

Grassland and Maize Agronomy Update



CORTEVA
agriscience

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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.

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.





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

With three actives delivering effective translocation and a wide spectrum of

weed control, Pastor Trio 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 Pastor Trio for control of this weed.

Pastor Trio 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.

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.

Pastor® Trio 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 Pastor Trio 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 reseedling, 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 Pastor Trio 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



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%.

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** will give control of sycamore seedlings. 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.

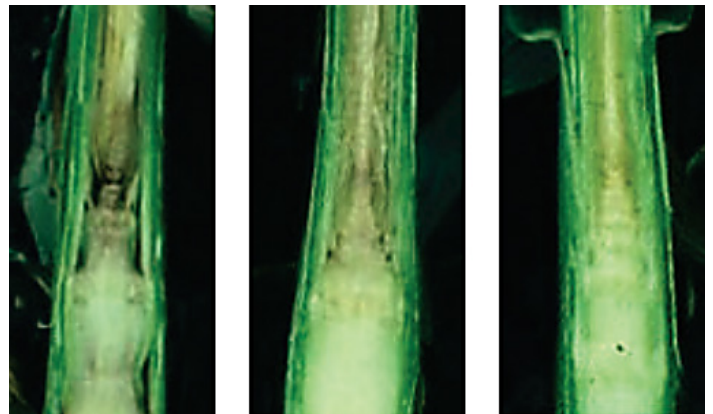
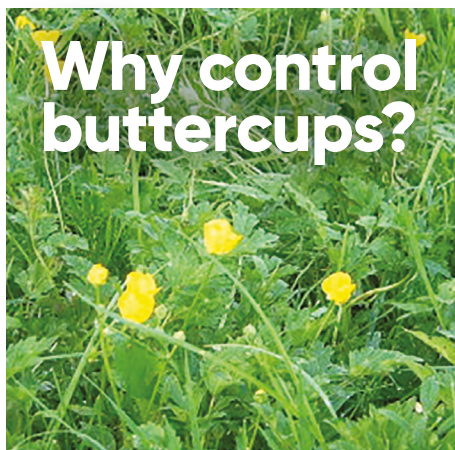


Fig. 2. Damage to the growing point.



Fig. 3. Frost hollow.



Why control buttercups?

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

Forefront® T

HERBICIDE

NEW Stewardship Training Course.

Forefront® T is a valuable herbicide option giving great control of docks, nettles, thistles, buttercups, dandelions & ragwort. However, its misuse can lead to herbicide residue carry over in manure and hay / silage. To mitigate against this happening, we are introducing a new online course to help ensure that Advisors are fully aware of their product stewardship responsibilities.

The Forefront T Online Training Module is an easy-to-use course for:

- **IASIS Pesticide Advisors and IASIS Professional Pesticide Distributors that already advise on the use of this product**
- **IASIS Pesticide Advisors and IASIS Professional Pesticide Distributors who are interested in advising on this product for the first time**

The course will take up to 75 minutes to complete (depending on experience). It doesn't have to be completed all at once.

9 IASIS CPE Credits are available for Pesticide Advisors and Professional Pesticide Distributors (credits can only be claimed once).

If you wish to take the Forefront T Stewardship Course, please contact your T P Whelehan Representative confirming the name that you wish to be registered for the course and the email address that you will use (one email address per person). They will make the necessary arrangements for you.

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 both for 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.



IASIS Points.

10 IASIS points will be awarded to those subscribing to the Grassland Agronomy and Maize Agronomy Update newsletter.



We're here to help you.

For technical advice and support, contact the technical hotline or Liz Glynn, your Corteva National Technical Manager on: 00353 (86) 844 5306



Liz Glynn

Technical hotline: 0800 689 8899 Email: ukhotline@corteva.com
or visit: www.corteva.ie/forage 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: <https://www.corteva.ie/contact-us.html> 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, Pastor® Trio contains fluroxypyr, clopyralid and florasulam,
 Instinct® contains nitrapyrin, Thistlex® contains clopyralid and triclopyr.