HB0472-FAV-DTMG-2-3-21.pdf
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Olivia Bartlett, Co-Lead, DoTheMostGood Maryland Team

Committee: Environment and Transportation

Testimony on: HB0472 - Agriculture – Use of Glyphosate – Prohibition

Position: Favorable

Hearing Date: February 3, 2021

Bill Contact: Delegate Pat Young

DoTheMostGood (DTMG) is a progressive grass-roots organization with more than 2500 members who live in a wide range of communities in Montgomery and Frederick Counties, from Bethesda near the DC line north to Frederick and from Poolesville east to Silver Spring and Olney. DTMG supports legislation and activities that keep all the members of our communities healthy and safe in a clean environment. DTMG strongly supports HB0472 because it will keep Maryland residents safe by banning use of the dangerous herbicide glyphosate in the state.

Glyphosate is one of the world's most common herbicides. It is the active ingredient in popular weed-control products like Roundup, Rodeo, and Pondmaster, and is used in agriculture as well as by homeowners. Glyphosate is also used in public spaces like parks and playgrounds to prevent the growth of weeds and other unwanted plants. People are exposed to glyphosate through their skin, their eyes, or by breathing it in while using it, or by touching plants that are still wet with spray. People may also ingest glyphosate if they eat or smoke after applying it without washing their hands first.

We may also be exposed to glyphosate in our food. Glyphosate is mostly applied to corn, soybean and wheat crops, but is increasingly sprayed just before harvest on oats, chickpeas and other crops as a drying agent to speed the harvest, thereby contaminating foods made from these crops. Glyphosate was found in nearly every sample of popular oat-based cereals and other foods marketed to children. Glyphosate has also been found in grain and bean products, like pasta, buckwheat, barley, kidney beans, and chickpeas, as well as in avocados, apples, blueberries, cherries, cucumbers, dates, dried peas, garlic, lemons, olives, peanuts, pomegranates, potatoes, rice, spinach, sugarcane, tobacco, tomatoes, and walnuts.

There is growing evidence that long-term exposure to glyphosate and accumulation of glyphosate in our bodies causes cancer in people. In 2015, glyphosate was classified by the International Agency for Research on Cancer as a probable carcinogen for people, and in 2017, the California Office of Environmental Health Hazard Assessment listed glyphosate as a chemical known to cause cancer. Glyphosate may also cause liver and kidney damage; dairy cows eating a diet of soybeans with high levels of glyphosate had higher risks of liver and kidney damage. In another study, pregnant rats who were given high doses got sick and their fetuses had slow weight gain and skeletal defects.

Therefore, this dangerous chemical should be banned in Maryland. Several countries have already banned glyphosate completely or set out specific restrictions regarding its use: In 2014, the Netherlands prohibited the sale of glyphosate to consumers for use at home. As of June 30, 2021, the sale and use of glyphosate herbicides will be banned in Vietnam. The German government also announced in 2019 that the use of glyphosate will be prohibited starting at the end of 2023.

For all these reasons, DTMG strongly supports HB0472 and urges a **FAVORABLE** report on this bill.

Respectfully submitted,

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HB472-MPEN-FAV-Berlin-Raindrop

Uploaded by: Berlin, Ruth

Position: FAV

Testimony in Support of House Bill HB472

February 3 , 2021

Dear Chairman Barve and Members the Environment and Transportation Committee:

The Maryland Pesticide Education Network and its Smart on Pesticides Coalition comprised of 108 organizations and businesses, support passage of HB472.

Glyphosate, most commonly known and applied as "RoundUp," is the most widely used pesticide in the world. It is applied to lawns and gardens, parks and playgrounds, farm fields and food crops, and then runs with rainfall into the waterways and thus drinking water.[1]

Restricting the use of this weed killer on state, county and city government owned or leased grounds and parks will significantly help to protect Maryland citizens from the serious adverse impacts of this well researched pesticide.

Human Health Impacts: In 2015, the UN World Health Organization's International Agency on Research on Cancer (IARC) determined that glyphosate is a "probable carcinogen to humans" – after reviewing numerous peer-reviewed scientific studies that link it to a wide range of cancers. [2] These include pancreatic cancer, skin cancers, non-Hodgkin's lymphoma and endocrine disruption, as well as non-cancer illness such as liver and kidney damage, genetic damage, decreased sperm count and developmental abnormalities.

In April 2019, the Agency for Toxic Substances and Disease Registry (a US federal public health agency) released its draft Toxicological Profile for Glyphosate, which supports the earlier cancer assessment of the IARC.[3] By 2017, glyphosate was listed as a cancer-causing chemical under California's Safe Drinking Water and Toxic Enforcement Act. requiring cancer warning labels be placed on glyphosate products in California.[4]

Glyphosate residues are found in various food products including oat-based cereals our children eat[5], wine (even organic wines[6] and honey[7].A 2019 released Washington State University found exposure to Roundup can cause problems generations later[8].

Environmental Impacts

Bees. Honeybees exposed to glyphosate lose some of their beneficial intestinal bacteria and become more susceptible to infection and death from harmful bacteria.[9] They found that young worker bees exposed to glyphosate died more often when later exposed to a common bacterium. Another major impact is the destruction of wildflowers on which they depend.[10]

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[1] Natural Resources Defense Council: https://on.nrdc.org/2XRlGkg
[2] "Glyphosate," IARC Monographs–112.
[3] Toxicological Profile for Glyphosate, ATSDR, 2019. pps. 2-5: http://bit.ly/2vqBMVE
[4] OEHHA. Notice of Intent to List: Tetrachlorvinphos, Parathion, Malathion, Glyphosate. September 2015. http://bit.ly/2WaYSeL
[5] https://www.ewg.org/release/new-round-ewg-tests-finds-more-children-s-cereals-tainted-monsanto-s-cancer-causing
[6] https://d3n8a8pro7vhmx.cloudfront.net/yesmaam/pages/680/attachments/original/1458848651/3-24-16_GlyphosateContaminationinWineReport_(1).pdf?1458848651
[7] https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0009754
[8] https://www.inlander.com/spokane/a-wsu-study-finds-exposure-to-prevalent-herbicide-roundup-can-cause-problems-generations-down-the-line/Content?oid=17699513&fbclid=IwAR0c21ZS82a-I_MhZhb9VCcxb_Pk8f8WwK7DGzX_w9M1xdeoKp2Dx53WPQU
[9] Motta et al. Glyphosate perturbs the gut microbiota of honeybees. 2018. PNAS. http://bit.ly/2ZKF7wG
[10] Monsanto's global weed killer harms honeybees, research finds. The Guardian 09.24.2018. http://bit.ly/2ULRqFq

Other Wildlife. Glyphosate used directly impacts a variety of nontarget animals, including insects, earthworms, and fish, and indirectly impacts birds and small mammals. Roundup kills beneficial insects, including parasitoid wasps, lacewings and ladybugs. Repeated applications of glyphosate significantly affect the growth and survival of earthworms. Environmental factors, such as high sedimentation, increases in temperature and pH levels increase the toxicity of Roundup, especially to young fish.[11]

Marine Life: Researchers have linked changes in metabolism, growth, behavior and reproduction of certain fishes, mollusks and insects with exposure to glyphosate-containing herbicides[12]

Superweeds. It causes weed resistance due to use in genetically engineered crop production, water contamination, soil quality degradation and is toxic to soil microorganisms and aquatic organisms," according to a 2017 Cornell study.[13]Simultaneously, researchers are finding that RoundUp is increasingly generating weed resistance in a way that use of glyphosate products is becoming much less effective for farmers.[14]

Soil degradation. "As farmers battle in their above-ground war on weeds, they may inadvertently create underground casualties – unintentionally attacking the beneficial bacteria that help crops guard against enemy fungus.[15]

Background: Originally registered in 1974, glyphosate is used to kill broadleaf weeds and grasses. It is applied to more than 100 food crops, as well as forests, greenhouses, rights-of-way, turf and garden beds.

Alternatives to Glyphosate
There are safer options for managing the kinds of broadleaf weeds that are targeted by glyphosate:[16]

- The best alternative is to prevent the weeds from emerging by overseeding, using mulches and sanitation practices that prevent the introduction and spread of weed seeds.
- Vinegar and botanical oils, including clove oil, when applied at the recommended dose and with thorough spray coverage, can manage seedling broadleaf weeds.
- Flame weeding, steam or hot foam can be useful on seedling broadleaf weeds. And it is not necessary to burn the plants – merely to heat water inside the weeds, which causes them to collapse.
- Hand weeding is labor-intensive but is most effective when done before weeds have been able to establish a large root system and go to seed.
- A UMD study found acetic acid-based alternative herbicides can help manage more than a dozen common weeds.[17]

We ask for your favorable vote on HB472. Thank you.

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[11] Beyond Pesticides: http://bit.ly/2Vp8aXF
[12] http://bit.ly/2SrRFGb
[13] Beyond Pesticides: http://bit.ly/2Vp8aXF
[14] Science Daily: http://bit.ly/30NeJCi
[15] Cornell Chronicle: http://bit.ly/2L9xsFd
[16] NC State Extension: http://bit.ly/2y9jucZ
[17] University of Maryland Extension: http://bit.ly/2y7KdXB

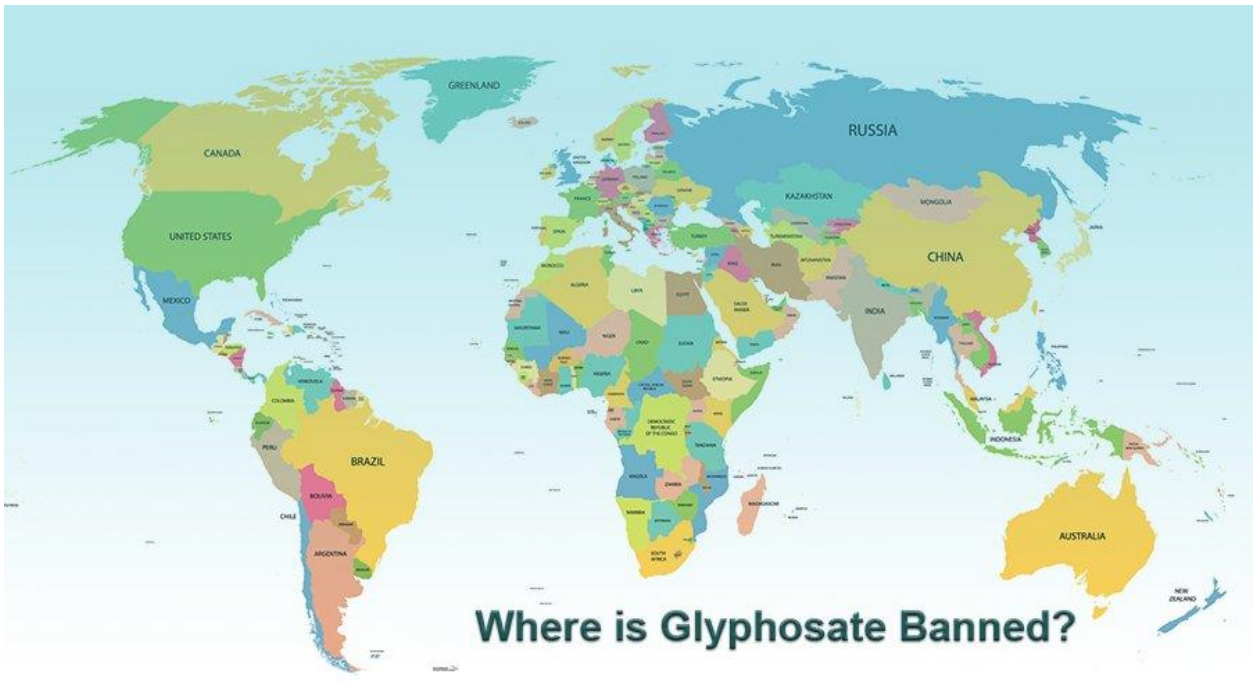
Where is Glyphosate Banned?

Updated 1/22/21 – Data Courtesy of Baum Hedlund Aristei Goldman PC (http://bit.ly/2TIxlQy)

Municipalities in MD, elsewhere in the USA and in many nations throughout the world have taken steps either to restrict or ban glyphosate, the active ingredient in Monsanto's Roundup herbicide – the most widely used pesticide in the world. The municipalities and countries listed below have issued outright bans on glyphosate, imposed restrictions or have issued statements of intention to ban or restrict glyphosate-based herbicides, including Roundup, over health concerns.

Most of the glyphosate restrictions or bans throughout the world were introduced following a landmark report on glyphosate by the World Health Organization's International Agency for Research on Cancer. The IARC concluded that glyphosate is a "probable human carcinogen."

According to the report, the cancers most associated with glyphosate exposure were found to be non-Hodgkin lymphoma and other cancers. Other glyphosate studies have linked it to health issues, including, but not limited to ADHD, Alzheimer's Disease, Autism, Birth Defects, various forms of cancer, Celiac Disease, Colitis, Heart Disease, Inflammatory Bowel Syndrome, Kidney Disease, Liver Disease, and Parkinson's Disease.



U.S. Municipalities Taking Action on Glyphosate

Maryland

- **Greenbelt, MD –** Adopted Sustainable Land Care policy for public lands calling for limited use of pesticides.
- **Howard County, MD** – Implemented a least-toxic IPM policy and accompanying legislation for county grounds maintenance.
- **Hyattsville, MD –** Passed ordinance prohibiting the use of toxic pesticides on public property in favor of alternative, organic methods
- **Montgomery County, MD –** County Council voted to ban the use of cosmetic pesticides on private lawns and the Parks Department has banned use of glyphosate in county parks.
- **Takoma Park, MD –** Placed restriction on cosmetic pesticides for lawn care on public and private property

Arizona

- Tucson, AZ **–** Created an organics-first policy for controlling weeds on city property.

