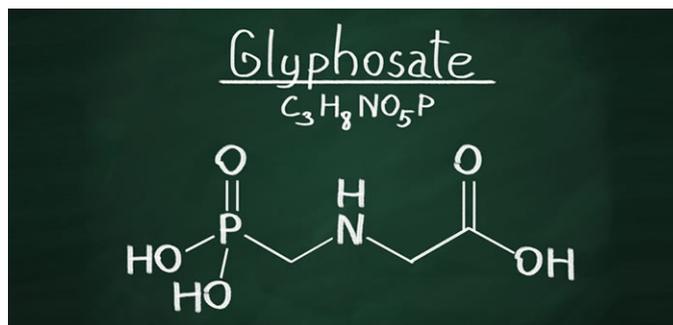


## Position Paper from the Committee: Glyphosate and Our Allotments:

The presentation on the use of glyphosate on our allotments at the AGM asked two main questions:

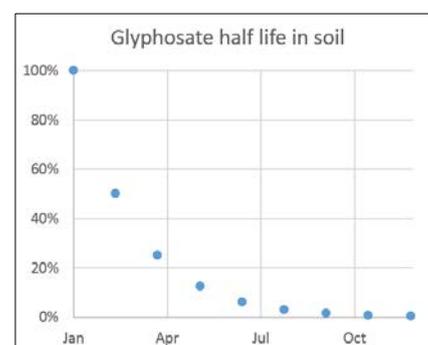
- Do we continue to sell it in the shop or stop selling it?
- Do we do nothing about its use? Ban its use? Or make rules about its use?



Glyphosate (e.g. Roundup® etc.) is so easy to buy elsewhere that the Committee have taken the decision to stop selling it in our shop, and dispose of any remaining stock. Continuing to stock it for sale suggests we have taken a stand on whether to support its use or not.

In terms of the second question we believe there was sufficient reaction to the AGM poster that doing nothing about its use is **not** an option. However, we consider banning its use at this point in time would be:

- **Impractical** – heavy-handed, hard to police and would limit our use in terms of returning severely weed-infested plots to use so they can be rented out again. Even the RHS [recommends the use of glyphosate](#) when first clearing an allotment plot of weeds.
- **Controversial** – despite the statements made on the AGM pre-session poster the case against glyphosate is not yet conclusive and many of our members will probably want to carry on using it in a safer manner:
  - “Possible carcinogen” – cases of cancer that have been linked to glyphosate relate to professional sprayers with decades of commercial exposure.
  - “Harms wildlife” – numerous scientific and regulatory reviews consistently conclude that use of glyphosate and **following the instructions** does not pose a significant risk of either direct acute or chronic toxicity to terrestrial species. (Note this does **not** cover aquatic species – so this needs guidance – below)
  - “Persistent” – glyphosate is non-persistent in plants, soils, water and sediments, due largely to a number of microorganisms that break down glyphosate for food, removing it from the ecosystem. Studies show that it takes only a few days to a few weeks for 50% of the glyphosate to dissipate. In soils, low residue levels may be detected for up to a year following treatment; however, such residues are considered to be strongly bound, **biologically unavailable** and **not** of toxicological significance.



If we have to do something, but this stops short of a site-wide ban, this leaves us with the third option – to draw up rules for the safer use of glyphosate etc. on allotments. The AGM poster included a number of suggested rules:

- Specify acceptable use (e.g. for persistent but not annual weeds)?
  - The Committee agrees this is probably the number one rule. Annual weeds are so simple to keep in check by hoeing, strimmers or using barriers (plastic or cardboard), there should be no need for weedkiller to tackle them (perhaps with the exception of abandoned plots – although if abandoned you can be reasonably sure persistent weeds will also have established). A list of the top four persistent weeds can be found in Annex A.

- Do not use within 5 metres of the river?
  - This would seem sensible, and would comply with the law. The Health & Safety Executive [Code of Practice](#) for Using Plant Protection Products (Section 4.6.13) states: “*very few pesticides are approved for use in or near water and you must **give notice to, and get permission from, the Environment Agency before using a pesticide in these situations.***”
  - For Twenty Pound Meadow, in most cases this would not impact members too severely as the river end of the plots tend to be where the sheds are located. Plots 164, 165 and the cut down orchard might need special treatment
  - For Botley Meadow this would impact plots 14<sub>a&b</sub>, 15, 16, 55<sub>b</sub>, 57, 59 and the communal orchard

- Do not spray within 1 metre of other allotments?
  - On the face of it this would seem sensible. However, the paths between plots can be anything from 50cm to 1 metre so members might be tempted to spray all the way to the edge of their plots.
  - In addition, persistent weeds usually colonise into plots **from** the paths so it is this very interface where weedkiller is most likely to be used.
  - The Committee prefers not setting a distance rule, focussing more on rules for ‘intelligent spraying’ detailed further on.



*Remember - weedkiller likes boots!*

- Do not store on your allotment?
  - We don’t think this is sensible. If folk are going to use glyphosate or other chemicals on their plots there would probably be more problems with these being constantly transported back and forwards than if they were kept securely – under lock & key in sheds, clearly labelled and up high out of the reach of either children or floods!

