## **Glyphosate Update**

The European Chemicals Agency's (ECHA) Committee for <u>Risk Assessment (RAC)</u> published the results of their latest review on 30th May 2022. The Committee for Risk Assessment (RAC) recommended no change in the classification of Glyphosate. They agreed that there was no scientific reason to change the classification of glyphosate. Based on a wide-ranging review of scientific evidence, the committee again concludes that <u>classifying glyphosate</u> as a carcinogen is not justified. The Formulated products will continue to be classified as non-hazardous.

The EU review <u>timetable for Glyphosate</u> has been modified and in effect delayed by 1 year. It is not expected that member states will vote on the continued registration of the active substance until December 2023.

In the UK, HSE/CRD has already announced a 3 year extension of the active substance <u>registration to</u> <u>15/12/2025</u>

Most newspaper articles reference the <u>WHO, IARC sub group 2015 decision</u> that Glyphosate should be classified as "probably carcinogenic" category, along with such dastardly things as eating processed meat, sunbathing too long and working as a hairdresser or barber. What does IARC consider much more dangerous than glyphosate? Drinking wine or beer or eating salty fish.

Following the IARC 'hazard analysis,' 19 other agencies including the UN itself and agencies in Europe, Asia, Africa, Canada, New Zealand, Australia and the United States have reviewed the "probably carcinogenic" conclusion and rejected it outright, often with a scathing rebuke of the IARC, which has been mired in scandal since issuing its report.

The following table summarises quotes from the major registration authorities, all of whom have access to all the papers and are experts in this field. This table may be helpful to pass on to clients wishing to know more real scientific information rather than interpretation of data to generate headlines. A good example of this occurred in an article this July in the *The Guardian*: '*Disturbing': weedkiller ingredient tied to cancer found in 80% of US urine samples*. A number of articles have been published recently on how this data is incorrectly interpreted. A critiqued by Kevin Folta entitled <u>Glyphosate detected in 80% of Urine samples reason for alarm or deception and distortion</u> of data also another article from the <u>Atlanta business journal</u> goes into more detail. These make interesting reading and demonstrate how data can be used to distort facts when taken out of context.



## What do global **regulatory** and **research** agencies conclude about the health impact of

GLYPHOSATE

SEPA United States Environmental Protection Agency USA	"Human health risk assessment concludes that glyphosate is not likely to be carcinogenic to humans [and] no other meaningful risks to human health when the product is used according to the pesticide label"	2017
Office of Pesticide Programs USA	"Not strong support for 'suggestive evidence of carcinogenic potential' based on the weight-of-evidence Even small, non-statistically significant changes were contradicted by studies of equal or higher quality. The strongest support is for 'not likely to be carcinogenic to humans'"	2017
Notional Toxicology Program USA	"Little evidence of toxicity, and there was no evidence of glyphosate causing damage to DNA"	1992
Health Canada	"Products containing glyphosate <b>do not present unacceptable risks to</b> <b>human health</b> or the environment when used according to the revised product label directions Risks to [occupational] handlers are not of concern for all scenarios"	2017
Canada	"No pesticide regulatory authority in the world currently considers glyphosate to be a cancer risk to humans at the levels at which humans are currently exposed"	2019
	"Based on the epidemiological data as well as on data from long-term studies in rats and mice, taking a weight of evidence approach, <b>no</b> <b>hazard classification for carcinogenicity</b> is warranted"	2017
Europe	"ECHA's Committee for Risk Assessment (RAC) agrees to keep glyphosate's current classification as causing serious eye damage and being toxic to aquatic life[but] again concludes that <b>classifying</b> glyphosate as a carcinogen is not justified."	2022
efsa European Food Safety Authority Europe	"Glyphosate is unlikely to be genotoxic or to pose a carcinogenic threat to humans Neither the epidemiological data nor the evidence from animal studies demonstrated causality between exposure to glyphosate and the development of cancer in humans"	2015
European Commission Assessment Group on Glyphosate Europe	"Taking all the evidence into account i.e. animal experiments, epidemiological studies and statistical analyses The AGG proposes that a classification of glyphosate with regard to carcinogenicity is not justified."	2021
	"Level of evidence of carcinogenicity in animals and humans is considered to be relatively limited"	2016
anses generation and the sources almost all and the sources of the sources for the sources of th	"36 [glyphosate-based] products will no longer be allowed for use from the end of 2020, due to a <b>lack or absence of scientific data</b> which would allow all genotoxical risk to be ruled out"	2019
Bundesinstitut Für Risikobewertung Germany	"Available data <b>do not show carcinogenic or mutagenic properties</b> of glyphosate nor that glyphosate is toxic to fertility, reproduction or embryonal/fetal development in laboratory animals"	2015
Federal Department of Home Affairs FDHA Federal Food Safety and Veterinary Office FSVO Switzerland	"Residues of glyphosate in the foods investigated do not represent a risk of cancer"	2018
Australian Government Australian Pesticides and Veterinary Medicines Authority Australia	"Glyphosate does not pose a carcinogenic risk to humans Products containing glyphosate are safe to use as per the label instructions"	