California

- Alameda County, CA -- East Bay Regional Park District banned glyphosate around picnic & play areas and plans to ban Roundup in parks.
- Arcata, CA – Initiated a pesticide reduction plan that urges pesticides to only be used as a last resort.
- Belvedere, CA – Passed municipal ordinance initiating Integrated Pest Management program that restricts toxic pesticide use and urges pesticide use as last resort.
- Benicia, CA – City decided to go glyphosate-free following the verdict in Johnson v. Monsanto Co.
- Berkeley, CA – Implemented pest management program to minimize or eliminate the use of pesticides.
- Burbank, CA – City Council members voted to discontinue the use of Roundup in city parks for one year, and Burbank Unified School District will no longer use the herbicide due to cancer concerns.
- Cambria, CA -- North Coast school board has proposed a ban on glyphosate for all school properties.
- Carlsbad, CA – The City Council voted unanimously to adopt a policy that makes organic pesticides the preferred method for killing weeds. "Asked to choose between aesthetics and public health…I'm going to choose public health every time," said Councilwoman Cori Schumacher.
- Clayton, CA – Banned use of Roundup on city property.
- Concord, CA – Mount Diablo Unified School District banned glyphosate on school property.
- Contra Costa County, CA – Restricted/Discontinued the use of glyphosate. *
- Corte Madera, CA – Passed ordinance calling for Integrated Pest Management (IPM) program restricting highly toxic pesticides, while also urging for pesticide use to be a last resort.
- Costa Mesa, CA – City Council adopted an organics-first Integrated Pest Management policy.
- Davis, CA – Passed ordinance implementing Integrated Pest Management (IPM) program designed to reduce the use of pesticides. Some city parks do not allow the use of glyphosate.
- Encinitas, CA – Banned the use of Roundup and other glyphosate-based weed killers in city parks.
- Fairfax, CA – Passed municipal ordinance restricting use of toxic pesticides on public property in favor of alternative methods.
- Greenfield CA – Restricted/Discontinued the use of glyphosate. *
- Irvine, CA – City Council passed resolution to cease spraying Roundup and other chemicals on public parks, streets and playgrounds.
- Lodi, CA – The city decided to ban use of Roundup within 25 feet of playgrounds.
- Long Beach, CA – announced an immediate halt on the spraying of Roundup in Long Beach Parks.
- Los Angeles County, CA – The Los Angeles County Board of Supervisors issued a moratorium on glyphosate-based herbicides, including Roundup.
- Marin County, CA – Stopped using glyphosate on all county-maintained parks, landscaping, playgrounds, walkways and parking areas..
- Mill Valley, CA – Passed ordinance initiating Integrated Pest Management program that restricts toxic pesticide use and urges pesticide use as last resort.
- Napa, CA – Policy announced in March 2019 banned glyphosate use on city property, completing a phase-out campaign that was three years in the making.
- Novato, CA – Following the $289 million Monsanto verdict, Novato Mayor Josh Fryday said the city will no longer use Roundup weed killer.
- Oakland, CA – Passed ordinance initiating Integrated Pest Management program that restricts toxic pesticide use and promotes pesticide use as last resort. On Sept. 1, 2018, the city formally halted the use of Roundup. Alameda County is reviewing its chemical spraying practices.
- Orange County, CA – Restricted/Discontinued the use of glyphosate. *
- Oxnard, CA – The Oxnard School District board voted to ban Roundup use on campuses.
- Palo Alto, CA – Pest management program calls for Integrated Pest Management that restricts pesticide use in favor of less harmful methods.
- Petaluma, CA – City officials are considering a ban on glyphosate for use in public parks.

- Richmond, CA – Issued an ordinance to ban the use of glyphosate for all weed abatement activities conducted by the city.
- San Anselmo, CA – Passed city resolution promoting an Integrated Pest Management program restricting the use of toxic pesticides. The program only allows pesticide use as a last resort.
- San Francisco, CA – Restricts the use of toxic pesticides on public property in favor of alternative, organic methods.
- San Juan Capistrano, CA – Implemented an organics-first policy to control weeds in city parks and open spaces.
- San Lorenzo Valley, CA – The San Lorenzo Valley Water District voted 4-1 for a permanent ban of glyphosate pesticide use by the district.
- San Luis Obispo, CA – San Luis Coastal Unified School District banned all pesticides, including Roundup, on school properties. Coast Unified School District has banned Roundup.
- Santa Rosa, CA – Banned the use of Roundup at city parks.
- Sonoma, CA - Restricted/Discontinued the use of glyphosate. *
- Thousand Oaks, CA – City instituted a ban on glyphosate use on public golf courses.
- Watsonville, CA – Restricted/Discontinued the use of glyphosate. *
- Woodland, CA – Woodland Joint Unified School District suspended the use of Roundup on school campuses.

Colorado

- Boulder, CO – Banned Roundup for use on city parks.
- Durango, CO – Instituted an Organically Managed Lands program to minimize the use of synthetic fertilizers and pesticides.

Connecticut

- Middletown, CT – Passed ordinance banning toxic pesticides and herbicides on municipally-owned fields, parks and other property.

A growing number of Connecticut towns, including Branford, Cheshire, Granby, Essex, Greenwich, Manchester, Plainville, Roxbury, Watertown, and Woodbridge have adopted bans or restrictions on glyphosate use. The state also has Public Act 09-56 to eliminate the use pesticides in K-8 schools.

Florida

The Florida Fish and Wildlife Conservation Commission ceased using aquatic herbicides, glyphosate chief among them, anywhere in state waters, while the agency gathers public input.

- Fort Myers, Florida- Restricted/Discontinued the use of glyphosate. *
- Indian River County, Florida- Restricted/Discontinued the use of glyphosate. *
- Key West, Florida- Restricted/Discontinued the use of glyphosate. *
- Martin County, Florida- Restricted/Discontinued the use of glyphosate. *
- Miami, FL – Announced a city-wide ban on glyphosate-based herbicides in February of 2019.
- Miami Beach, FL – Passed a resolution banning the use of glyphosate weed killers for landscaping and maintenance work on city-owned property.
- North Miami, FL – City Council approved a plan calling for the gradual reduction of pesticide use on city property and a study on alternative pesticides.
- Satellite Beach, FL – Restricted/Discontinued the use of glyphosate. *
- Sebastian, Florida- Restricted/Discontinued the use of glyphosate. *
- Stuart, FL – City commissioners voted to ban glyphosate, calling for an integrated pest control plan that reduces the use of glyphosate with the ultimate goal of eliminating chemicals.
- Vero Beach, Florida- Restricted/Discontinued the use of glyphosate. *

Hawaii

Hawaii County Council approved a bill that would prohibit use of herbicides like Roundup on public parks, roads, bike routes, trails, sidewalks and elsewhere. Would take effect in 2024.

Illinois

- Chicago, IL – The city stopped spraying glyphosate in public spaces.
- Evanston, IL – Evanston decided to go pesticide-free in 2010. Glyphosate is banned from use on city property, parks and schools.

- Franklin Park, IL – Passed resolution promoting an Integrated Pest Management (IPM) policy that restricts highly toxic pesticides and urges for pesticides to be considered as a last resort.
- Naperville, IL – Created the Sustainable Parks Initiative, which uses organic products and sustainable practices for weed control.
- Urbana, IL – Adopted the Midwest Grows Green natural lawn care initiative to eliminate synthetic lawn pesticides on city parks.

Iowa

- Dubuque, IA – City instituted a ban on glyphosate use in public parks.
- Story County, IA – Eliminated use of chemical pesticides in six of its mowed turf areas.

Kansas

- Lawrence, Kansas – Implemented Integrated Pest Management (IPM) program designed to reduce pesticide use.
- Wichita, Kansas – Initiated pilot program that limits or eliminates pesticide use.

Maine

Dozens of cities and townships in Maine have adopted local ordinances restricting or banning pesticides and herbicides.

- Portland, Maine – Banned synthetic pesticides in March of 2019. Private property owners may only use organic treatments on lawns and gardens. No pesticides may be used within 75 feet of a water body or wetland.
- South Portland, Maine – Passed a pesticide plan that discourages property owners from using certain pesticides and herbicides.

Massachusetts

- Chatham, Massachusetts – Passed an order banning glyphosate use in parks, athletic fields, mulch beds and walkways.
- Eastham, MA – Local ordinance requires town employees to receive a permit for use of registered pesticides and prohibits the use of highly-toxic pesticides.
- Falmouth, MA – Issued a yearlong moratorium on glyphosate use.
- Marblehead, MA – Created Organic Pest Management program to phase out pesticides and herbicides.
- Warwick, MA – A measure to ban Monsanto's Roundup passed at a Special Town Meeting. The ban does not allow people to spray glyphosate on any land within the town.
- Wellesley, Massachusetts – Wellesley banned all pesticides in 2011. Glyphosate is restricted from being sprayed on athletic fields and any city-owned property. The chemical can be used in limited emergency weed control situations.

Minnesota

- Minneapolis, MN – Commissioners of the Minneapolis Parks and Recreation Board decided to eliminate all glyphosate-based products from being used in neighborhood parks. In October of 2018, the Park Board's Operations & Environment Committee voted to extend the glyphosate ban to the entire Minneapolis park system.
- Rochester, MN – The Parks & Recreation Department initiated a pesticide-free pilot project for city parks.

Nevada

- Reno, NV – The city initiated a pesticide free pilot program.

New Hampshire

- Dover, NH – Passed resolution calling for Organic Land Management. City utilizes least toxic compounds only when necessary.
- Portsmouth, NH – Passed resolution eliminating the use of toxic pesticides on public property in favor of alternative, organic methods.

New Mexico

- Bernalillo County, NM – Abandoned the use of Roundup in April 2020. *
- Las Cruces, NM – City Council voted to ban Roundup and glyphosate for pest control on city property.
- Taos County, NM – Taos County Commissioners are considering the possibility of banning all pesticides, including glyphosate.

New Jersey

New Jersey has State and local ordinances encouraging Integrated Pest Management programs to eliminate or drastically reduce the use of pesticides. At least 15 city school districts and over a dozen other parks and recreation departments in the state have enacted IPM programs.

New York

New York's Park and Recreation Department has measures to eliminate or reduce pesticide and herbicide use in areas under its control.

- New Paltz, NY – The use of toxic pesticides and herbicides by city employees or by private contractors is forbidden on all city-owned lands.
- Rockland County, NY – Created a Non-Toxic Pesticide program, mandating the use of natural, non-toxic, or as a last resort with prior approval, the least toxic pesticide use.
- Westchester County, NY – Enacted a law for pesticide-free parks.

North Carolina

- Carrboro, NC – The city of Carrboro has restricted glyphosate use since 1999. Glyphosate cannot be sprayed in public parks, schools and town buildings or properties. The city will only allow glyphosate to be sprayed under limited circumstances.

Ohio

- Cuyahoga County, OH – Local ordinance prohibits the use of pesticides on county-owned land, and established the adoption of an Integrated Pest Management program for county-owned properties.
- South Euclid, OH – Passed ordinance prohibiting toxic pesticides on public grounds in favor of alternative, organic pest control methods unless permitted by an Environmental Review Board.

Oregon

- Portland, OR – Since 1988, Portland has restricted the use of Roundup to emergency use only. Glyphosate is banned on all city-owned property.

Texas

- Denton, TX – The city ended the use of glyphosate herbicide and is piloting an integrated pest management program that favors organic methods for city-owned parks. *
- Austin, TX – City Council voted to prohibit the spraying of glyphosate on city lands.

Virginia

- Charlottesville, VA – Restricts the use of glyphosate on any city-owned parks, schools, or buildings. Glyphosate can only be sprayed under limited circumstances.

Washington

- King County, WA – Passed municipal ordinance initiating an Integrative Pest Management (IPM) program to determine if and how pesticides should be used.
- Kitsap County, WA – Banned glyphosate spraying by workers on county-owned and maintained properties, but it may be used on noxious weeds as a tool of last resort.
- Olympia, WA – City passed a resolution to encourage the implementation of an Integrative Pest Management (IPM) program for non-chemical pest control.
- Seattle, WA – Officials restricted Roundup to only be used as the last resort and other herbicides containing the active ingredients triclopyr and imazapyr, should be used first. *
- Thurston County, WA –Passed municipal ordinance to restrict the use of toxic pesticides on public property.

Countries Where Glyphosate is Restricted or Banned

- **Argentina:** More than 400 towns and cities in Argentina have passed measures restricting glyphosate use.
- **Australia:** Numerous municipalities and school districts throughout the country are currently testing alternative herbicides in an effort to curtail or eliminate glyphosate use. Many use steam technology for weed control on streets and in other public areas.
- **Austria** – In July 2019 the Austrian Parliament voted in favor of banning glyphosate completely in the country. This ban was later delayed and the situation surrounding the ban is still unclear. *

- **Bahrain** – Six Middle Eastern countries banned the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Belgium:** Banned the individual use of glyphosate. In 2017, Belgium voted against relicensing glyphosate in the EU. The country was also one of six EU member states to sign a letter to the EU Commission calling for "an exit plan for glyphosate…" The city of Brussels banned the use of glyphosate within its territory as part of its "zero pesticides" policy.
- **Bermuda:** Outlawed private and commercial sale of all glyphosate-based herbicides. In 2017, the government relaxed its ban on glyphosate, allowing the Department of Environment and Natural Resources to import restricted concentrations of glyphosate for managing roadside weed overgrowth.
- **Brazil:** In August of 2018, a federal judge in Brasilia ruled that new products containing glyphosate could not be registered in the country. Existing regulations concerning glyphosate were also suspended, pending a reevaluation of toxicological data by Anvisa, the country's health agency. In September of 2018, a Brazilian court overturned the federal judge's ruling. September marks Brazil's first month of soybean planting. The country is the largest exporter of soybeans in the world, and as such, has become heavily reliant on agrochemicals. Anvisa issued a statement following the court's decision to overturn the ruling, saying it will take necessary legal and technical steps in response. Further, Brazil's Solicitor General's office has said it is preparing an appeal to the court decision with support from the Agriculture Ministry.
- **Canada:** Eight out of the 10 provinces in Canada have some form of restriction on the use of non-essential cosmetic pesticides, including glyphosate. Vancouver has banned public and private use of glyphosate, aside from the treatment of invasive weeds.
- **Colombia:** In 2015, Colombia outlawed the use of glyphosate to destroy illegal plantations of coca, the raw ingredient for cocaine, out of concern that glyphosate causes cancer. However, in January of 2017, the country reinstituted its controversial glyphosate fumigation program for coca. Unlike the previous program, which used aerial fumigation, the new program consists of manual spraying from the ground.
- **Costa Rica:** In December 2019 Costa Rica's National System of Conservation Areas (SINAC) banned the use of glyphosate herbicides in all protected wild areas in the country as well as on all SINAC owned land. *
- **Czech Republic:** Agriculture Minister Miroslav Toman said the country will limit glyphosate use starting in 2019. Specifically, the Czech Republic will ban glyphosate as a weedkiller and drying agent.
- **Denmark:** The Danish Working Environment Authority declared glyphosate to be carcinogenic and has recommended a change to less toxic chemicals. Aalborg, one of the largest cities in Denmark, issued private-use glyphosate ban in September of 2017. In July of 2018, the Danish government implemented new rules banning the use of glyphosate on all post-emergent crops to avoid residues on foods.
- **El Salvador:** Banned glyphosate over links to deadly kidney disease.
- **England:** Following the landmark $289 million Monsanto Roundup verdict on Aug. 10, 2018, Homebase, one of England's largest DIY retailers, announced that it would review the sale of Roundup and Ranger Pro. A number of townships, including Brighton, Frensham, Hammersmith & Fulham, Bristol, Glastonbury, Frome, Erewash, North Somerset, Lewes and Wadebridge have also voted to institute restrictions on pesticides and herbicides, including glyphosate.
- **France:** French authorities banned the sale, distribution and use of Roundup 360 in early 2019. In May of 2019, French Agriculture Minister Didier Guillaume announced that France would eliminate the use of glyphosate by 2021 with limited exceptions.
- **Germany:** Environment Minister announced Germany will ban glyphosate by 2023. This includes a "systemic reduction strategy" prohibiting glyphosate spraying in domestic gardens and on the edges of farmland.
- **Greece:** Greece was one of nine EU countries to vote against relicensing glyphosate in November of 2017. The country was also one of six EU member states to sign a 2018 letter to the European Commission calling for "an exit plan for glyphosate…" According to Greek Minister of Agricultural Development Evangelos Apostolou, "[i]t is our duty to push in the direction of risk management, in the interests of consumers, producers and the environment." In March of 2018, the Greek government approved a five-year license for Monsanto's Roundup against the wishes of Greek environmentalists.