- Limit the number of uses per year? Define acceptable times of year to use?
  - The Committee doesn’t think either of these are sensible. The first suggests that members have a ‘quota’ – a number of times they can deploy before they’re banned. The second doesn’t make sense either as glyphosate only works on actively growing plants – effectively ruling out up to half the year. Also suggesting members had to wait until ‘open season’ for weeds begins is a bit odd. You want to tackle e.g. bindweed as soon as you spot it and not let it spread.

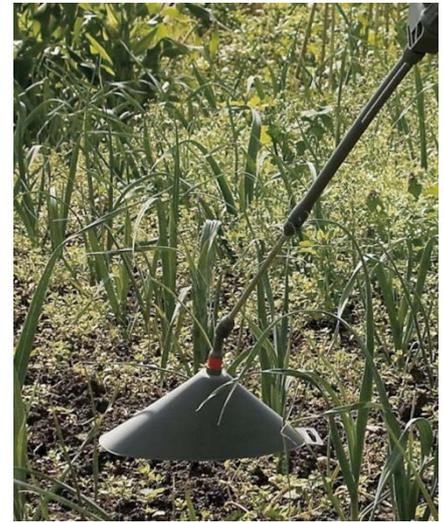
- Use only on days with little or no wind?
  - The Committee completely agrees with this suggestion.

**‘Intelligent spraying’** – things to consider:

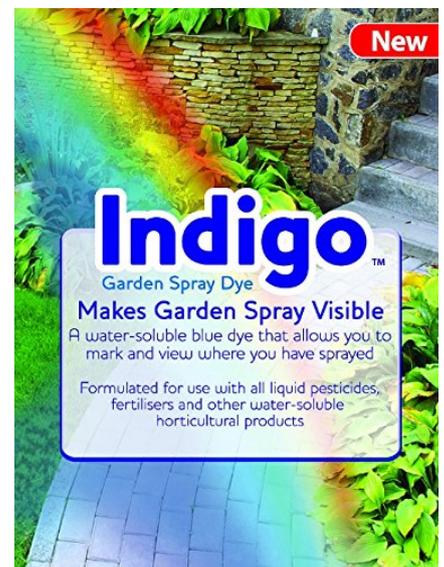
- **ONLY** consider spraying if there is little or no wind, e.g. early in the morning (check any flags on site) and take account of wind direction if it is obvious and consistent.
- The HSE Code of Practice says not to use herbicides when **rain** is expected, when it is **windy** or when the **soil is saturated**. This is to reduce the risk of herbicides spreading into or over other parts of the site.
- Check the short-term weather forecast. There is little or no point in spraying if rain is expected the same day.



- Glyphosate needs to be applied while the plants is actively growing and transpiring moisture, which requires sunlight. This means you need to apply glyphosate in the morning so it will take effect the same day. Glyphosate is deactivated very easily so applying late in the day, even if it doesn't rain, is likely to be ineffective. Apply in the morning on a day expected to be sunny and warm with no rain.
- Consider buying a [spray cone](#) that clips onto the end of the lance – cheap and effective, they focus the spray onto the intended area.
- Make a spray screen – we have one made from two bits of plastic about 1m high, and allows careful application of weed killer and avoid drift and wind eddy dispersal



- There are non-toxic dyes available to add to weed killers so that you can see where you have sprayed – this avoids over-application and you can spot if the spray is drifting. The dye breaks down safely and rapidly after rainfall



### A balanced approach – some comments from other allotment blogs:

- *“When used to clear weedy ground, all the organic matter and nutrients in the dead weeds go back into the ground. There is no wastage of organic material by burning or dumping.”*
- *“Often the soil structure of a weedy new plot has benefited from years of plant growth. Why destroy this structure by digging?”*
- *“It facilitates minimum cultivation systems, which preserve soil organic matter, worms and soil life.”*
- *“When used to enable zero cultivation, its effects become more interesting. You might not like the liverwort and moss, but as a habitat for wildlife at the bottom of the food chain, they are superb.”*

### In conclusion:

- There may be a national ban in the future – at which point these rules will need to be revisited.
- The licence for glyphosate use in the EU has recently been under discussion. After a long battle between the agricultural industry, who wanted a full 15 year renewal, and concerned environmental NGOs and individuals, who wanted glyphosate banned - a licence has been granted. But only for 5 years.
- The EU Commission also added certain recommendations for its use: to ban the co-formulant, POE-tallowamine; and to minimise its use in specific areas, such as public parks and playgrounds. To date **it is unclear** if the UK government is prepared to accept these recommendations.

## Annex A: Common persistent weeds on allotments

### Weed number 1: Couch grass

Couch or Twitch grass (*Elymus repens*) is weed number one - more due to how common it is than how difficult it is to control.

It's a rather invasive weed that, if not controlled, quickly will take over a large area. Couch grass looks like any other tuft of grass, but underground it spreads by rhizomes and long white spaghetti-like stems, which will produce new shoots, from where new tufts will grow. The new tufts will form their own stems and rhizomes - and the circle is complete!

