GreenThumb

Questions and Answers

Are GreenThumb committed to the environment?

Yes, we are. We have always innovated and tested new techniques – from organic / vegan fertilisers to electric vehicles. Our <u>Oasis Water Conserver treatment</u>, for example, reduces the need to water a lawn by up to 80% - an essential innovation as droughts and hosepipe bans become increasingly common thanks to global warming.

Garden owners can no longer purchase off the shelf products to kill worms, as they once could, because of the impact on human and animal health that those highly dangerous products once posed. Customers who now want the problem of worm casts removed are advised to manage this in a sustainable way. This includes mechanical means along with an increase in acidity in the lawn surface which deters the worms from leaving their casts on the surface whilst staying very much alive in the soil profile.

We share this as an example of how knowledge and innovations work together at GreenThumb. This exemplifies how customer requests drive our endeavours to supply a solution that is environmentally minded.

It's important to point out that as a customer service business, we offer our treatments to gardeners who want to have their lawns raised to a healthy standard that they can enjoy. We do not apply anything to a lawn that is not needed. Our aim is to create disease and pest free lawns that generate oxygen, support wildlife and provide our customers with spaces to socialise, play or escape in support of their mental health and wellbeing.

Are GreenThumb committed to developing an organic programme to look after lawns?

We are researching organic opportunities on an ongoing basis and based on our current field trials we are hopeful that we will be able to offer a completely organic programme to look after lawns in the next two years. Our aim is always to drive towards organic and environmentally friendly solutions for all of our lawn care and welcome being challenged as to how we describe our actions in a highly regulated space.

Are GreenThumb fertilisers organic?

Our fertilisers are mineral based and so due to the process of extraction, this means they cannot be described as totally organic even though all the contents are natural. For example, our innovative Oasis treatment includes seaweed extract which, because of the way it's processed, we are not permitted to call organic even though it's derived from seaweed.

Does GreenThumb's treatments to green the lawn cause excess nitrogen?

We manage the Nitrogen in our lawns to 145 - 160 kgs of N per ha per year which is considerably lower than the permitted figures for agriculture use, even in nitrate vulnerable zones. <u>Using nitrogen fertilisers in nitrate vulnerable zones - GOV.UK (www.gov.uk).</u>

Although the Nitrogen levels we use are higher than you would get in a garden centre, the process of controlled release means that it is a trickle as and when conditions allow, as opposed to fertilisers that do not have or use this technology. The lawn is a canopy of plants, and the fertiliser is designed to fall into the bottom of the sward therefore releasing as a drip feed into the areas the grass needs it. The slow release reduces the flush growth situation so there is no impact to the environment and



the release will not impact any insects.

How do GreenThumb treat for Leatherjackets and Chafer Grubs in lawns

The lawn on the left is being damaged by animals going after Chafer Grubs - not a pleasant picture for a customer who loves their garden. The lawn on the right has been affected by Leatherjackets, sadly birds have not started digging them up in their quest to eat the grubs.



There are **no pesticides** to treat either of these situations.

GreenThumb uses a bio stimulant which is designed to improve nutrient use and efficiency, helps the plant deal with environmental stress and improves the quality of the plant, helping root development and colour of the grass plant. The sources GreenThumb use to produce these bio stimulants are seaweed, sugars and starches and derived plant oils. The use of bio stimulants where appropriate deters the grubs from damaging lawns, allowing the plant to hold its own. On lawns with high populations, the lawn does not recover quickly however the deterioration is greatly reduced and when we get into the growing season some seeding and top dressing is needed to recover the lawn.

Why do we use bio stimulants? Because we have seen incidences when the populations of both these types of grubs have been so high that the lawn has been completely decimated. And, since there is no chemical solution or the birds have not been able to manage the numbers in a lawn, some of our customers have taken their lawns up and either laid AstroTurf or a hard surface, like concrete or tarmac, to replace their green space.

Do GreenThumb use active ingredients to control weeds?

Our lawn control treatment does have active ingredients to control weeds however these are only used to spot treat the weeds rather than a blanket spray and are well regulated in terms of how much of the active ingredient, how much water is to be used in the spray etc. to ensure this is as environmentally friendly as possible. For most wildlife and pets this is completely harmless, however the recommendation to keep any grazing animals (such as rabbits and guinea pigs) off the lawn for two weeks is due to the fact that ragwort is commonly found within lawns and this plant becomes poisonous as it dies.



Do the pesticides which GreenThumb use contain carcinogens?

The pesticides we use day-to-day are **not** glyphosate, they are post emergence selective* herbicides designed to manage weed populations.

*The term *post emergence* only has to do with the leaf of the weed, if the product is sprayed and there is no leaf it will not do anything and it is wasted and could contaminate the soil, hence the reason for target spraying. The expression *selective* refers to the types of plants. In the plant kingdom there are Monocotyledons and Dicotyledons, these are related to how the seed splits and whether this is one leaf or two. In the case of grass species there is only one leaf whereas in the case of other plants there are two. This then allows for the design of actives when applied correctly affecting the Dicotyledons as in selecting them over the Monocotyledons.

They are manufactured using a few different active ingredients:

- Fluroxypyr
- Florasulam
- 2 4D
- Dicamba

The use of pesticides is governed by the Chemical Regulations Division which is part of the Health and Safety Executive. They assess and test each formulation and the impact they might have both on the public and the environment. This information is placed onto a Safety Data Sheet which can be made available on request. It's important to remember that the information on the Safety Data Sheet is for the products at full concentration but when using them the application rate is in most instances, for the above, 2 parts products to 200+ parts water.

We also train all our operatives to spot spray weeds using caution to only spray visible weeds that have leaf and not to spray where there is no visibility. This we refer to as target spraying and it minimises any impact to the environment that is being sprayed.

We only use glyphosate when customers choose to have what we term a Lawn Makeover, where the old lawn is killed off and new seed is applied.

Glyphosate-based herbicides are currently fully licenced as being safe for use in the public realm and the product we use carries no warning labels, which means even weed control contractors are not legally required to wear protective equipment such as masks or gloves when applying it.

There was a decision taken in 2015, by the <u>International Agency for Research on Cancer</u> (part of the World Health Organisation) to classify glyphosate as "probably carcinogenic". To put this decision into context, the IARC also lists eating red meat, working as a hairdresser, working night shifts and drinking very hot beverages in the same category as glyphosate.

Since 2015, glyphosate has been reviewed by 19 other agencies, including the European Chemicals Agency, the European Food Safety Authority, the European Commission, the Swiss Federal Food Safety and Veterinary Office, the Australian Pesticides and Veterinary Medicines Authority, the New Zealand Environmental Protection Agency and three different branches of the World Health Organisation. All these reviews have rejected the view that glyphosate is "probably carcinogenic".