- **India:** In October of 2018, the government of Punjab banned the sale of glyphosate in the state. "All pesticide manufacturers, marketers and dealers in the State shall not sell glyphosate formulations-concentrations with immediate effect. The licensing authorities have been asked to take necessary steps for removal of entries for glyphosate from the licenses issued by them," said State Agriculture Secretary K.S. Pannu.
- **Italy:** Italy's Ministry of Health placed a number of restrictions on glyphosate use. Italian legislators have also raised concerns about glyphosate safety, and have come out against relicensing the herbic ide in the European Union. In 2016, the Italian government banned the use of glyphosate as a pre-harvest treatment and placed restrictions on glyphosate use in areas frequented by the public. In November of 2017, Italy was one of seven EU nations to vote against relicensing glyphosate.
- **Kuwait** – Six Middle Eastern countries banned the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Luxembourg:** One of Luxembourg's largest supermarket chains removed glyphosate from its shelves following the release of the IARC glyphosate report. Luxembourg was one of nine EU countries to vote against relicensing glyphosate in November of 2017, and in early 2018, the country signed a letter to the EU Commission calling for "an exit plan for glyphosate…"
- **Malawi** – Malawi's Ministry of Agriculture, Irrigation and Water Development announced the suspension of import permits for glyphosate in April 2019 *
- **Malta:** Malta began the process of instituting countrywide ban of glyphosate. However, Environment Minister José Herrera backtracked in January of 2017, saying the country would continue to oppose glyphosate in discussions but would fall in line with the European Union and wait for further studies. In November of 2017, Malta was one of nine EU countries to vote against relicensing glyphosate. The country also signed a letter to the EU Commission in 2018 calling for "an exit plan for glyphosate…"
- **Mexico:** The Secretariat of Environment and Natural Resources (SEMARNAT), Mexico's Environment Ministry, announced in June 2020 that glyphosate-based herbicides will be phased out of use in the country by 2024 to protect human health and the environment. *
- **Netherlands:** Banned all non-commercial use of glyphosate.
- **New Zealand:** The cities of Auckland and Christchurch passed resolutions to reduce the usage of chemicals for weed and pest control in public places. The Physicians and Scientists for Global Responsibility, a New Zealand charitable trust, called for a glyphosate ban in 2015.
- **Oman** – Six Middle Eastern countries banned the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Portugal:** Prohibits the use of glyphosate in all public spaces. President of the Portuguese Medical Association has also called for a worldwide ban of glyphosate.
- **Qatar** – Six Middle Eastern countries banned the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **St. Vincent & the Grenadines** – has suspended import of glyphosate-based herbicides.
- **Saudi Arabia** – Six Middle Eastern countries banned the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Scotland:** Aberdeen cut back its use of herbicides and Edinburgh's City Council voted to phase out glyphosate. In November of 2017, five of Scotland's six EU parliamentarians voted in favor of a motion that would phase out glyphosate by 2022.
- **Slovenia:** Slovenia was one of six EU member states to sign a 2018 letter to the European Commission citing "concerns" about the risks associated with glyphosate. The letter called upon the Commission to introduce "an exit plan for glyphosate…"
- **Spain:** According to Kistiñe Garcia of the Spanish NGO, Ecologistas en Acción, Barcelona, Madrid, Zaragoza and the region of Extremuda have decided to ban glyphosate. The regions of La Rioja (major Spanish wine region) and Aragon have also approved motions against endocrine disrupting chemicals, which includes glyphosate.
- **Sri Lanka:** Sri Lanka was the first country to issue a nationwide ban on glyphosate. However, in 2018, the government decided to lift the ban due to crop losses and overgrowing weeds.

- **Sweden:** Raised concerns about glyphosate safety and has pushed against relicensing the herbicide in the EU. In 2017, the Swedish Chemicals Agency (SCA) announced it was planning to tighten rules on private use of plant protection products. Under the plan, private users would only be allowed to use products containing "low-risk substances." According to the SCA, glyphosate is an example of an active substance not expected to be included among low-risk substances, meaning in due time, private consumers may not be permitted to use herbicides containing glyphosate.
- **Switzerland:** Concerned about public wellbeing, the Swiss supermarket chains Migros and Coop removed glyphosate-based products from their shelves due to health risks. In 2017, the Green party put forth a plan to ban glyphosate in Switzerland. The proposed plan was rejected by the Federal Council, Switzerland's executive.
- **Togo**: In the West African country of Togo, it is now prohibited to 'import, market or use glyphosate and any product containing it' *
- **Thailand**: Thailand's National Hazardous Substances Committee voted to ban glyphosate and chemicals paraquat and chlorpyrifos from December 2019. This ban was later changed from a ban to a restriction on use. *
- **United Arab Emirates:** Six Middle Eastern countries banned the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Vietnam**: Vietnam announced that it banned the import of all glyphosate-based herbicides with in March 2019 following a cancer trial verdict from San Francisco *

* *Denotes new additions to list made on 1/22/21*

# # #

testimony HB472.pdf
Uploaded by: Goembel, Luke
Position: FAV

Statement of Luke Goembel, Ph.D.
Vice President, Central Maryland Beekeepers Association
vp@centralmarylandbees.org, 443-465-3863

In support of HB 472, Use of Glyphosate Prohibition

A 2019 Yale publication notes:

"Although the herbicide does not appear as toxic to bees as some other pesticides (notably neurotoxins known as neonicotinoids), researchers have found that glyphosate may impact bees in more subtle ways — for example, impeding the growth of bee larvae, diminishing bees' navigational skills, altering their foraging behavior, or even disrupting their gut microorganisms, known as the microbiome." [https://e360.yale.edu/features/bee-alert-is-a-controversial-herbicide-harming-honeybees]

That publication offers a synopsis, and includes hyperlinks to appropriate studies, of what beekeepers are facing since the explosion in glyphosate use since in the 2000s due to use on "Roundup Ready" crops.

According to the United States Department of Agriculture, one-third of every bite we eat is due to pollination. In the last few decades Maryland beekeepers have been suffering 30-40% hive losses, whereas in past decades 5-10% losses were expected. We, as an informed, intelligent society, must stop killing our pollinators with this ever-increasing onslaught of agricultural chemicals.

As a beekeeper and scientist who is very concerned about the health of our vital pollinators, I wholeheartedly support House Bill 427 and urge a yes vote. Thank you.

HB472-Agriculture-UseOfGlyphosate-SethGrimes.pdf
Uploaded by: Grimes, Seth
Position: FAV

HB472 -- Support

Agriculture - Use of Glyphosate - Prohibition

Environment and Transportation Committee

Submitted by Seth Grimes, seth.grimes@gmail.com, 301-873-8225
February 1, 2021

Chair Barve and Members of the Environment and Transportation Committee,

I write in support of *HB472, Agriculture - Use of Glyphosate - Prohibition*, and urge a favorable committee report.

As a Takoma Park City Council member, in 2014, I drafted our city's Safe Grow law, banning lawncare use of synthetic chemical pesticides, including notably glyphosate, the active ingredient of the widely used -- and widely misused -- Roundup herbicide. I helped win 2015 enactment of Montgomery County's similar Healthy Lawns Act.

Our local governments acted because the dangers posed by synthetic chemical pesticides -- including to non-targeted plant and animal life exposed, particularly children and vulnerable individuals, and to our ecosystem including the Chesapeake Bay -- are clear. These dangers have been established by scientific studies and supported by numerous peer-reviewed publications. I will spare you a retelling here as others will have covered this in their testimony. Those dangers far outweigh the pesticides' limited benefits, which are readily achieved by alternative pest-control methods and substances.

Neither Takoma Park nor Montgomery County restricts the ability to use pesticides in agriculture. That was a tactical choice made to sidestep anticipated opposition.

Agriculture applies glyphosate extensively despite its classification as "probably carcinogenic to humans" (International Agency for Research on Cancer, 2015). California adopted the classification of glyphosate as a carcinogen in 2017, however the federal Environmental Protection Agency -- Donald Trump's EPA, of course -- undercut California's action in 2019 by prohibiting that Roundup labels be required to carry a cancer warning.

My conclusions: Glyphosate is unacceptably dangerous, state action is appropriate, and action must go beyond labels and warnings. An outright ban is needed, and that is why I support HB472, to prohibit use of glyphosate in Maryland.

I urge a favorable Environment and Transportation Committee report on HB472 and General Assembly enactment of the bill.

Prohibition of glyphosate - WISE Testimony.pdf
Uploaded by: O'Connor, Monica
Position: FAV

Committee: Environment and Transportation
Testimony on: Agriculture - Use of Glyphosate - Prohibition HB 0472
Organization: WISE
Position: Favorable
Hearing Date:February 3, 2021

The Maryland Legislative Coalition, a statewide coalition of over 50 grassroots and professional organizations, urges you to vote favorably on HB0472. The bill will prohibit a person in the state from using glyphosate on or after October 21, 2022.

Glyphosate is a commonly used synthetic herbicide. It's the active ingredient in popular weed-control products like Roundup, Rodeo, and Pondmaster. The Environmental Protection Agency (EPA) estimates that 280 million pounds per year of glyphosate are applied in the United States on agricultural fields, roadsides, businesses, industrial sites, homes and public parks. Americans have applied 1.8 million tons of glyphosate since patented by Monsanto in 1974.

While glyphosate systemically kills weeds relatively quickly, it also binds tightly to soils and can persist for months in the ground. According to a U.S. Geological Survey study, glyphosate was found in 66 of 70 rivers and streams studied, as well as in 70 percent of rainfall samples. There are growing concerns about its persistence in the environment and the effects on wildlife and human health.

Glyphosate exposure can be direct because of application, or indirect because of persistence in the food chain. Trace amounts of glyphosate are found in a variety of food products, wine, beer and even in breast milk.

In 2015, the World Health Organization's International Agency for Research on Cancer (IARC) identified glyphosate, as a probable human carcinogen. In 2019 the International Federation of Gynecology and Obstetrics called for the ban of glyphosate worldwide.

The giant pharmaceutical company Bayer, which purchased the herbicide from Monsanto in 2018, has since agreed to pay $10 billion in more than 100,000 lawsuits to plaintiffs who say the chemical harmed them, including allegations that it caused non-Hodgkin's lymphoma, while continuing to sell the product without adding warning labels about its safety.

A ban on glyphosate is gaining traction in countries around the world. In the US, counties, towns, and cities, including Los Angeles, Seattle, and Miami, and many others in California,

Florida, Illinois, Maryland, Massachusetts, New York, Washington State, and more, have banned glyphosate applications on public lands.

If glyphosate is deemed unsafe for public lands, private use should also be prohibited. We urge the committee to vote in favor of HB472 which bans its use in Maryland.

Ruth - HB0472 - support.pdf
Uploaded by: Ruth, S
Position: FAV

Sheila Ruth
Legislative District 44B
Baltimore County

Environment and Transportation
Committee

Annapolis Office
The Maryland House of Delegates
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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

Testimony in Support of HB0472

Agriculture - Use of Glyphosate - Prohibition

Delegate Sheila Ruth

February 3, 2021

Glyphosate is an herbicide and crop desiccant for killing broadleaf plants and grasses. You may know it as the active ingredient in Monsanto's popular RoundUp weedkiller, which was acquired by Bayer in 2018. In agriculture, glyphosate works in conjunction with Monsanto's "RoundUp Ready" crops, which have been genetically engineered to be resistant to RoundUp so that the herbicide kills the weeds and not the crops. In addition to agricultural use, Glyphosate is used by individuals, businesses and governments to control weeds in a variety of settings, including fields, parks, schools, roadsides, residences, and forests.

There is increasing evidence that Glyphosate may be harmful to public health and the environment:

- In 2015, the World Health Organization's International Agency for Research on Cancer (IARC) issued a report stating that Glyphosate is a probable human carcinogen.
- A 2019 meta-analysis found that high exposure to Glyphosate increases the risk of developing non-Hodgkin lymphoma by 41%.
- In November, 2020, the EPA issued a draft Biological Evaluation of the impact of Glyphosate on species listed as endangered or threatened, and found "Likely Adverse Impact" from Glyphosate for 93% of listed species and 96% of listed species' critical habitats.
- A 2018 study found that Glyphosate decreases the beneficial gut biota in bees at concentrations documented in the environment. This decrease makes the bees more susceptible to harmful pathogens, leading to increased mortality.
- An August, 2020 study found that loss of milkweed due to glyphosate use is the primary factor in the decline of the monarch butterfly population. The U.S. Fish and Wildlife Service just announced in December that monarch butterflies will be placed on the candidate waiting list for endangered species protection.

Opposition Cited Research

Opponents of this bill cite several sources to indicate that there are no health risks from Glyphosate.

- In 2017 the EPA issued a risk assessment based on data review and concluded that "glyphosate is not likely to be carcinogenic to humans." This contradicts the 2015 finding by the WHO IARC that concluded that Glyphosate is a probable human carcinogen. In a January, 2019 paper, "How did the US EPA and IARC reach diametrically opposed conclusions on the genotoxicity of glyphosate-based herbicides?", Dr. Charles M. Benbrook concluded that "the EPA relied mostly on registrant-commissioned, unpublished regulatory studies, 99% of which were negative, while IARC relied mostly on peer-reviewed studies of which 70% were positive (83 of 118)." Dr. Benbrook's paper was peer reviewed with a more stringent review process than is usual due to the toxic nature of the controversy over this research.

  Dr. Lianne Sheppard, one of the co-authors of the 2019 meta-analysis cited above, says of the EPA study that the EPA didn't follow proper scientific protocols. Dr. Sheppard is a professor in the Environmental and Occupational Health Sciences department at the University of Washington and was one of the scientific advisers to the EPA on glyphosate.

- The Agricultural Health Study (AHS), conducted by the National Cancer Institute along with investigators from other agencies, is a study of cancer and other health outcomes in licensed pesticide applicators and their spouses from Iowa and North Carolina. The study included 52,394 licensed pesticide applicators and 32,345 spouses. AHS Research updated in 2018 found no statistically significant association between Glyphosate exposure and solid cancers. However, it did find an increased risk of acute myeloid leukemia among those with the highest exposure, which was not statistically significant but which the AHS felt merits further study.

  Data from the AHS research was included in the 2019 meta-analysis listed above. That study found that high exposure to Glyphosate increases the risk of developing non-Hodgkin lymphoma by 41%, even when data from the AHS study was included. Data from an earlier version of the AHS research was included in the 2015 WHO IARC study. That study concluded Glyphosate was probably carcinogenic to humans, even with the AHS data included. The IARC found that "The data from all of the studies combined show a statistically significant association between non-Hodgkin lymphoma and exposure to glyphosate." Those two analyses that included the AHS data would seem to indicate that there is enough evidence from other studies that there is cause for concern in spite of the lack of results from AHS research.

  A different research paper from the Agricultural Health Study did find a statistically significant link between the autoimmune disease Rheumatoid Arthritis and Glyphosate

exposure in women. The AHS plans to follow up with additional research on RA and other autoimmune diseases.