On an open plot couch grass doesn't really pose much of a problem. If, however, its roots spread and gets itself entangled in the root balls of fruit bushes and shrubs on your plot - you have a problem!



Couch grass

#### Cultural control

Digging out couch grass is possible - but it's a bit of a task if it's widely spread. While digging, make sure to remove every bit of root you find, to avoid the couch grass re-growing and the problem worsening. New shoots of grass should be dug out immediately - removing all roots. While digging out the roots - use a fork rather than a spade - to avoid cutting the roots.

Dug-out roots should be burned or disposed of to avoid them re-growing. *Never* throw them on your compost heap! They can be rendered safe by sealing in a black bag with some water and leaving for a few months in the sun. After they have broken down they are safe to add to the compost heap.

#### Chemical control

Glyphosate based weedkillers like Roundup are extremely effective against even heavy infestations of couch grass, and (if used correctly) should kill off the lot in just one application.

Leave weedkiller to do its job for about 3 weeks, and promptly treat any new grass that may appear in this period of time. The treated area should not be cultivated until the grass has died back completely.

### Weed number 2: Field Horsetail

Horsetail or Mare's Tail (*Equisetum arvense*) is one of the allotmenters (or gardeners in general) worst nightmares. It's quite a common weed to be found on a lot of plots - seemingly one that you have to learn to live with - since it's more than difficult to eradicate.

Horsetail mainly spread through its creeping underground rhizomes, which can go down as far as 1.5 metres. The growth starts out in spring as asparagus-like shoots, and later in the season develops into fir-tree like plants as shown on the picture. The top growth dies back in winter.



Mare's-tail

#### Cultural control

The rhizomes can be forked out of the top layers of soil, but regrowth is inevitable. Shallow weeding should be avoided, as it worsens the problem. By regularly removing new shoots as soon as they appear above ground, the plants seem to weaken, and infestation can be reduced quite a lot over a couple of seasons.

#### Chemical control

Horsetail is resistant to most weedkillers - at least those that can be used anywhere near other plants and produce. This is due to the plants having an outer cuticle that protects it against penetration.

Some success can be achieved by using a systemic glyphosate based weedkiller like roundup in late summer when the plant is growing fast. Before application of the weedkiller - run a rake across the patch you want to treat - or trample down the plants, in order to break the protective cuticle on them.

Any new growth after the first application should be treated promptly - and further treatments later in the season - or early in the next season may well be required.

### Weed number 3: Bindweed

The third weed in our countdown is Bindweed (*Convolvulus arvensis*) – a herbaceous perennial climber that will not only take over your plot, but also “strangle” other plants if left to it. It has shallow, fleshy roots that spreads very quickly through the soil, and can go down up to 5 meters. Any bit of roots left while trying to eradicate the plant can grow into a new plant, and it can end up on your plot hidden in the roots of new plants, manure or soil.

#### Cultural control

Bindweed is extremely difficult to control organically - but with a couple of years persistent digging and hoeing it is possible to get rid of the plant. In saying that, though, it will readily spread from neighbouring plots if left untreated.

The first step in treating bindweed is to get as much of the root system out as possible while digging your plot in autumn/winter. Next you must consistently hoe out any shoots that try to come out in summer, as this will significantly weaken the roots for the coming season.

#### Chemical control

Bindweed is effectively and easily treated with a systemic glyphosate based weedkiller, such as roundup. The problem lies in not killing other plants in the process. To avoid any other plants being affected by the weedkiller, make sure there's no chance of the spray drifting onto them - or apply the weedkiller onto the leaves of the bindweed - using a paintbrush.



*Bind Weed*

### Weed number 4: Bramble

The omnipresent bramble (*Rubus fruticosus*) is a nuisance perennial weed that spreads in two ways - through its root network or by layering new shoots from its long stems. It doesn't represent much of a problem if you have got one or two of them on your plot. If, however, you have inherited an overgrown plot with brambles on it, you're in for a bit of a fight, as they can soon take over uncontrolled areas.

Not all allotmenters wage war on brambles – some even grow them near the perimeter of their plots due to its excellent anti-intruder qualities. Also its berries are excellent for making jam and attracting wildlife.

#### Cultural control

The bramble isn't too hard to remove by hand if you have got one or two of them. The real problem arises if they have been allowed to spread. Start out by cutting all stems back to the roots - and dispose of them - preferably by burning them. Then - using a fork - try to lift the entire root ball. Do not use a spade for this, as the bramble will re-shoot from any roots cut through by the blade. Again - get rid of the roots - either by burning or throwing them on a skip.



*Bramble and shoots*

## **Chemical control**

When going down the chemical route you still have to cut back all stems and dispose of them. This is to prevent the bramble from continuing to spread via layering itself while the chemicals do their work, and to limit your use of the chemicals to a smaller area.

Once cut back treat new growth as and when it emerges. While a glyphosate based weedkiller like roundup will do the job (it usually requires more than one or two treatments), other weedkillers (brushwood type) are more efficient. The advantages with using the glyphosate based weedkillers is that they are readily available and that they don't leave residues in the soil. The brushwood weedkillers are harder to get hold of - and will linger in the soil for around 6-8 weeks.