



Glyphosate in our bread - facts & figures

Soil Association July 2015

Glyphosate spraying of cereals has risen 400% in the last 20 years

- Figures 1 and 2 overleaf, from the Department for Environment, Food and Rural Affairs¹ show the growth in the use of glyphosate in Great Britain from 1990-2013.
- The quantity of glyphosate applied per hectare has remained constant (at around 0.75-0.8 kg per hectare), but the area of cereals sprayed has increased fourfold in the last 20 years.
- 2013, the last year for which there is data, was a record for both the total amount of glyphosate used on cereals and the highest area of cereals sprayed.
- This stood at just over 1million hectares – nearly a third of UK cereals being sprayed (see figure 2).
- The total amount applied came to around 800,000 kg of glyphosate.

Glyphosate is turning up in more of our bread

- Figure 3 shows that according to Government data², this rise in glyphosate use is matched by a rise in the amount of glyphosate found in sampled bread.
- Again, 2013 had the highest numbers of bread samples contaminated with glyphosate on record – nearly a third of bread tested contained the weed-killer.
- The average amount found for 2014 and 2013 was around 0.2mg of glyphosate, per kg of contaminated bread³. The officially allowed 'Maximum Residue Level' (MRL) in wheat is 10 mg per kg, set before the WHO's IARC found glyphosate is a probable carcinogen to humans.
- In 2013, around a half of bread samples containing glyphosate also contained one or two additional pesticides. The impact of these mixtures on our health is unknown and could be worse than glyphosate alone.
- A dip in the proportion of bread samples containing glyphosate was seen last year (2014), to between 14-17% - this is likely to be because both 2013 and 2014 saw dryer conditions during harvest than 2012.

Glyphosate is also turning up in our urine, and breast milk

GM Freeze and Friends of the Earth Europe tested the urine of 182 city-dwelling volunteers from 18 European countries in 2013. 44% had urine containing glyphosate. Of the 10 volunteers from the UK, 7 out of 10 had traces of the weed-killer⁴, and glyphosate has been found in the breast milk of German women⁵.

¹ <https://secure.fera.defra.gov.uk/pusstats/index.cfm>

² http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PriF/PriF_Results_and_Reports/index-to-results-by-food-pesticide-residues.htm?WBCMODE=PresentationUnpublished#bread_and_pasta

³ <http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PriF> 2014 and 2013 monitoring reports – both were quarter 3, analysing food samples purchased around the time of April to August/September

⁴ <http://www.gmfreeze.org/news-releases/225/>

⁵ <http://gmwatch.us6.list->

[manage1.com/track/click?u=29cbc7e6c21e0a8fd2a82aeb8&id=12b45de52d&e=c61daaf8ba](http://gmwatch.us6.list-manage1.com/track/click?u=29cbc7e6c21e0a8fd2a82aeb8&id=12b45de52d&e=c61daaf8ba)

Figure 1: Total area treated (a) and total weight applied in kg (b) of glyphosate applied to cereals in Great Britain⁶

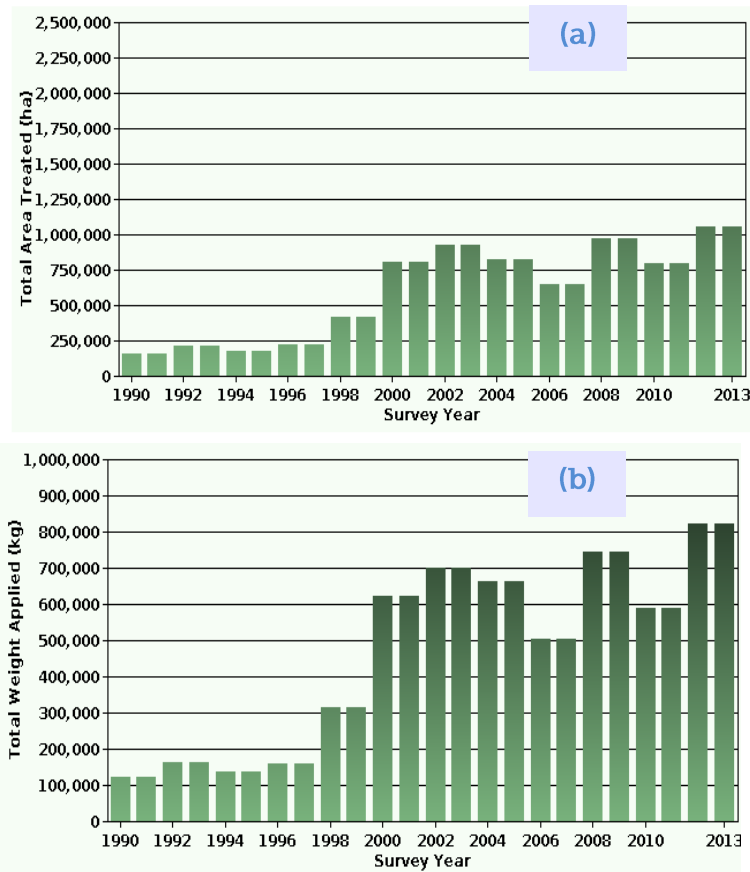


Figure 2: Percentage of cereals treated with glyphosate and the number of times treated⁵

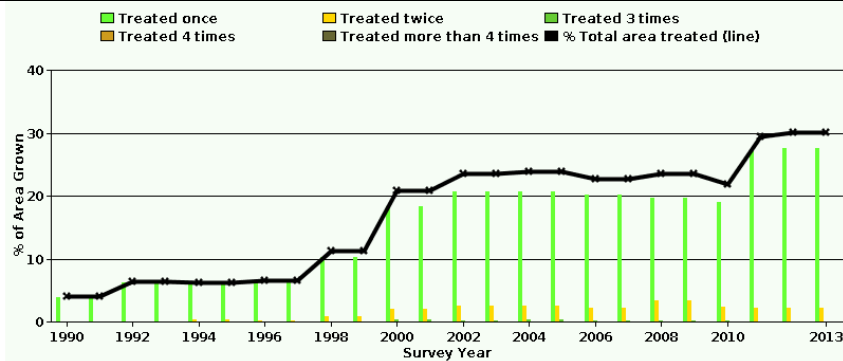
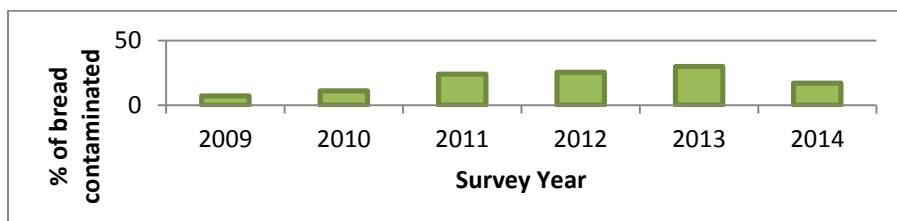


Figure 3: Percentage of samples of UK bread found to contain glyphosate (level of detection >0.1mg per kg)⁷



⁶ Graphs taken from <https://secure.fera.defra.gov.uk/pusstats/index.cfm>

⁷ Source of graph: Soil Association. *Data sourced from:* http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/PRiF_Results_and_Reports/index-to-results-by-food-pesticide-residues.htm?WBCMODE=PresentationUnpublished#bread_and_pasta