Conclusion

Opponents of the bill will claim that the science shows no clear health impact from glyphosate. However, while some studies did not find a link between glyphosate use and certain specific health conditions, that's a far cry from being able to conclude that glyphosate has no health impact. The references I cited above show enough emerging evidence of glyphosate impact on health and the environment to be concerned. We must act now to protect the workers who apply it, others who are exposed inadvertently through drift or contact, the pollinators we rely on for our food, and other plants and animals including 93% of endangered species. I urge a favorable report for HB472.

Sources

IARC Monograph on Glyphosate
https://www.iarc.who.int/featured-news/media-centre-iarc-news-glyphosate/

Weedkiller 'raises risk of non-Hodgkin lymphoma by 41%'
https://www.theguardian.com/business/2019/feb/14/weed-killing-products-increase-cancer-risk-of-cancer

Exposure to glyphosate-based herbicides and risk for non-Hodgkin lymphoma: A meta-analysis and supporting evidence
https://www.sciencedirect.com/science/article/abs/pii/S1383574218300887

EPA Draft National Level Listed Species Biological Evaluation for Glyphosate
https://www.epa.gov/endangered-species/draft-national-level-listed-species-biological-evaluation-glyphosate#executive-summary

Glyphosate perturbs the gut microbiota of honey bees
https://www.pnas.org/content/115/41/10305

Evaluating the Migration Mortality Hypothesis Using Monarch Tagging Data
https://www.frontiersin.org/articles/10.3389/fevo.2020.00264/full

Questions and Answers: 12-month finding on a petition to list the monarch butterfly
https://www.fws.gov/savethemonarch/FAQ.html#FAQ12

EPA Releases Draft Risk Assessments for Glyphosate
https://www.epa.gov/pesticides/epa-releases-draft-risk-assessments-glyphosate

How did the US EPA and IARC reach diametrically opposed conclusions on the genotoxicity of glyphosate-based herbicides?
https://enveurope.springeropen.com/articles/10.1186/s12302-018-0184-7

Some food for thought: a short comment on Charles Benbrook´s paper “How did the US EPA and IARC reach diametrically opposed conclusions on the genotoxicity of glyphosate-based herbicides?” and its implications
https://enveurope.springeropen.com/articles/10.1186/s12302-019-0187-z

Glyphosate Use and Cancer Incidence in the Agricultural Health Study
https://pubmed.ncbi.nlm.nih.gov/29136183/

Rheumatoid Arthritis in Agricultural Health Study Spouses: Associations with Pesticides and Other Farm Exposures
https://pubmed.ncbi.nlm.nih.gov/27285288/

HB0472_Food & Water Watch_FAV.docx.pdf
Uploaded by: Starbuck, Amanda
Position: FAV

Testimony for HB0472: Agriculture - Use of Glyphosate - Prohibition
Bill Sponsor: Sheila Ruth
Committee: Environment and Transportation
Organization Submitting: Food & Water Watch
Person Submitting: Amanda Starbuck
Position: FAVORABLE

Food & Water Water is a national nonprofit advocacy organization with thousands of supporters in Maryland. We are pleased to support Delegate Ruth's bill to prohibit the use of glyphosate within Maryland.

Glyphosate (the active ingredient in Roundup herbicides) is the most widely applied herbicide in the world.[1][2] Monsanto (today owned by Bayer) has long marketed glyphosate as a safe method for controlling weed populations on the field and around the home. However, study after study have revealed the harmful effects of glyphosate:

- Glyphosate is a probable human carcinogen, according to the World Health Organization's International Agency for Research on Cancer;[3]
- Roundup and other glyphosate herbicides are possible endocrine disruptors, meaning they can interfere with the body's hormones and lead to chronic health problems;
- Glyphosate also alters the gut microbiome, possibly contributing to a wide range of human health impacts related to gut health that scientists are just beginning to understand; and[4]
- Glyphosate use has also led to widespread ecological contamination, can be toxic to many types of wildlife, and also impacts pollinators like Monarch butterflies and honeybees.

Unfortunately, the U.S. Environmental Protection Agency's (EPA) approval process for chemical herbicides remains inadequate and outdated. EPA only considers glyphosate in isolation, thereby excluding all studies addressing the synergistic effects of glyphosate formulations as they are used. EPA also overwhelmingly uses industry-submitted studies, which a Food & Water Watch analysis found are several times less likely to find evidence of glyphosate's toxicity

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[1] Bøhn, T. et al. "Compositional differences in soybeans on the market: Glyphosate accumulates in Roundup Ready GM soybeans." *Food Chemistry*. Vol. 153. June 15, 2014 at 207.

[2] Bøhn, T. et al. "Compositional differences in soybeans on the market: Glyphosate accumulates in Roundup Ready GM soybeans." *Food Chemistry*. Vol. 153. June 15, 2014 at 207.

[3] World Health Organization. International Agency for Research on Cancer. [Issue brief]. "IARC Monographs Volume 112: Evaluation of five organophosphate insecticides and herbicides." March 20, 2015 at 1; Food and Agriculture Organization of the United Nations and World Health Organization. [Summary Report.] "Joint FAO/WHO Meeting on Pesticide Residues." May 16, 2016 at 2; World Health Organization. [Online Q&A.] "Pesticide Residues in Food?" May 2016; Davies, Stephen. "Glyphosate unlikely to pose risk through diet, WHO says." *Agri-Pulse*. May 16, 2016.

[4] Leino, Lyydia et al. "Classification of the glyphosate target enzyme (5-enolpyruvylshikimate-3-phosphate synthase) for assessing sensitivity of organisms to the herbicide." *Journal of Hazardous Materials.* Article in Press.

compared to studies from the open literature. In contrast, the World Health Organization's comprehensive assessment that relied exclusively on publicly-available studies concluded that glyphosate is "probably carcinogenic to humans."[5]

In absence of federal action, state regulators need to step up to protect environmental and public health. Roundup has lost its effectiveness for farmers, as more and more superweeds resistant to it have sprung up. It is a suspected carcinogen and a likely contributor to a wide-range of health conditions. And its environmental contamination is nearly ubiquitous. For these reasons, Food & Water Watch requests a favorable report for H.B. 0472.

[5] World Health Organization. International Agency for Research on Cancer. (2017). *Some Organophosphate Insecticides and Herbicides, Volume 112: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans.* Lyon: International Agency for Research on Cancer at 398 to 411.

BaltimoreCounty_FWA_HB0472.pdf
Uploaded by: Conner, Charles
Position: FWA

JOHN A. OLSZEWSKI, JR.
County Executive

CHARLES R. CONNER III, ESQ.
Director of Government Affairs

JOEL N. BELLER
Deputy Director of Government Affairs

BILL NO.: **HB 472**

TITLE: Agriculture - Use of Glyphosate - Prohibition

SPONSOR: Delegate Young

COMMITTEE: Environment and Transportation

POSITION: **SUPPORT WITH AMENDMENTS**

DATE: February 3, 2021

Baltimore County **SUPPORTS** House Bill 472 – Agriculture - Use of Glyphosate - Prohibition. This legislation would restrict the use of glyphosates to bar them from State and County government use.

Glyphosate is the main active ingredient in popular herbicide brands. Recent studies have found that the chemical compound may have adverse health effects particularly on those who are tasked with applying it. Glyphosate has been linked to non-Hodgkin's lymphoma, myeloma, and was recently classified by the World Health Organization as a probable carcinogen for humans.

It has long been a priority of Baltimore County Executive Olszewski's to make government practices safe and worker-friendly. This is why Baltimore County ceased the use of glyphosates internally and opted for the brand Cheetah Pro, an herbicide which contains an alternative chemical compound known as glufosinate ammonium. It has proven to be just as effective and, most importantly, keeps the County's workers safe.

The County feels the legislation could be strengthened with an amendment clarifying that the restrictions apply solely to state and local government, as that is its intent. As scientists have begun to uncover the toxicity of once commonly used items, it has never been more critical to confront those products that also have a direct impact on the health of all that work and live in the State.

Accordingly, Baltimore County requests a **FAVORABLE** report on HB 472. For more information, please contact Chuck Conner, Director of Government Affairs, at cconner@baltimorecountymd.gov.

HB0472-ET-FWA.pdf
Uploaded by: Mehu, Natasha
Position: FWA

BRANDON M. SCOTT
MAYOR

Office of Government Relations
88 State Circle
Annapolis, Maryland 21401

HB 472

February 3, 2021

TO: Members of the House Environment and Transportation Committee

FROM: Natasha Mehu, Director of Government Relations

RE: House Bill 472 - Agriculture - Use of Glyphosate - Prohibition

POSITION: SUPPORT WITH AMENDMENTS

Chair Barve, Vice Chair Stein, and Members of the Committee, please be advised that the Baltimore City Administration (BCA) **supports with amendments** House Bill (HB) 472.

Baltimore City Recreation and Parks (BCRP) recognizes a need for responsible use and application of Glyphosate as it applies to public park land management. The Department maintains over 335 parks and 2,300 acres of forested natural. Considering our current resources and capacity, the use of Glyphosate is an important tool used to care for Baltimore's public parks. Our Department abides by state-level regulations and appreciates that current laws are already quite strong. Most outstanding glyphosate pollution problems are a result of misuse, overreliance or misapplication, and can be corrected by enforcement or regulation as opposed to additional legislation with an outright ban of this chemical.

For these reasons, Baltimore City Recreation and Parks is opposed to House Bill 472 as it is currently drafted and recommends revisions to specifically address the overreliance on Glyphosate in commercial industries from which pollution is primarily sourced. Upon revision of scope, our Department would then, conditionally support greater restrictions on the use of Glyphosate.

Pesticide regulation is just that, a regulatory process. Pesticides are reviewed and approved by the Environmental Protection Agency (EPA) through an extensive scientific process and at the state level in Maryland by the Maryland Department of Agricultural (MDA). The expertise of health experts, scientists working in the field, and other subject matter experts should lead the discussion.

Our Department does not support a total ban on Glyphosate and request its continued use be permitted in limited situations to control non-native invasive plants in our natural areas and forests, to restore ballfields, and to control weeds in cracks on basketball courts, tennis courts, and curb lines and sidewalks. Out of an abundance of caution we will no longer use Glyphosate on playgrounds and near vegetable gardens, despite numerous governmental publications addressing risk assessments about Glyphosate—with findings that it is unlikely to cause cancer in humans when used according to label directions as required. Referenced studies include:

- US Environmental Protection Agency, December 18,2018
- European Food Safety Authority, November 12, 2015
- Australian Pesticides and Veterinary Medicine Authority, March 15, 2017
- New Zealand Environmental Protection Authority, August 2016
- Health Canada, 2015
- International assembly of experts: FAO/WHO May 16, 2016

Use of Glyphosate at BCRP is deliberate and critical to our work, particularly within the Forestry Division for Integrated Vegetation Management (IVM) conservation practices. To specifically articulate how Glyphosate is used within the agency, this unabridged testimonial from the Divisions of Forestry is included as a detailed illustration:

Glyphosate is Essential for Non-Native Invasive Herbaceous Plants & Grasses in Conservation

Glyphosate is an essential chemical for the treatment of particular non-native invasive plant species. This systemic herbicide inhibits an important enzyme needed for plant processes, and is thus used for treatments requiring absorption through plant foliage. We rely on Glyphosate for certain herbaceous plants and grasses.

Brand-specific Glyphosate categorized as "aquatic-safe" is essential for the treatment and management of the prolific, invasive grass, *Phragmites spp*. (or Common Reed). This plant is found along waterways and increasingly around many of our City lakes and reservoirs. Phragmites requires decades of repetitive cutting to control it—or alternatively, aquatic-safe treatments of Glyphosate over the course of only several seasons. The use of Glyphosate is essential if we want to inhibit the spread of this aggressive invasive species.

Another grass, Japanese Stiltgrass, has overtaken the understory of various MD state parks, including Elk Neck State Park, and is abundantly present in the forests surrounding the City managed reservoirs. BCRP can prevent the spread of this plant by hand pulling small patches and chemically treating larger patches of the grass with incredibly low concentrations of Glyphosate. This plant should be treated in summer, before it sets seed— and Glyphosate is the primary chemical compound available to systematically treat this plant during the heat of summer.

While Glyphosate alternatives may be applicable in certain scenarios, Glyphosate is a cost-effective and efficient chemical that is used sparingly to protect and enhance forested natural areas. By prohibiting this chemical, the cost of our operations would increase significantly, reducing our ability to properly manage and protect additional forests on parkland.

Preventing Herbicide Resilience Requires Diversified Chemical Use

While applying IVM practices, a diversity of tools is important for treating problematic vegetation. Regarding the application of herbicides, best management practices recommend the occasional alternation of chemical compounds and herbicide brands to prevent local vegetation from developing a resistance to certain chemicals and treatments. If the Forestry Division's access is limited to fewer chemical compounds, we will eventually face stronger, more resilient non-native invasive plants, with fewer means for preserving "good woods" in our City parks.

Messaging Around Agriculture vs. Environmental Conservation

In 2014, over 90% of total Glyphosate use in the U.S. was related to Agricultural purposes (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5044953/). Thus, we would like to stress that the use of Glyphosate for Forestry related practices and park renovations, has been used sparingly and responsibly in Baltimore City and we would appreciate the continued ability to use the chemical as an important tool in our repertoire for programmatic operations.

Baltimore City Recreation and Parks was able to address local regulatory concerns regarding the use of Glyphosate with an amendment specifying that the application of the chemical would be used under the scope of an Integrated Vegetation Management Program and with prior notification to our City Health Commissioner. We believe this type of concession for the use of this chemical is a responsible approach for aiding in the regulation of Glyphosate, though in regards to the impacts of non-native invasive vegetation on Maryland's natural areas, the use of Glyphosate can also be an important tool for homeowners in managing invasive vegetation.

For the foregoing reasons, the BCA asks for a **favorable with amendments** report on HB 472.

House Bill 472 Todd Morgan - Oppose.pdf
Uploaded by: Blondino, Angela
Position: UNF

ST. MARY'S COUNTY GOVERNMENT

COMMISSIONERS OF ST. MARY'S COUNTY

Todd B. Morgan

James R. Guy, President
Eric Colvin, Commissioner
Michael L. Hewitt, Commissioner
Todd B. Morgan, Commissioner
John E. O'Connor, Commissioner

House Bill 472
Agriculture - Use of Glyphosate - Prohibition

OPPOSE

January 29, 2021

Delegate Kumar P. Barve, Chairman
Environment and Transportation Committee
Room 251
House Office Building
Annapolis, MD 21401

RE: **HB 472** - Agriculture - Use of Glyphosate - Prohibition Hearing Date: February 3, 2021

Dear Chairman Barve:

I **OPPOSE** House Bill 472 Agriculture - Use of Glyphosate - Prohibition which will be heard on February 3, 2021 in the Environment and Transportation Committee. Therefore, I request an unfavorable report on this bill.

Sincerely,

Todd B. Morgan, Commissioner

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HB0472-ENV_MACo_OPP.pdf
Uploaded by: Butler, Alex
Position: UNF

House Bill 472

Agriculture - Use of Glyphosate - Prohibition

MACo Position: **OPPOSE**

To: Environment and Transportation Committee

Date: February 3, 2021

From: Alex Butler

The Maryland Association of Counties (MACo) **OPPOSES** HB 472 as it would unnecessarily financially and operationally burden a variety of local government weed control efforts. A complete prohibition on the use of glyphosate would force county agencies to divert already limited taxpayer resources from other public efforts.