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Risk Assessment what is the Ballious fits with racia he	eri, Samani an anna anni naganaani"	
Environmental Protection Authority Te Mana Bauhi Taiao New Zealand	"Unlikely to be carcinogenic to humans or genotoxic (damaging to genetic material or DNA) and should not be classified as a mutagen or carcinogen"	2016
ANVISA Agéncia Nacional de Vigilância Sanitária Brazil	"No evidence to indicate that the herbicide glyphosate is carcinogenic"	2019
Food Safety Commission of Japan	"No neurotoxicity, carcinogenicity, reproductive toxicity, teratogenicity, and genotoxicity"	2016
Rural Development Administration Korea	"Epidemiological studies on glyphosate found no cancer link"	2017
World Health Organization Organization of the United Nations Global	"Glyphosate is <b>unlikely to be genotoxic at anticipated dietary</b> <b>exposures</b> . Glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet"	2016
World Health Organization Drinking-water quality guidelines Global	"Under usual conditions, the presence of glyphosate and AMPA [aminomethylphosphonic acid, glyphosate's primary metabolite] in drinking-water <b>does not represent a hazard</b> to human health"	2004
World Health Organization International Programme on Chemical Safety Global	"Available data on occupational exposure for workers applying Roundup indicate <b>exposure levels far below</b> the NOAELs [no observed adverse effect levels] from the relevant animal experiments"	1994
Longitudinal Study How glyphosate Impacted 54.251 pe Agricultural Health Study USA	"No association was apparent between glyphosate and any solid tumors or lymphoid malignancies overall, including non-Hodgkin's lymphoma and its subtypes some evidence of increased risk of AML [acute myeloid leukemia] among the highest exposed group that requires confirmation"	2018
Hazard Assessment What is the potential to cause harm	n, regardless of dose or exposure?	
International Agency for Research on Cancer World Health Organization Global	<ul> <li>"Limited evidence in humans for the carcinogenicity of glyphosate</li> <li>Evidence in humans is from studies of exposures, mostly agricultural [e.g. not from dietary exposure] A positive association has been observed for non-Hodgkin lymphoma There is 'strong' evidence that exposure to glyphosate or glyphosate-based formulations is genotoxic"</li> <li>IARC placed glyphosate in its hazard category "Group 2A: probably carcinogenic to humans" along with red meat, hot beverages, and working as a barber. The evidence on carcinogenicity was less robust than for agents such as bacon, salted fish, oral contraceptives and wine.</li> </ul>	2015
Genetic Literacy Project Infographic by Kayleen Schreiber, PhD, and	l you to the document issued by the regulatory or research agency. dapted from inlographic by Maxime Pinazzi and iida Ruishalme. <u>Maxime Pinazzi</u> is a media blogger focusing on skeptical analysis <u>iza fr</u> (media analysis, critical thinking). <u>lida Ruishalme</u> is a biologist specializing in biomedical research and author of <b>Thoughts</b>	

The Amenity Forum has a duty to inform members of all the developments to aid our move towards sustainable integrated vegetation management using all the tools at our disposal.

Over the next few months, we will pull together all the elements of integrated vegetation management to help our members have access to the data to help them make a decision based on fact rather than internet articles and political arguments.