification. Optinyte has been shown to reduce nitrogen losses by up to 50% through leaching and by 45% through greenhouse gases, delivering a clear environmental benefit. As well as these significant environmental benefits, because nitrogen is kept in the soil for longer, Optinyte can significantly improve crop quality and yields.

Opportunity for grain maize

There are many advantages to growing maize for grain in the UK with the right hybrid:

- To increase the diversity and duration of the crop rotation
- An opportunity to address blackgrass problems
- Potential to utilise slurry or manure stocks
- Improve soil organic matter levels
- Flexibility to sell the crop for forage
- Higher crop yields on lighter / drought prone soils versus wheat

We have a number of hybrids that are commercially available this year and suitable for maize grain that can grown in the open or under film in the UK, including **P7948:** An exciting hybrid with very high grain yield potential and excellent standing power.

Grassland Packaging

All Corteva grassland herbicides are now in our new packaging (pictured). This new packaging will begin to filter through to the marketplace as we replace any stocks already packaged in the previous style.



Pioneer Silage Inoculants – Benefits to The Farmer

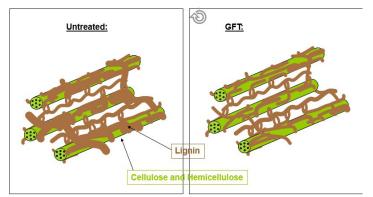
Over the last number of years Corteva have been at the forefront of introducing new silage inoculant technologies. Two of the more recent introductions would include Fibre Technology and Rapid React *L. Lactobacillus buchneri.*

Fibre Technology

- Novel strain of L. buchneri.
- Produce enzymes which increase fibre digestibility by weakening the bonds between lignin and the rest of the cell wall.
- Increase in neutral detergent fibre digestibility (NDFd) by up to 7%.
- *L. buchneri* significantly reduces the incidence of heating and moulds in the clamp.
- Products which include fibre technology <u>11GFT</u> (grass and whole crop), <u>11CFT</u> (maize) 11CH4 Biogas.

Rapid React

- *L.buchneri* set the standard for control of heating, yeasts and moulds.
- Traditional *L.buchneri* are slow to act and need the clamp to remain unopened for 4-6 weeks. Many farmers need to open clamps much earlier than this.
- Corteva have developed the patented new strain of Rapid React *L. buchneri*, this has proved to be a game changer for those situations where the clamp is needed to be opened sooner. This means that clamps can now be opened within 7-10 days giving outstanding aerobic stability.
 - Products which contain Rapid React include <u>11G22</u> (grass and whole crop), <u>11C33</u> maize and <u>11B91</u> crimped grain.



Ask a question

Chickweed is growing very rapidly, what size of chickweed will Envy control?

Envy[®], which can be used as of 1st February will control chickweed up to flowering, but monitor weed size and apply before it gets too large. Control will be better on smaller weeds.

I haven't used the Stewardship section of the App for some time. Can I get a refresher on how to do so?

Using the Forefront®

Stewardship Recoord Management Tool in the App is a very important aspect of selling Forefront T and must be done for each sale. There is a section in the online Forefront T Stewardship Certification Course. Alternatively, a step by step training document which can be accessed via <u>https://</u> www.corteva.co.uk/forage

Manure for Gardeners / Allotment Holders

Manures are widely used as a great soil conditioner and can be an excellent source of nutrients. Any manure supplied to gardeners / allotment holders must be free of herbicide residues so that vegetables such as potatoes, beans and tomatoes which are susceptible to grassland herbicides are not affected. Inappropriate product use and dosage can lead to unwelcome plant growth symptoms.

If hay is being sold off farm, particularly to stables, please ensure that label restrictions and warnings are heeded and followed. Product choice should be made based on these considerations.

If you know of someone who is experiencing a problem in their garden which is potentially caused by herbicide residues, please direct them to our upgraded Manure Matters website at https://www.manurematters.co.uk. If you need more guidance on product selection then contact you local Corteva Area Manager, Forage Portfolio Specialist or the Corteva Technical Hotline on 0800 689 8899 or UKHotline@corteva. Com

This website will help gardeners and allotment holders who think they may have used manure or compost containing aminopyralid or clopyralid residues on their crops. Or who are concerned about possible residues in sources of manures or compost.

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: <u>https://twitter.com/</u> <u>CortevaForage</u> and Facebook: <u>facebook.com/cortevauk</u>

For further information please contact the Corteva Agriscience technical hotline on 0800 689 8899 or <u>UKHotline@corteva.com</u>, go to <u>www.corteva.co.uk/forage.html</u>



Discover more at <u>corteva.co.uk</u>

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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*, "Trademarks Corteva Agriscience and its affiliated companies. All other brand names are trademarks of other manufacturers for which proprietary rights may exist. Forefront*T contains aminopyralid and triclopyr. Envy* contains fluroxypyr and florasulam. Doxstar* Pro contains triclopyr and fluroxypyr. Leystar* contains fluroxypyr, clopyralid and florasulam.