HB 472, as written, would prohibit the use of glyphosate in the state on or after October 1, 2022. MACo understands that the bill will be amended to only prohibit the use by state or local government agencies. Counties remain concerned that an outright ban on government property may deny some current reasonable practices, dictated by project or geography.

Glyphosate is the most widely used herbicide in the country. It remains one of the most effective tools to combat invasive species, making it an essential measure for local governments who maintain forests, parks, transportation infrastructure, and other outdoor areas. Counties already use glyphosate and other weed management tools sparingly, taking into account the needs of their communities when developing policies. This can be combined with limitations on use in high pedestrian traffic areas, and public notice procedures.

A recent decision from the Environmental Protection Agency (EPA) concluded that when used properly, glyphosate poses no risks of concern to human health. Out of an abundance of caution, the Maryland Association of County Parks and Recreation Administrators (MACPRA) currently advises its members to adhere to best practices for safe use of glyphosate.

Alternatives to glyphosate are typically more expensive, and significantly less effective. County agencies deploy these alternatives where practicable but maintain that appropriate use of glyphosate is necessary to effectively manage weeds in public facilities. MACo recognizes the intent of HB 472 but believes it has significant cost and implementation challenges. Accordingly, MACo urges the Committee to provide an **UNFAVORABLE** report for HB 472.

169 Conduit Street, Annapolis, MD 21401
410.269.0043 BALT/ANNAP ◆ 301.261.1140 WASH DC ◆ 410.268.1775 FAX
www.mdcounties.org

hb0472.pdf
Uploaded by: Cissel, Robert
Position: UNF

HOUSE BILL 472

M4 1lr1491

By: **Delegate P. Young**
Introduced and read first time: January 15, 2021
Assigned to: Environment and Transportation

A BILL ENTITLED

AN ACT concerning

Agriculture – Use of Glyphosate – Prohibition

FOR the purpose of prohibiting a person from using glyphosate in the State on or after a certain date; and generally relating to the use of glyphosate.

BY adding to
Article – Agriculture
Section 5–210.6
Annotated Code of Maryland
(2016 Replacement Volume and 2020 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article – Agriculture

5–210.6.

ON OR AFTER OCTOBER 1, 2022, A PERSON MAY NOT USE GLYPHOSATE IN THE STATE.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2021.

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets**]** indicate matter deleted from existing law.

MAAGCS Glyphosate Oppostion Letter 02-01-2021.pdf
Uploaded by: David, Eric
Position: UNF

Mid-Atlantic Association of Golf Course Superintendents
15 Quail Run Drive
Manakin-Sabot, VA 23103
(804) 708-9760 (O) / www.maagcs.org

Environmental and Transportation Committee:

This letter is to express our opposition to **House Bill 472 – Glyphosate – Prohibition**. The Mid-Atlantic Association of Golf Course Superintendents (MAAGCS) represents over 100 golf facilities and companies in Maryland and we have over 400 members. Currently, glyphosate is only being applied on golf courses in this state by licensed and trained personnel.

Glyphosate is an essential tool that is used on the golf course for weed management in a variety of capacities. It is a safe and reliable product that helps to control invasive species. The alternatives to glyphosate provide mediocre control and create a financial burden for the users. The EPA released a review of glyphosate in January 2020 concluding there is no risk to human health when used in accordance with the label. The EPA also found it is a not a carcinogen.

This association has recently completed a comprehensive Best Management Practices document and website for our members to adhere. Integrated Pest Management (IPM) has always been a principle by which our members follow. IPM calls for the rotation of active ingredients to combat chemical resistance. Our members are at the forefront of research and we work actively with local universities to make sure we are using the best available tools to control pests in this region.

The Mid-Atlantic Association of Golf Course Superintendents requests your **NO** vote on House Bill 472.

Thank you,

Chris Fernandes
MAAGCS President

Opposition of HB472 - Agriculture - Use of Glyphos

Uploaded by: Ferguson, Colby

Position: UNF

Maryland Farm Bureau, Inc.

3358 Davidsonville Road • Davidsonville, MD 21035 • (410) 922-3426

February 3, 2021

To: House Environment and Transportation Committee

From: Maryland Farm Bureau, Inc.

Re: **Opposition of HB472 - Agriculture - Use of Glyphosate - Prohibition**

On behalf of our member families, I submit this written testimony opposing HB 472. This bill would ban the use of glyphosate (Round-Up) by anyone in the State on or after October 1, 2022.

There are multiple reasons on why this bill would be devastating to farmers in Maryland not to mention the virtual impossibility to control noxious weeds and the state meeting its 2025 water quality goals. Not only have "real" science proved that Round-Up is one of the safest herbicides available, but the alternatives are more toxic (including those that are approved for certified organic crops).

Glyphosate based herbicides have been approved for more than 40 years. No other pesticide has been more extensively tested than glyphosate with more than 800 safety studies submitted to regulators. Glyphosate has been approved for use in 160 countries. Glyphosate plays an integral part in the process in which Maryland farmers are achieving their 2025 Water quality improvement plan (WIP) goals. Removing the use of this safe and affordable tool would set the state back 20 years in the movement for water quality improvement.

MDFB Policy: We urge keeping all federally labeled crop protection products legal in the state, counties, and municipalities. Furthermore, we believe the use of pesticides should be regulated by available facts, not on emotional issues.

MARYLAND FARM BUREAU RESPECTFULLY OPPOSES HB 472

Colby Ferguson
Director of Government Relations
For more information contact Colby Ferguson at (240) 578-0396

RISE Testimony HB 472.pdf
Uploaded by: Gaeta, Jon
Position: UNF

Responsible Industry for a Sound Environment®

February 1st, 2021

To: The Honorable Delegate Barve, House Environment and Transportation Committee
Re: HB 472 Agriculture – Use of Glyphosate – Prohibition

Thank you for the opportunity to comment on HB 472, a measure to ban applications of glyphosate-based herbicides in state of Maryland. This bill, if passed, would negatively impact Maryland citizens, homeowners and professional applicators, in their ability to protect property from noxious and invasive weeds. We strongly oppose HB 472 and request an unfavorable vote.

Glyphosate-based herbicides are widely and safely used to control noxious and invasive weeds, some of which can cause allergic reactions, compete with native plant species, destroy vital species habitats and decimate natural ecosystems. These invasive species can be difficult to control and expensive to eradicate. State land managers rely on glyphosate for controlling these plants, such as purple loosestrife, poison ivy and giant hogweed, and other vegetation spread which can degrade critical infrastructure.

In a February 7, 2019 *Bloomberg Law* article, the importance of glyphosate to controlling invasive weeds is discussed: "As it stands, glyphosate is really the best tool we have for fighting invasive plants," said Brendan Quirion, an invasive species specialist with The Nature Conservancy, the largest conversation advocacy group in the world. The efficient and judicious use of glyphosate-based herbicides protects and extends efforts of conservation and habitat protection.

All pesticides go through an extensive evaluation and registration process by the U.S. Environmental Protection Agency (EPA) before they are approved for use. In January 2020, EPA's Interim Registration Review Decision concluded that there are no risks to public health when glyphosate is used in accordance with its label. This Decision builds on Glyphosate's track record of safe and effective use for more than 40 years. A complete and current scientific study and review by the world's leading regulatory bodies concurs Glyphosate can be used safely and effectively without causing adverse health or environmental impacts.

Additionally, Glyphosate is far less toxic than other alternative herbicides available, both in terms of human exposure and environmental impact. The 2018 Agricultural Health Study, the largest epidemiologic study on glyphosate-based herbicides supported by the National Cancer Institute, followed over 50,000 licensed pesticide applicators – the most exposed group - for 20 years (1997-2017) and found no associations between glyphosate use and cancer risk.

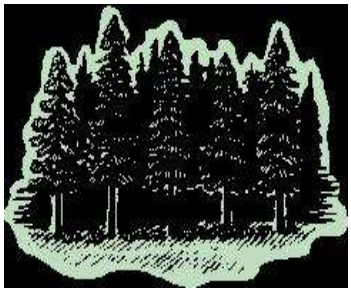
Without access to the full range of herbicide options registered by the Environmental Protection Agency, including glyphosate, to treat weed and harmful plant infestations, Maryland homeowners and professional applicators will be at risk of injury when alternative control methods are used, such as mechanical, acetic acid or flaming techniques. On State land, invasive plant and infrastructure maintenance costs will increase.

As the national trade association which represents the companies producing EPA-registered vegetation management products, RISE hopes to serve as a resource to you and other Maryland policymakers involved with Integrated Vegetation Management (IVM) legislation. Thank you for your consideration and for the opportunity to share our perspective, we respectfully ask the committee for an unfavorable vote on HB 472.

Sincerely,

Jon Gaeta
Director, State Affairs
RISE (Responsible Industry for a Sound Environment)
jgaeta@pestfacts.org
4201 Wilson Blvd.
Suite 700
Arlington, VA 22203
Tel. 202-695-5725

HB472 Glyphosate Tesimony MFA AFI.pdf
Uploaded by: Hill, Beth
Position: UNF



TESTIMONY FROM THE MARYLAND FORESTS ASSOCIATION AND THE ASSOCIATION OF FOREST INDUSTRIES IN OPPOSITION

HOUSE BILL 472

Agriculture- USE OF GLYPHOSATE -Prohibition

January 27, 2021

THE HONORABLE KUMAR BARVE, CHAIR
& DISTINGUISHED COMMITTEE MEMBERS

On behalf of Maryland's forest community – as represented by the Maryland Forests Association and the Association of Forest Industries – we join the State's agricultural community in asking the General Assembly to not ban the use of glyphosate due to the detrimental impacts it will have on the health of Maryland's forests.

Maryland's forests – declared by State law as critical to Maryland's Chesapeake Bay restoration efforts and rural employment – are vulnerable to invasive forest plants, keeping them healthy sometimes requires the use chemicals used sparingly and under appropriate application guidelines. Glyphosate has proven to be an effective tool for both large scale and small applications to not only control exotic invasives, but also as site prep for successful reforestation.

Due to climate change, there is a never-ending wave of non-native plants colonizing our landscapes. With no alternative tool available, we feel it would be reckless to the future management of forest ecosystems to ban the use glyphosate. For these reasons we cannot support the passage of this legislation. Thank you for your consideration in this matter.

Beth Hill, Executive Director
Maryland Forests Association, beth@mdforests.org

William Miles
Association of Forest Industries, billmilesmd@comcast.net

MAIPC Testimony-HB472 Feb 3, 2021 Final A.docx
Uploaded by: Imlay, Marc
Position: UNF

Mid-Atlantic Invasive Plant Council Testimony against Maryland HB 472
February 3, 2021

Good afternoon Madam/Sir Chair and members of the subcommittee. My name is Marc Imlay. I am testifying, as a board member, on behalf of the Mid-Atlantic Invasive Plant Council. The council, composed of representatives of Maryland, Delaware, Pennsylvania, New Jersey, Virginia, West Virginia, and the District of Columbia, strongly opposes HB472.

Glyphosate is a safe, widely used, short-lived systemic herbicide and the most effective and affordable chemical for treatment of invasive and noxious plants that threaten native ecosystems. Without glyphosate, land managers will be forced to use more toxic herbicides to manage plant pests. There is no valid, science-based argument to support the proposed broadscale ban on its use.

Over 630 introduced invasive plant species are known to be impacting and threatening our region's natural areas and ecosystems. These areas include local, state and national parks, state and national forests, wildlife refuges, preserves, rivers, lakes, wetlands, private properties, and the Chesapeake Bay estuary. Habitat degradation by invasive species is one of the primary drivers of native species losses. Natural areas dominated by native plant species provide critical habitat for native wildlife including insects, birds, frogs, turtles, fish and many other animals. Additionally, healthy native ecosystems help to offset the impacts of global climate change by absorbing carbon dioxide and cooling the local environment.

Glyphosate is the most reliable, effective, affordable and lowest-risk herbicide used to manage natural areas in Maryland (and world-wide) against the broadest range of pest plants. Published scientific research shows that glyphosate has insignificant effects on human health and negligible impacts to wildlife, fungi and soil microbes when used according to label instructions for invasive plant management. Glyphosate has a unique mode of action and is broken down rapidly by microorganisms, giving it very short-term persistence in the soil.

A recently-published 12-year study of national parks in the eastern U.S., led by Kathryn Miller, concluded that invasive plants are getting worse and invasive plant management will require a greater investment of resources. If glyphosate is removed from the tool box, land managers in Maryland will be forced to rely on more toxic, more persistent, more expensive, and less broadly effective herbicides. Invasive plant control will also see a much higher labor cost due to the increased need for manual and mechanical management.

Glyphosate is an important and necessary tool for a successful integrated pest management strategy in natural areas, together with manual, mechanical and biological management. The Mid-Atlantic Invasive Plant Council promotes targeted employment of glyphosate, according to the pesticide label directions, for preserving our environment.

Thank you.

MD HB 472 Testimony.pdf
Uploaded by: Mann, Bob
Position: UNF

NATIONAL ASSOCIATION OF LANDSCAPE PROFESSIONALS

Testimony in Opposition to HB 472 – Use of Glyphosate

Chairman Barve and Members of the Environment & Transportation Committee,

For over 40 years the National Association of Landscape Professionals (NALP) has represented tens of thousands of certified professional pesticide applicators across the United States. Tasked with providing plant health services to millions of residential and commercial clients, the core values of our association include advocating on behalf of our members as to the benefits of healthy plants in our landscapes, fostering the highest standards of professionalism, and educating both our members and the public in caring for their landscapes in an environmentally responsible way.

We are writing today to express our opposition to House Bill 472, a bill which will ban the use of a popular herbicide in the State of Maryland. Glyphosate is the active ingredient in the herbicide Roundup™ and has been available on store shelves since its introduction in the early 1970's. We are alarmed that the state would contemplate this type of decision placing it in conflict with those regulatory entities with the expertise to make decisions on the safe use of pesticides, namely the Maryland Department of Agriculture and the U.S. Environmental Protection Agency.

Ensuring the safety, health and well-being of our members, customers, the public and the environment is the top priority of NALP. Our association fully supports documented research conducted by regulatory bodies and the established framework for the regulation of pesticides in the United States through the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), and we continually and closely monitor for regulatory and research developments.

FIFRA prescribes and implements a robust federal and state pesticide registration and review process. NALP believes this process is the foundation for our industry to responsibly manage landscapes using federally and state approved pesticides. We rely on our regulators, as the experts, to make sound scientific decisions on pesticide registration approvals. The EPA and the 50-state pesticide lead regulatory agencies are our pesticide regulators, and the landscape industry will continue to comply with all federal and state laws and regulations that is supported by the review processes, science, evaluations, decisions, and enforcement pursuant to FIFRA.

Recently, controversy has sprung up around this previously innocuous product with claims that it causes cancer in human beings, specifically non-Hodgkin's lymphoma. Not a day goes by without a television or on-line advertisement from a law firm making claims and offering high cash payouts if you or a loved one had used Roundup in the past. These ads use hyperbolic photographs of people making pesticide applications of some sort, usually depicting glyphosate being misused in a manner completely contrary to label directions to stoke fear with the public.

