**Spragglesea Mead and Dean’s Ham Allotment Association**

**Use of glyphosate and other weed-killers**

The following report was written in response to a discussion at our March 2013 AGM about glyphosate weed-killers. The conclusions and recommendations apply also to other weed-killers and also pesticides.

***What is glyphosate?***

Glyphosate is a synthetic herbicide, probably the most extensively used one worldwide in agriculture and horticulture. It is the active constituent of many products sold as weed-killers for gardeners in the UK, including the following:

Roundup Fast Action, Doff Advanced Concentrated Weedkiller, SBM Job done General Purpose Weedkiller, SBM Job done Tough Weedkiller, SBM Job done Path Weedkiller and Weedol Pathclear

Glyphosate is a non-selective herbicide, killing plants by interfering with an essential metabolic pathway. In dead leaves it is broken down quickly by bacteria, but it binds tightly to soil and may be retained there for several months. However it does not leach significantly into waters and is reported to have low toxicity to wildlife.

***Why is glyphosate controversial?***

A scientific committee of the World Health Organisation has reported that glyphosate may be carcinogenic in humans. However it has been claimed that the conclusion is based on studies involving high concentrations in animals, and bears little relation to real-life use. DEFRA in the UK and EPA in the US maintain that the compound poses little threat to human health if used according to the manufacturers’ instructions, although some countries (e.g. France) and some local councils in the UK have banned its use in urban areas. The EU had proposed a total ban starting in 2022 but this has been postponed until December 2025.

Although glyphosate is technically an organo-phosphorus compound, it is not neurotoxic like many organophosphate pesticides; nor should it be confused with neo-nicotinoids that have been reported to harm bees and other insects. These compounds are subject to partial or complete bans.

***Are there alternatives?***

Many of the organisations calling for a ban on glyphosate - such as the Pesticide Action Network - are opposed to all synthetic substances in the garden, and advocate only non-chemical alternatives such as digging and mulching. On the other hand, some proprietary weed-killers such as SPK Brushwood contain *triclopyr,* which is a selective herbicide for broadleaf plants, i.e. not grasses. It seems to have fewer negative indications than glyphosate, except that some chemical forms are toxic to aquatic life (*see below*).

Some previously popular weed-killers, such as the very powerful and non-selective sodium chlorate, are now banned for health and safety reasons, although may still be found for sale online.

***Use near water courses***

According to current regulations, anyone using a herbicide or pesticide within one metre of a water course (I think that include lakes and ponds in communal areas) must obtain authorisation using a form provided by the Environment Agency. It seems that the only herbicide that will be approved for such use is glyphosate.

***Should we ban glyphosate?***

When I raised the question of glyphosate use at a recent Allotment Liaison meeting with Oxford City Council, it was reported that one association has banned it, against the advice of its Chair who does not see how the ban can be enforced. The only other input came from the OCC representative who reported that the council is careful to minimise its use. That claim is somewhat undermined by the fact that stream banks between Osney Mead and North Hinksey have been extensively sprayed with glycophosate in an attempt (so far unsuccessful!) to control the spread of Himalayan balsam.

I believe that a total ban on a substance licensed for use in the UK and widely available from reputable sources would be unpopular and hard to enforce. I do suggest, however, that we should discourage over-use of this and other synthetic chemicals, and that we could include the following in our rules.

*Proprietary weed-killers and pesticides should be used in strict conformity with the suppliers’ instructions. Use should be localised, in small quantities, and never in amounts or places from where it could spread to neighbouring plots.*

*No weed-killers or pesticides should ever be used within one metre of the lake, the Eastwycke Ditch, or any other water course. Care should be taken to avoid any contamination of flood-waters.*

*No synthetic chemicals, except those obtainable from reputable suppliers and licensed for use in gardens in the UK, should ever be used on the allotment site.*

Tony Cox 19/2023

***Sources***

https://media.reading.gov.uk/news/council-trials-weed-control-alternatives

https://content.ces.ncsu.edu/are-there-alternatives-to-glyphosate-for-weed-control-in-landscapes

https://www.pan-uk.org/finding-a-commercially-viable-alternative-to-glyphosate-in-an-urban-setting/

https://www.pan-uk.org/site/wp-content/uploads/A-guide-to-gardening-without-pesticides-2017-bw-printer-friendly.pdf

http://npic.orst.edu/factsheets/glyphogen.html

https://www.theguardian.com/environment/2022/jul/12/its-a-non-party-political-issue-banning-the-weed-killer-glyphosate

http://www.npic.orst.edu/factsheets/triclopyrgen.html

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/601814/LIT\_4720.pdf

http://www.islandrivers.org.uk/wp-content/uploads/2015/09/FAQ-Using-herbicide-in-or-near-water.pdf