There is a very vocal minority of people who at their core disapprove of all pesticides regardless of how beneficial those pesticides are to man or the environment. Not satisfied with the exhaustive research that goes into approving pesticides before they are available for sale, activists turn to lawmakers and make claims demanding immediate action as if an established, rigorous evaluation process for pesticide products does not exist.

We caution you to carefully listen to both sides of this argument critically.

NATIONAL ASSOCIATION OF LANDSCAPE PROFESSIONALS

Testimony in Opposition to HB 472 – Use of Glyphosate

A leading cancer epidemiologist has taken a special interest in the claim that glyphosate is carcinogenic, and offers his opinion in this recent article:

> *"In the case of glyphosate, 40 years of science demonstrating the safety of the chemical is quite consistent and is supported not only by industry-affiliated scientists but by independent scientists, including agricultural experts, toxicologists, and regulatory officials who are familiar with pesticide use, as evidenced by the fact that so many regulatory bodies worldwide are in agreement. Why, then, are the attacks on glyphosate in courtrooms and governments succeeding?"*[1]

The US Environmental Protection Agency is responsible for the regulation of pesticides at the federal level, while the Maryland Department of Agriculture performs similar duties at the state level. This is our business – we know and interact with those responsible for regulating pesticides and trust their judgement.

The underlying premise that glyphosate is unsafe is belied by the voluminous research data demonstrating the product's safety. A long-term study, a collaborative effort involving investigators from National Cancer Institute, the National Institute of Environmental Health Sciences, the Environmental Protection Agency, and the National Institute for Occupational Safety and Health, of over 89,000 farmers and their spouses in Iowa and North Carolina reviewed data related to glyphosate usage by participants in their study. Regarding non-Hodgkin's lymphoma specifically, the Agricultural Health Study stated:

> *"In this large, prospective cohort study, no association was apparent between glyphosate and any solid tumors or lymphoid malignancies overall, including NHL and its subtypes."*[2]

In response to numerous lawsuits and marketing campaigns to sway public opinion against this product, the US EPA recently made this statement:

> *"EPA continues to find that there are no risks to public health when glyphosate is used in accordance with its current label and that glyphosate is not a carcinogen"*[3]

Health Canada has also stated that glyphosate is not carcinogenic:

> *"After a thorough scientific review, we have concluded that the concerns raised by the objectors could not be scientifically supported when considering the entire body of relevant data. The objections raised did not create doubt or concern regarding the scientific basis for the 2017 re-evaluation decision for glyphosate. Therefore, the Department's final decision will stand.*
>
> *Health Canada follows a transparent and rigorous science-based regulatory process when making decisions about the safety of pesticides. As part of this process, Health Canada will publish its response to each notice of objection in the Pest Management Regulatory Agency's Public Registry on January 14.*

---

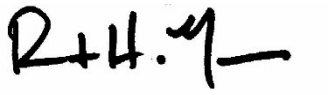
[1] https://issues.org/whos-afraid-of-roundup/
[2] https://www.ncbi.nlm.nih.gov/pubmed/29136183
[3] https://www.epa.gov/newsreleases/epa-takes-next-step-review-process-herbicide-glyphosate-reaffirms-no-risk-public-health

Our scientists left no stone unturned in conducting this review. They had access to all relevant data and information from federal and provincial governments, international regulatory agencies, published scientific reports and multiple pesticide manufacturers. This includes the reviews referred to in the Monsanto Papers. Health Canada also had access to numerous individual studies and raw scientific data during its assessment of glyphosate, including additional cancer and genotoxicity studies. To help ensure an unbiased assessment of the information, Health Canada selected a group of 20 of its own scientists who were not involved in the 2017 re-evaluation to evaluate the notices of objection.

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. We continue to monitor for new information related to glyphosate, including regulatory actions from other governments, and will take appropriate action if risks of concern to human health or the environment are identified."[4]

Glyphosate is an enormously beneficial tool for agriculture, allowing farmers of many different crops to practice no or low-till practices that reduce soil erosion, reduce overall pesticide inputs, lower greenhouse gas emissions, among others. While the green industry does indeed use glyphosate in limited circumstances, we feel strongly that decisions regarding pesticides are correctly left to the expertise of the regulatory community.

Respectfully Submitted,



Robert H. Mann
Director of State & Local Government Relations

[4] https://www.canada.ca/en/health-canada/news/2019/01/statement-from-health-canada-on-glyphosate.html

CLA Testimony on HB 472 - Oppose.pdf
Uploaded by: Massoni, Jenna
Position: UNF

To: Members of the House Committee on Environment and Transportation

House Office Building
6 Bladen Street Room 251
Annapolis, MD

From: Riley Titus, CropLife America

Date: 2/3/2021

RE: HB 472, Agriculture – Glyphosate - Prohibition

Chair Barve, and distinguished members of the Committee on Environment and Transportation:

Thank you for the opportunity to submit written testimony about HB 472, which would prohibit the use of glyphosate in Maryland. We respectfully oppose this legislation and request an unfavorable vote.

Glyphosate is one of the most widely studied herbicides developed, with more than 40 years on the market and 800 safety studies submitted to regulators in over 160 countries. No regulatory agency in the world has concluded that glyphosate is a carcinogen. In January 2020, the U.S. Environmental Protection Agency (EPA) reaffirmed its findings that "there are no risks of concern to human health when glyphosate is used in accordance with its current label. EPA also found that glyphosate is unlikely to be a human carcinogen."[1]

We support and promote science-based policy and regulatory processes necessary in the regulation of pesticide products at both the state and federal level. In addition to the extensive review and approval process EPA applies to pesticides, the Maryland Department of Agriculture (MDA) also reviews pesticides before they are registered or used in the state. This dual layer of oversight and enforcement helps ensure safe and proper pesticide use across Maryland through state registration of pesticides, certification of pesticide applicators, and enforcement and research activities. MDA registration and regulation of pesticides also promotes consistency with federal regulation and scientific standards, particularly those for human health and safety and the environment.

This bill would undermine the expertise and authority of MDA. Prohibiting the use of glyphosate-based herbicides would create unintended consequences, costing the state significantly in alternative solutions, adversely affecting vegetation management, impacting natural resources and investments, restricting agricultural producers and agricultural state college programs, and ultimately harming the state's economy and budget. A neighbor state,

[1] "Glyphosate" Ingredients used in pesticide products, United States Environmental Protection Agency, https://www.epa.gov/ingredients-used-pesticide-products/glyphosate#main-content

Connecticut, when faced with a proposal to prohibit uses on roads and highways found that loss of this tool for those uses would cost the state more than $2 million dollars.[2]

Glyphosate-based herbicides are used to control and manage invasive and unwanted vegetation. It is an important tool for agriculture, in addition to other uses like forestry and natural resources management, road and highway maintenance, rights of ways and energy corridors, aquatic vegetation control, and parks and recreation. Maryland farm operations total 2 million acres in the state[3]. Maryland's Department of Natural Resources manages more than 475,000 acres of public lands and protected open spaces in the State[4]. Losing this tool would make vegetation management, invasives control, and weed resistance nearly impossible for farmers and state land managers, generating significant costs, revenue and crop yield loses.

Losing this tool would also have negative impacts on practices to help address climate change currently practiced by farmers. The use of herbicides enables regenerative farming practices that protect the environment, such as no-till farming in which fields are not plowed and residue from the previous seasons' crops are left in the field as mulch for the next growing season. The benefits of no-till farming include reduced soil erosion (by about 90%), water conservation, improved soil health, and reduced fuel use because farmers don't plow their fields between crops.[5] According to the U.S. Department of Agriculture, no-till farming saves a combined 812.4 million gallons of fuel each year – roughly the annual amount of energy required by 3.2 million homes – and reduces CO2 emissions by 9.1 million tons – the equivalent annual emissions of 1.9 million passenger cars.[6]

Glyphosate is an important tool for agriculture and the State. Because of this and the reasons stated above, CLA urges your NO vote on this legislation. Thank you for your time and consideration.

Sincerely,

Riley Titus
Director, Government Affairs
CropLife America
rtitus@croplifeamerica.org
202-872-3856

CropLife America (CLA) represents the manufacturers, formulators and distributors of crop protection products in the United States. CLA member companies produce, sell and distribute virtually all the crop protection products used by American farmers.

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[2] "SB-754" Office of Fiscal Analysis, Connecticut, https://www.cga.ct.gov/2017/fna/2017SB-00754-R00LCO06752-FNA.htm
[3] United States Department of Agriculture, National Agriculture Statistics Service, Maryland 2019 State Agriculture Overview, https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MARYLAND
[4] Maryland Department of Natural Resources, About Our Lands, https://dnr.maryland.gov/Pages/lands.aspx
[5] "Seeing is Believing: Soil Health Practices and No-Till Farming Transform Landscapes and Produce Nutritious Food" United States Department of Agriculture, https://www.usda.gov/media/blog/2016/12/19/seeing-believing-soil-health-practices-and-no-till-farming-transform
[6] "Reduction in Annual Fuel Use from Conservation Tillage" Natural Resources Conservation Service, United States Department of Agriculture, https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1258255.pdf

HB0472_DNR_OPP ENT 2-3-2021-3.pdf
Uploaded by: McKitrick, James
Position: UNF

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Jeannie Haddaway-Riccio, Secretary

February 3, 2021

The Honorable Kumar Barve
Chair, Environment and Transportation Committee
Room 251, House Office Building
Annapolis, MD 21401

The Honorable Dana Stein
Vice Chair, Environment and Transportation Committee
Room 251, House Office Building
Annapolis, MD 21401

Re: Letter of Opposition – House Bill 472 – Use of Glyphosate – Prohibition

Dear Chair, Vice Chair, and Committee Members,

The Maryland Department of Natural Resources respectfully opposes House Bill 472. This bill would prohibit all persons from using glyphosate herbicide, more commonly known as "Roundup," in Maryland on or after October 1, 2022.

The department is tasked with managing close to a half million acres within the state, and vegetation management is an essential task in caring for this land and meeting our mission of protecting Maryland's natural resources. Invasive plants are having a significant detrimental impact on natural habitats and native species. Nationwide, approximately 45 percent of rare, threatened or endangered species are at risk due to invasive species. Human health and economies are also at risk from invasive species, as their impact on our natural ecosystems and economy cost billions of dollars each year.

Plainly put, removing glyphosate as a tool for managing vegetation, including invasive species will put Maryland's public and private lands -- and the Chesapeake Bay -- in peril. DNR's Maryland Park Service, Wildlife and Heritage Service, and Maryland Forest Service greatly rely on this common herbicide to keep our parks, wildlife management areas, and forests healthy for the benefit of the public, whether for recreation or providing necessary sequestration of harmful greenhouse gas. The Maryland Forest Service also advises HB 472 would have a significant adverse impact to invasive control and other important vegetative management on the 72% of Maryland's forestlands owned by private individuals. The most comparable chemical alternative to glyphosate costs four to five times more, requires greater amounts of chemical to be applied, and would require greater man hours to additionally weed by hand. Hand-weeding is labor intensive and cost-prohibitive for DNR, so chemical herbicides are the only option for the removal of some species.

Scientific studies demonstrate that glyphosate breaks down very quickly within 24 hours after application and has no undesirable or residual soil effects when applied appropriately and within the labeled uses from the U.S. Environmental Protection Agency. A majority of the cases

that demonstrate glyphosate in the environment are due to overapplication, spray drift, and surface runoff, all of which are due to the application rather than the herbicide itself. All alternatives to glyphosate contain break-down products that are more long-lived and dangerous to our environment. As a result, the prohibition on the use of glyphosate will also have significant impacts on the tidal and nontidal wetlands in the Chesapeake Bay area. Maintaining wetlands around the Chesapeake Bay free from invasive plant species, like phragmites, will become a dangerous challenge given that there is no environmentally-safe alternative if HB 472 passes.

For these reasons, the department respectfully asks the committee to give HB 472 an unfavorable report.

Respectfully submitted,

James W. McKitrick
Director, Legislative and Constituent Services

cc: The Honorable Pat Young

Contact: James McKitrick, Director, Legislative and Constituent Services
JamesW.McKitrick@maryland.gov ♦ 443-510-5013

MACPRA Position HB472 1-27-21.pdf
Uploaded by: Miller, Steve
Position: UNF

MARYLAND ASSOCIATION OF COUNTY
PARK & RECREATION ADMINISTRATORS
(MACPRA)

2021 MD General Assembly
House Bill 472

Prohibiting a person from using glyphosate in the State on or after October 1, 2022.

Maryland Association of County Park & Recreation Administrators

TO: Environment and Transportation

Date: January 26, 2021

FROM: Steve Miller, MACPRA President

Position: **OPPOSE**

The Maryland Association of County Park & Recreation Administrators (MACPRA) is an affiliate of the Maryland Association of Counties and represents County Parks and Recreation departments , including Baltimore City – the professionals engaged in the delivery of Parks and Recreation services throughout Maryland.

On behalf of association members, **MACPRA OPPOSES HB 472.**

The use of glyphosate, often found in products such as Roundup, can be an important tool for Parks and Recreation agencies to deal with noxious weeds, non-native invasive plants, and other unwanted weeds that make it challenging to provide safe, functional and attractive facilities for residents and visitors alike.

Recent studies conducted by the EPA, National Institute of Health and the FDA concluded that glyphosate-based products are not likely to be carcinogenic to humans and pose a low threat of toxicity for people. While alternative products do exist, imposing a 100% ban on glyphosate-based products would cause a financial burden (25% or more on product costs alone) to many jurisdictions who rely on its use as a safe and efficient method of weed control.

MARYLAND ASSOCIATION OF COUNTY
PARK & RECREATION ADMINISTRATORS
(MACPRA)

Additionally, many jurisdictions have imposed their own local legislation or operational controls that govern the use of glyphosate in public facilities. Since conditions vary across the State, MACPRA believes that such legislation and operational decisions should remain at a local level.

Lastly, MACPRA would encourage its agency members to utilize best practices whenever glyphosate is used, particularly in public places that attract humans or pets. These practices may include limiting usage where possible, training staff members in proper PPE and application techniques, and following EPA and County laws for regulations including public notification, among other best practices.

MACPRA would also encourage its members to explore alternative products and utilize those where practical and affordable.

The 100% ban of this product, however, is unnecessary legislation that would place an undue burden on many agencies who do not have the resources for alternative control measures. It would be better left to local jurisdictions to make these determinations based on their given situations.

We urge the Committee to consider the consequences of this proposed legislation and return an **UNFAVORABLE** report.

House Bill 472 - MASCD - Oppose.pdf
Uploaded by: Nelson, Jen
Position: UNF

February 3, 2021

The Honorable Kumar Barve, Chairman
House Environment & Transportation Committee

Re: House Bill 472 – Agriculture – Use of Glyphosate – Prohibition

Position: ***Oppose***

Chairman Barve & Committee Members:

On behalf of the Maryland Association of Soil Conservation Districts (MASCD), we express our ***opposition*** for House Bill 472 – Agriculture – Use of Glyphosate – Prohibition (HB 472). As written, HB 472 puts the agricultural economic system at risk. Farmers across the state have been using glyphosate-based herbicides for more than 40 years. While alternatives exist, the safety, efficacy, and relative affordability of glyphosate have made it a key component in conservation farming.

As of October 1, 2022 – HB472 bans an individual in Maryland from using Glyphosate products. Glyphosate is an instrumental and effective tool Maryland farmers use to control invasive and noxious weeds. It is especially valuable in no-till farming and other practices that improve soil health. No-till farming decreases the amount of soil erosion caused in certain soils, especially in sandy and dry soils on sloping terrain. In addition to the more than 800 studies that have demonstrated the safety of glyphosate to human health, research conducted at the USDA Beltsville Agricultural Research Center showed that use of glyphosate did not impact the soil microbial community. Essentially without the use of this product Maryland farmers would need to use more intensive tillage and/or change to different active ingredients, many which have not been independently verified to be as effective or as safe for the environment.

Glyphosate protects agricultural ground from invasive plant species which are detrimental to the economy and the environment. Our Association remains an avid supporter of the health and economic system for our agricultural stakeholders in Maryland, and the scientific evidence presented through numerous federal and health studies encourages an ***unfavorable*** report for HB 472.

Respectfully Submitted,

J Nelson

Jen Nelson, Executive Director
Maryland Association of Soil Conservation Districts

HB472_Barve 1.26.21.pdf
Uploaded by: Norris, John
Position: UNF

CALVERT COUNTY
BOARD OF COUNTY COMMISSIONERS

175 Main Street
Prince Frederick, Maryland 20678
410-535-1600 • 301-855-1243
www.calvertcountymd.gov

Board of Commissioners
Earl F. Hance, President
Steven R. Weems, Vice President
Mike Hart
Thomas E. Hutchins
Kelly D. McConkey

January 26, 2021

VIA ELECTRONIC & FIRST CLASS MAIL
The Honorable Delegate Kumar P. Barve, Chair
Environment and Transportation Committee
Room 251
House Office Building
Annapolis, Maryland 21401

Re: HB472 – Agriculture - Use of Glyphosate - Prohibition

Delegate Barve,

Upon discussion with our Director of Parks & Recreation, the Board of County Commissioners of Calvert County has concerns regarding HB472. Our Department uses the weed killer "Roundup" and glyphosates to control invasive species and keep weeds under control. When appropriately used by our licensed staff, there are no risks to health or the environment. Banning glyphosates dramatically increases costs, and impacts the effectiveness of noxious and invasive species management strategies, and will likely increase workforce requirements to, for example, keep aesthetics of some areas weed-eating along fence lines.

We, therefore, request the Committee consider the unfavorable and negative impacts of this Bill, should it be passed. Should you have any questions or require further information, please do not hesitate to contact County Administrator Julian M. Willis at 410-535-1600, ext. 2202, or County Attorney John Norris at 410-535-1600, ext. 2566. Thank you for your kind consideration of our position regarding this important Bill.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
CALVERT COUNTY, MARYLAND

Earl F. Hance, President

Steven R. Weems, Vice President

Mike Hart

Thomas E. Hutchins

Kelly D. McConkey

cc: Calvert County Senators and Calvert County Delegation

MD HB 472_January 2021.pdf
Uploaded by: OBrien, Kimberly
Position: UNF

February 1, 2021

Submitted via MyMGA website
Kumar P. Barve, Chair
Committee on Environment and Transportation
Maryland General Assembly
Room 251, House Office Building
Annapolis, Maryland 21401

Re: Testimony in opposition to HB 472, Agriculture – Glyphosate - Prohibition

Chairman Barve and Members of the Committee:

There is ongoing discussion about glyphosate, the active ingredient in most Roundup® brand herbicides and other weed-control products. Glyphosate-based herbicides are among the most widely-used crop protection products in modern agriculture, so it's understandable that people have questions about their safety, the impact they have on our food supply and our health.

We share Maryland's commitment to public health, safety and environmental protection, but the proposed legislation is unnecessary and counterproductive to that goal. **We respectfully OPPOSE HB 472 and request an unfavorable vote.**

The benefits of glyphosate in Maryland agriculture, especially, are significant. In the past, farmers controlled weeds by hand. With mechanization, farmers moved to plowing soil, which contributes to topsoil erosion. Using glyphosate-based herbicides, corn and soybean farmers can leave soil intact, supporting soil health and reducing greenhouse gas emissions.

Maryland land managers need glyphosate as a tool for controlling vegetation that can impact railroad, highway and road safety; utility reliability, and; the ability to control invasive and noxious plants.

The widespread adoption of glyphosate-based products is due not only to their effectiveness and extensive economic and environmental benefits, but also due to the strong safety profile of these products.

There is an extensive body of research on glyphosate and Bayer's glyphosate-based herbicides, including more than 800 studies submitted to the U.S. Environmental Protection Agency (EPA), in connection with the registration process, which confirms these products can be used safely and that glyphosate does not cause cancer.

When it comes to safety assessments, glyphosate is among the most extensively tested pesticides on the market. Evaluations spanning more than 40 years, and the overwhelming conclusion of experts and regulators worldwide, support the safety of glyphosate and that glyphosate does not cause cancer.

Regulatory authorities routinely review all approved pesticide products. Most recently, in January 2020, the U.S. EPA published its Interim Registration Review Decision on glyphosate and stated *"EPA has thoroughly evaluated potential human health risk associated with exposure to glyphosate and determined that there are no risks to human health from the current registered uses of glyphosate and that glyphosate is not likely to be carcinogenic to humans."*

The EPA's latest decision on glyphosate adds to the overwhelming consensus among leading expert health regulators worldwide for more than 40 years that these products can be used safely, and that glyphosate does not cause cancer. In addition to the U.S. EPA, the European Food Safety Authority (EFSA), the European Chemicals Agency (ECHA), and the leading health authorities in Germany, Australia, Korea, Canada, New Zealand, Japan, and elsewhere around the world continue to conclude that glyphosate-based products are safe when used as directed and that glyphosate does not pose a carcinogenic risk.

Glyphosate's Classification by IARC

One non-regulatory organization presented a classification of glyphosate that was inconsistent with experts and regulatory authorities around the world – this organization was the International Agency for Research on Cancer (IARC), a sub-agency of the World Health Organization (WHO). In March 2015, IARC gave glyphosate a classification of "Category 2A: probably carcinogenic" despite evidence to the contrary. IARC is one of four programs within the WHO that has reviewed glyphosate, and the only one to have made such a finding.

IARC is not a regulatory authority and conducted no independent studies. IARC is the same organization that determined beer, meat, cell phones and hot beverages cause cancer or are likely to cause cancer.

IARC's opinion is inconsistent with the overwhelming consensus of regulatory authorities and other experts around the world, who have assessed all the studies examined by IARC – and many more – and found that glyphosate presents no carcinogenic risk. Since IARC classified glyphosate in March 2015, regulatory authorities in the United States, Europe,

Canada, Korea, Japan, New Zealand and Australia have publicly reaffirmed that glyphosate-based herbicides can be used safely, and that glyphosate does not pose a carcinogenic risk.

In January 2020, the U.S. EPA explained that "EPA considered a significantly more extensive and relevant dataset than the International Agency on the Research for Cancer (IARC). EPA's database includes studies submitted to support registration of glyphosate and studies EPA identified in the open literature. For instance, IARC only considered eight animal carcinogenicity studies while EPA used 15 acceptable carcinogenicity studies. EPA does not agree with IARC's conclusion that glyphosate is 'probably carcinogenic to humans.' EPA's cancer classification is consistent with other international expert panels and regulatory authorities, including the Canadian Pest Management Regulatory Agency, Australian Pesticide and Veterinary Medicines Authority, European Food Safety Authority, European Chemicals Agency, German Federal Institute for Occupational Safety and Health, New Zealand Environmental Protection Authority, and the Food Safety Commission of Japan and the Joint Food and Agriculture Organization/World Health Organization (FAO/WHO) Meeting on Pesticide Residues (JMPR)."

Glyphosate is an important tool for land managers. We respectfully OPPOSE HB 472 and request an unfavorable vote. Thank you for the consideration.

Sincerely,

Kimberly OBrien

Kimberly OBrien, Government Affairs
Bayer US Crop Science
E-mail: kimberly.obrien@bayer.com

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[1] https://www.epa.gov/ingredients-used-pesticide-products/glyphosate [Retrieved February 1, 2021]

[2] https://academic.oup.com/jnci/article/110/5/509/4590280 [Retrieved February 12, 2019]

[3] https://www.efsa.europa.eu/sites/default/files/170523-efsa-statement-glyphosate.pdf [Retrieved February 12, 2019]

[4] https://www.canada.ca/en/health-canada/news/2019/01/statement-from-health-canada-on-glyphosate.html [Retrieved Feb. 12, 2019]

[5] https://www.who.int/foodsafety/jmprsummary2016.pdf?ua=1 [Retrieved February 12, 2019]

[6] https://www.ncbi.nlm.nih.gov/pubmed/29136183 [Retrieved February 12, 2019]

[7] https://www.epa.gov/iris/reference-dose-rfd-description-and-use-health-risk-assessments[Retrieved February 12, 2019]

[8] http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.detail&language=EN&selectedID=1438 [Retrieved February 12, 2019]

[9] https://aghealth.nih.gov/ [Retrieved February 12, 2019]

2021 HB472 Glyphosate Prohibition.pdf
Uploaded by: Porter, Holly
Position: UNF

Educate. Advocate. Innovate.

Date: February 1, 2021
To: Members of the House Environment & Transportation Committee
From: Holly Porter, Executive Director
Re: HB472– Agriculture – Use of Glyphosate - Prohibition - **UNFAVORABLE**

Delmarva Chicken Association (formerly Delmarva Poultry Industry, Inc.), the 1,600-member trade association representing the meat-chicken growers, processing companies and allied business members on the Eastern Shore of Maryland, the Eastern Shore of Virginia, and Delaware strongly opposes HB 472 and urges an unfavorable committee report.

HB 472 would prohibit the use of glyphosate on all public or private lands.

Glyphosate is a safe, effective and affordable tool in the integrated vegetation management toolbox. It is used to control invasive, noxious and poisonous weeds, especially within corn, soybean and wheat fields throughout Maryland.

The chicken industry is the largest market for the Maryland grain farmers, purchasing $1 billion worth of feed ingredients in 2019. They are the third leg within the Delmarva's "three-legged stool" economy and without the use of glyphosate, farmers will suffer yield losses and ultimately suffer financially. This has a direct impact to the chicken industry as we will have to export more grains from other areas.

In addition, Maryland is a leader in conservation tillage and other best management practices that have already shown benefits in meeting Maryland's Total Maximum Daily Loads (TMDL's) for the Chesapeake Bay. Prohibiting the use of glyphosate will require farmers to resort to practices from 40 years ago and will likely increase nutrient and sediment loading to the Bay. Not to mention many farmers no longer own the equipment that would be needed to farm as was done so many years ago.

Glyphosate based herbicides have a long history of use with more than 40 years on the market. When it comes to safety assessments, no other pesticide has been more extensively tested than glyphosate with more than 800 safety studies submitted to regulators. Glyphosate has been approved for use in 160 countries. Since 2015, glyphosate has undergone additional review by independent scientific bodies in Japan, the EU, Germany, Canada, Australia, New Zealand, Korea, Brazil, as well as the US EPA, none of whom have determined it to be a carcinogen.

For these reasons, we urge an **unfavorable** vote on HB 472.

Should you have any additional questions, please feel free to contact me at porter@dcachicken.com or 302-222-4069 or Nick Manis, Manis Canning & Associates, 410-263-7882.

Barve HB 472 unfavorable testimony.pdf
Uploaded by: Raley Jr., James K.
Position: UNF

ST. MARY'S COUNTY FARM BUREAU
26737 Radio Station Way, Ste. G.
Leonardtown, MD 20650
(240) 309-4183
www.mdfarmbureau.com/st-marys
WORKING FOR SUSTAINABLE AGRICULTURE SINCE 1947
February 1, 2021

Hon. Kumar P. Barve
Chair, Environment and Transportation Committee
Room 251
House Office Building
Annapolis, Maryland 21401

Re: House Bill 472 Unfavorable

Dear Chairman Barve,

The St. Mary's County Farm Bureau Board of Directors opposes House Bill 472, titled Agriculture - Use of Glyphosate - Prohibition.

The proposal to ban the use of glyphosate is not based on science. The U.S. Environmental Protection Agency (EPA) reported, as recently as January 2020, that there is no risk to public health when glyphosate is used in accordance with its current label. The U.S. Food and Drug Administration (FDA) reported in the results of its 2019 annual Pesticide Residue Monitoring Program, that all detectable glyphosate residue levels "were below tolerance levels set by the EPA." The FDA's results are consistent with the findings of other regulatory authorities around the world.

If glyphosate usage is banned in Maryland, it will wreak havoc on farmer's ability to produce safe, affordable food for our citizens. Farmers will have to resort to using harsher chemicals to control weeds in field crops or worse, they will have to revert to conventional tillage, which will derail efforts to support water quality improvement initiatives to reduce the total maximum daily loads of nutrients and sediment entering our waterways. Taking glyphosate out of the farmer's tool box is simply bad public policy and is based on emotion not science.

Farm bureau respectfully requests that your committee give an unfavorable report on HB 472.

Sincerely,

James K. Raley, Jr.
President
St. Mary's County Farm Bureau

HB 472 - Use of Glyphosate- Prohibition testimony

Uploaded by: Schlossberg, Mark

Position: UNF

M.A.G.I.
Maryland Association of Green Industries, Inc.

February 3, 2021

Ref. HB 472- Agriculture - Use of Glyphosate - Prohibition

Position - **Unfavorable Report**

Chairman Barve, Vice Chairman Stein and Members of the Committee,

My name is Mark Schlossberg and I am President of the Maryland Association of Green Industries, Inc. (MAGI). We represent lawn care companies, golf course superintendents and pest control companies in Maryland. I myself am an agronomist and have owned a lawn care business in Baltimore County and provide services to clients in the Baltimore metro area.

Our organization is against HB 472 and asks the committee for an unfavorable report for several reasons. First, we do not think the science justifies removing this widely used product from the market. Most of the impetus for this bill comes from the unending amount of commercials on television, radio and online for the class-action lawsuits. Monsanto and Bayer stand by this active ingredient and feel it is safe to use when used as specified on the label including the use of proper PPE.

Next, in addition to professionals, many homeowners use glyphosate on a regular basis to control weeds and grasses in their flower beds, sidewalk cracks and other areas where they don't want weeds growing. And despite what the proponents have stated, there is no replacement for glyphosate that doesn't require many more repeat applications. Glyphosate is the only non-selective weed and grass killer that translocates down to the roots.

The Cheetah-Pro product that has been mentioned as a replacement has little or no translocation in its mode of action. Because of this, as professionals, it would require much more labor cost that we would have to pass on to our clients.

As turf management professionals, we do not use glyphosate unless we are renovating areas of lawn, athletic fields or golf courses. However, to many of those in our Industry that maintain other areas of the landscape, not being able to utilize glyphosate would definitely negatively affect their business.

We ask for an unfavorable report for HB 472.

Respectfully Submitted,

Mark Schlossberg,
President

1406 Shoemaker Road, Baltimore, MD 21209 * 410-825-8873

MDA - HB 472 - Letter of Opposition.docx.pdf
Uploaded by: Shirk, Cassie
Position: UNF

Maryland
Department of Agriculture

Agriculture | Maryland's Leading Industry

Office of Marketing
Animal Industries and Consumer Services
Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Joseph Bartenfelder, Secretary
Julianne A. Oberg, Deputy Secretary

State Board of
Veterinary Medical Examiners
The Wayne A. Cawley, Jr. Building
50 Harry S. Truman Parkway
Annapolis, Maryland 21401
www.mda.maryland.gov

410.841.5862 Baltimore/Washington
410.841.5780 Fax
800.492.5590 Toll Free

Maryland Department of Agriculture

Legislative Comment

Date: February 3, 2021

BILL NUMBER: House Bill 472

SHORT TITLE: Agriculture - Use of Glyphosate - Prohibition

MDA POSITION: Oppose

House Bill 472 would enact a statewide ban on the use of glyphosate on or after October 1, 2022.

The Maryland Department of Agriculture (MDA) is concerned that prohibition by legislation undermines the established regulatory authority of the U.S. Environmental Protection Agency and MDA. The U.S. EPA relies on a stringent, science-based review process to guide the registration and labelling of pesticide products, which MDA regulates and enforces at the state level.

The federal agency has the authority to cancel or change product registrations and labeling if a product is believed to pose a risk to humans, wildlife or the environment. In January 2020, EPA released a proposed interim decision which stated that EPA continues to find that there are no risks of concern to human health when glyphosate is used in accordance with its current label. EPA also found that glyphosate is unlikely to be a human carcinogen.

Glyphosate is one of the most widely used broad spectrum pesticides in Maryland. Prohibition of this pesticide would require many businesses to find alternative products that may be more expensive, less effective and potentially more toxic.

Products containing glyphosate are used regularly in no-till and minimum till farming practices, which are critical in the state's efforts to reduce soil erosion and runoff in the Chesapeake Bay and its tributaries.

These products are also widely used by lawn and landscape professionals; golf courses and country clubs; and managers of public and private rights-of-way. Prohibiting the use of glyphosate will have a significant impact on these businesses, which in turn may be passed onto the consumer.

Banning glyphosate will also have a negative impact on MDA's Noxious Weed Control program, and other weed control programs at the state and local level. Taking this widely used, effective tool out of the toolbox would lead to the unmitigated spread and infestation of noxious weeds, which poses a threat to Maryland agriculture and green spaces across the state.

If you have additional questions, please contact Cassie Shirk, Director of Legislation and Governmental Affairs, at cassie.shirk@maryland.gov or 410-841-5886.

HB472 Coalition letter_opposed.pdf
Uploaded by: Thompson, Lindsay
Position: UNF

Coalition letter in opposition for House Bill 472 – Glyphosate Prohibition

Chairman Barve, Vice Chairman Stein and Members of the Environment & Transportation Committee,

This letter is from a coalition of Maryland agricultural, conservation, green industries, forestry, and business organizations in opposition to **House Bill 472 – Agriculture – Glyphosate - Prohibition**. Glyphosate is a safe, effective, and affordable tool critical to an integrated vegetation management program. Restricting glyphosate use on public or private land, in agriculture, forestry, or turf management puts Maryland's natural and urban landscapes and conservation efforts at risk.

Glyphosate is used to control invasive, noxious and poisonous weeds, maintain roadways and other critical infrastructure, enable wildland restoration, ensure worker safety, and minimize habitat for rodents and mosquitos that undermine structural integrity of infrastructure and spread human disease.

Glyphosate is an essential tool in the toolbox for Maryland farmers to achieve their Chesapeake Bay conservation and carbon sequestration goals. Using glyphosate to manage weeds enables farmers to plant and manage cover crops while maintaining a no-till system. Nearly 650,000 acres of Maryland farmland currently practices conservation tillage or no-till and Maryland's Watershed Implementation Plan III calls for 425,000 acres of cover crops per year. Without glyphosate, achieving these goals would be nearly impossible.

While there are alternatives to glyphosate, it is important to have it as a tool to combat resistance. Additionally, A paper co-authored by NC State and Cornell Cooperative Extension concluded that alternatives to glyphosate for weed management are likely to be "less effective, less convenient, and more expensive." Opponents to glyphosate use may argue that it is counter to soil health. Research conducted at the USDA ARS center in Beltsville, Maryland found that plots treated with glyphosate did not differ from the untreated plots in overall soil microbial community composition and activity.

Glyphosate based herbicides have a long history of use with more than 40 years on the market. When it comes to safety assessments, no other pesticide has been more extensively tested than glyphosate with

more than 800 safety studies submitted to regulators. Glyphosate has been approved for use in 160 countries. Since 2015, glyphosate has undergone additional review by independent scientific bodies in Japan, the EU, Germany, Canada, Australia, New Zealand, Korea, Brazil, as well as the US EPA, none of whom have determined it to be a carcinogen.

For these reasons that we respectfully request your **NO** vote on House Bill 472.

Respectfully submitted,

Choptank Electric Cooperative
CropLife America
Delmarva Chicken Association
Delaware-Maryland Agribusiness Association
Maryland Forests Association
Maryland Grain Producers Association
Maryland Farm Bureau
Maryland Association of Soil Conservation Districts
Maryland Association of Green Industries
Maryland Green Industries Council
Maryland Nursery, Landscape, and Greenhouse Association
Mid-Atlantic Farm Credit
Mid-Atlantic Chapter Golf Course Superintendents Association of America
Mid-Atlantic Invasive Plant Council
National Association of Landscape Professionals
Responsible Industry for a Sound Environment

Contact: Lindsay Thompson, MGPA, Lindsay.mdag@gmail.com

HB472 Glyphosate, MGPA, OPPOSED.pdf
Uploaded by: Thompson, Lindsay
Position: UNF

Maryland Grain Producers Association
123 Clay Drive, Queenstown, MD 21658
Lindsay.mdag@gmail.com (p) 443-262-8491
www.marylandgrain.com

Date: February 3, 2021

House Bill 472 – Agriculture – Glyphosate – Prohibition

Committee: Environment & Transportation

MGPA Position: **OPPOSED**

The Maryland Grain Producers Association serves as the voice of grain farmers growing corn, wheat, barley and sorghum across the state. On an annual basis, nearly a million acres of these crops are grown in Maryland.

House Bill 472 would ban the use of glyphosate in Maryland. Glyphosate is an important crop protection tool for Maryland farmers to control weeds that seek to compete with crops for nutrients and introduce other pests and diseases to their fields. Glyphosate can be used both prior to planting grain and during the growing season. This allows farmers to control weeds without tilling the land, disturbing the soil structure, and releasing soil carbon into the atmosphere.

Maryland farmers are responsible for a large portion of the planned nutrient reductions under Maryland's Phase III Watershed Implementation Plan. Two of the most important conservation practices needed to reach those goals are cover crops and no-till; both made possible, in part, by glyphosate. While there are other herbicides available to farmers to control weeds, glyphosate is an effective, affordable option. To avoid weed resistance to any one herbicide, farmers rotate between different products so that weeds do not become resistance to any one product.

Farmers also value glyphosate as a tool for counties, municipalities, and the state to use in land management. Government effectively managing weeds on public properties and rights-of-ways aids in reducing weed pressure in the agricultural fields that border those properties.

Glyphosate has been used safely by farmers for over 40 years. During that time, there have been over 800 studies and reviews published demonstrating the safety of products containing glyphosate: making it one of the most studies herbicides in history. Contrary to the categorization by the International Agency for Research on Cancer (IARC) as a "probable carcinogen," no regulatory agency in the world has concluded in their reviews that glyphosate is a carcinogen, and it remains registered for use in 160 countries.

Farmers are concerned for their health and the health of their families and workers more than anyone else. In 2018, the U.S. National Cancer Institute published a study following over 50,000 licensed pesticide applicators from 1997-2017 and found no association between glyphosate and cancer risk.

Glyphosate is a safe, effective, and affordable tool Maryland farmers use to control weeds while still meeting water quality and climate change mitigation goals. MGPA has confidence in the regulatory agencies both in the U.S. and around the world that have confirmed time, and time again, the safety of glyphosate for humans when used according to the labeled directions.

MGPA respectfully asks for an UNFAVORABLE report on House Bill 472.

CLA Testimony on HB 472 02 21.pdf
Uploaded by: Titus, Riley
Position: UNF

To: Members of the House Committee on Environment and Transportation

House Office Building
6 Bladen Street Room 251
Annapolis, MD

From: Riley Titus, CropLife America

Date: 2/3/2021

RE: HB 472, Agriculture – Glyphosate - Prohibition

Chair Barve, and distinguished members of the Committee on Environment and Transportation:

Thank you for the opportunity to submit written testimony about HB 472, which would prohibit the use of glyphosate in Maryland. We respectfully oppose this legislation and request an unfavorable vote.

Glyphosate is one of the most widely studied herbicides developed, with more than 40 years on the market and 800 safety studies submitted to regulators in over 160 countries. No regulatory agency in the world has concluded that glyphosate is a carcinogen. In January 2020, the U.S. Environmental Protection Agency (EPA) reaffirmed its findings that "there are no risks of concern to human health when glyphosate is used in accordance with its current label. EPA also found that glyphosate is unlikely to be a human carcinogen."[1]

We support and promote science-based policy and regulatory processes necessary in the regulation of pesticide products at both the state and federal level. In addition to the extensive review and approval process EPA applies to pesticides, the Maryland Department of Agriculture (MDA) also reviews pesticides before they are registered or used in the state. This dual layer of oversight and enforcement helps ensure safe and proper pesticide use across Maryland through state registration of pesticides, certification of pesticide applicators, and enforcement and research activities. MDA registration and regulation of pesticides also promotes consistency with federal regulation and scientific standards, particularly those for human health and safety and the environment.

This bill would undermine the expertise and authority of MDA. Prohibiting the use of glyphosate-based herbicides would create unintended consequences, costing the state significantly in alternative solutions, adversely affecting vegetation management, impacting natural resources and investments, restricting agricultural producers and agricultural state college programs, and ultimately harming the state's economy and budget. A neighbor state,

[1] "Glyphosate" Ingredients used in pesticide products, United States Environmental Protection Agency, https://www.epa.gov/ingredients-used-pesticide-products/glyphosate#main-content

Connecticut, when faced with a proposal to prohibit uses on roads and highways found that loss of this tool for those uses would cost the state more than $2 million dollars.[2]

Glyphosate-based herbicides are used to control and manage invasive and unwanted vegetation. It is an important tool for agriculture, in addition to other uses like forestry and natural resources management, road and highway maintenance, rights of ways and energy corridors, aquatic vegetation control, and parks and recreation. Maryland farm operations total 2 million acres in the state[3]. Maryland's Department of Natural Resources manages more than 475,000 acres of public lands and protected open spaces in the State[4]. Losing this tool would make vegetation management, invasives control, and weed resistance nearly impossible for farmers and state land managers, generating significant costs, revenue and crop yield loses.

Losing this tool would also have negative impacts on practices to help address climate change currently practiced by farmers. The use of herbicides enables regenerative farming practices that protect the environment, such as no-till farming in which fields are not plowed and residue from the previous seasons' crops are left in the field as mulch for the next growing season. The benefits of no-till farming include reduced soil erosion (by about 90%), water conservation, improved soil health, and reduced fuel use because farmers don't plow their fields between crops.[5] According to the U.S. Department of Agriculture, no-till farming saves a combined 812.4 million gallons of fuel each year – roughly the annual amount of energy required by 3.2 million homes – and reduces CO2 emissions by 9.1 million tons – the equivalent annual emissions of 1.9 million passenger cars.[6]

Glyphosate is an important tool for agriculture and the State. Because of this and the reasons stated above, CLA urges your NO vote on this legislation. Thank you for your time and consideration.

Sincerely,

Riley Titus
Director, Government Affairs
CropLife America
rtitus@croplifeamerica.org
202-872-3856

CropLife America (CLA) represents the manufacturers, formulators and distributors of crop protection products in the United States. CLA member companies produce, sell and distribute virtually all the crop protection products used by American farmers.

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[2] "SB-754" Office of Fiscal Analysis, Connecticut, https://www.cga.ct.gov/2017/fna/2017SB-00754-R00LCO06752-FNA.htm
[3] United States Department of Agriculture, National Agriculture Statistics Service, Maryland 2019 State Agriculture Overview, https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MARYLAND
[4] Maryland Department of Natural Resources, About Our Lands, https://dnr.maryland.gov/Pages/lands.aspx
[5] "Seeing is Believing: Soil Health Practices and No-Till Farming Transform Landscapes and Produce Nutritious Food" United States Department of Agriculture, https://www.usda.gov/media/blog/2016/12/19/seeing-believing-soil-health-practices-and-no-till-farming-transform
[6] "Reduction in Annual Fuel Use from Conservation Tillage" Natural Resources Conservation Service, United States Department of Agriculture, https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1258255.pdf

HB0472-763924-01
Uploaded by: Ruth, Del. Sheila
Position: INFO

HB0472/763924/1

AMENDMENTS PREPARED BY THE DEPT. OF LEGISLATIVE SERVICES

09 FEB 21
09:05:27

BY: Delegate Ruth
(To be offered in the Environment and Transportation Committee)

AMENDMENTS TO HOUSE BILL 472
(First Reading File Bill)

AMENDMENT NO. 1

In line 3, after "State" insert ", except when studying the health and environmental effects of glyphosate,".

AMENDMENT NO. 2

In line 14, strike "**ON**" and substitute "**(A) EXCEPT AS PROVIDED IN SUBSECTION (B) OF THIS SECTION, ON**"; and after line 15, insert:

"**(B) A PERSON MAY USE GLYPHOSATE FOR RESEARCH PURPOSES TO STUDY THE HEALTH AND ENVIRONMENTAL EFFECTS OF GLYPHOSATE.**".

HB0472 - SHA - Use of Glyphosate - LOI_FINAL.pdf
Uploaded by: Westervelt, Patricia
Position: INFO

February 3, 2021

The Honorable Kumar Barve
Chairman, House Environment and Transportation Committee
241 House Office Building
Annapolis MD 21401

Re: Letter of Information – House Bill 472 – Agriculture – Use of Glyphosate – Prohibition

Dear Chairman Barve and Committee Members:

The Maryland Department of Transportation (MDOT) takes no position on House Bill 472 but offers the following information for the Committee's consideration.

Maryland Weed Control Law requires landowners to manage noxious weeds, which includes the MDOT State Highway Administration (MDOT SHA). Noxious weeds cause economic and environmental harm, spread aggressively, reproduce quickly and tolerate a wide range of environments. To manage noxious weeds, MDOT SHA typically uses Glyphosate, commonly known as "Roundup."

Glyphosate is a non-selective herbicide, meaning it controls most weeds and grasses in a single treatment. Glyphosate is a systemic herbicide, meaning it moves from the treated foliage to other parts of the plant, such as the roots, making it the best herbicide for managing annual and perennial weeds. Glyphosate also leaves little to no soil residue, the herbicide becomes inactive allowing use under trees and shrubs without adverse effects on desirable plants.

The Maryland Department of Transportation respectfully requests the Committee consider this information when deliberating House Bill 472.

Respectfully Submitted,

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