Message

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Sent: 2/12/2015 10:13:27 PM

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Subject: Revised IARC reactive messaging

Attachments: Glyphosate Key Points on IARC Decision 2B (draft 2-12-15B).docx

Attached please find revised messaging for IARC. This is an ever-evolving document. Thank you for your continued input. Kelly Clauss said she gained acceptance from CropLife International to speak out for the entire industry if the decision is a 2B in March. That plus the JGTF and academics and we should be in good shape for the reactive plan.

Glyphosate Key Points Following IARC Decision

Draft 2/12/15

This component represents the orchestrated outcry that could occur following the March 3-10 IARC monograph expert meeting. The following reactive communications efforts would be deployed if glyphosate receives an unfavorable 2B classification. A series of positive communication efforts already will have occurred leading up to the meeting. The proposed approach suggests industry associations and credible third parties lead, and Monsanto plays a secondary role to defend its Roundup brand.

2B Decision

Key Industry Points:

- We disagree with the decision made by IARC. Comprehensive assessments of the scientific evidence that spans four decades prove that glyphosate does not cause cancer.
- The 2B classification does not establish a link between glyphosate and an increase in cancer.
 "Possible" simply means not impossible. 2B substances can include "agents for which there is limited evidence of carcinogenicity in humans and lack of sufficient evidence of carcinogenicity in experimental animals."
 - o It's important to put this 2B classification into perspective. Many common exposures are classified in Category 2B, including coffee, alcohol and pickled vegetables.
- Unlike regulatory reviews that consider all available data, IARC narrows its review to only
 publicly available data. [or] In contrast to the IARC process, regulatory authorities in developed
 countries consider all available data, published and unpublished, in a comprehensive evaluation.
- IARC based its decision on a limited data review, which included one study co-authored by two
 members of IARC the same study that at least four expert epidemiologists later identified as
 flawed.
- Many experts, including the World Health Organization and most recently the German BfR, have determined with a high degree of science-based confidence that glyphosate does not pose an unreasonable risk to humans and is non-carcinogenic.
 - o In fact a new scientific study published in 2014 by the German Federal Institute for Risk Assessment (BfR) showed no link between glyphosate exposure and cancer.
 - The U.S. EPA assigned glyphosate to pesticide category E based on its safety profile "evidence of non-carcinogenicity for humans."
- All glyphosate-based herbicides on the market meet regulatory and health authorities' high margin of safety for the public, including infants and children.
- There is no biological rationale for glyphosate presenting a chronic health risk because the herbicide targets an enzyme found in plants that does not exist in humans or animals.

European Joint Glyphosate Task Force / Public Acceptance Group

- The decision by IARC was made without the benefit of the extensive and relevant data base generated for and evaluated by the Regulatory Authorities of OECD countries.
- The regulatory authorities of OECD countries on reviewing all of the available data, published and unpublished, have consistently concluded that glyphosate does not cause cancer in either animals or humans.

Academics

- IARC has done the public a disservice by creating baseless fears with a cancer rating for glyphosate, and the confusing classification is certainly open to distortion by alarmists.
- The limited evidence on which the IARC findings are based are far from conclusive.
- Given the way IARC works, their decision was predictable and political. The suggested
 classification is essentially meaningless because it was made without the benefit of the
 extensive and relevant database and it is believed that a key piece of information was a report
 authored by IARC itself.
- Government regulators remain reassuring about the potential risks. For example, the U.S. EPA is currently reviewing glyphosate and is obligated to act immediately if they shared concerns of a possible cancer causing agent. Instead the EPA is continuing with its routine risk assessment.
- Glyphosate has gotten a longstanding endorsement from the World Health Organization (WHO) based on decisions grounded in science.
- The IARC paper and its panel's decision are contrary to 40 years of scientific consensus on the safety profile of glyphosate.
- [Fact check: The rating by IARC is not the end. The WHO will conduct its own science-based assessment, and the expected outcome is a conclusion of noncancerous that echoes its previous decisions and follows broad scientific consensus.]

American Cancer Society, European Association of Cancer Education and/or Research

- It is critical that the IARC panel's findings be interpreted with great care. The evidence, based on scientific studies spanning 40 years, does not demonstrate that glyphosate causes cancer in animals or humans.
- It's important to put this 2B classification into perspective. Many common exposures are classified in Category 2B, including coffee, alcohol and pickled vegetables.

Monsanto Company statement to supplement industry and third-party messaging

Thank you for contacting us.

Product safety is of paramount importance to Monsanto. Comprehensive toxicological studies repeated over the last 40 years have time and again demonstrated that glyphosate, the active ingredient in Roundup® branded agricultural herbicides, does not cause cancer. This IARC classification is based on a limited literature review and is contrary to four decades of previous scientific conclusions, including the 2014 German risk assessment that found no link between glyphosate exposure and cancer. (Link to Jan/Feb BfR news statement)

To learn more about glyphosate, visit Monsanto.com/glyphosate and glyphosate.eu.

In addition to the prepared media statement, Monsanto will issue the following materials to ensure the facts are presented.

- Monsanto Beyond the Rows blog title: What the IARC 2B Rating for Glyphosate Really Means
- Add new web page on Monsanto.com/glyphosate dedicated to glyphosate and cancer with links to studies, BfR opinion in English and German
- Encourage physician to talk about glyphosate and cancer for op/ed

Grower Groups

- Glyphosate is one of the most studied pesticides on the market, yet it's under political attack.
- An agency in France, IARC, classified glyphosate as a "possible carcinogenic" substance based on a limited data review.
- This is a clear case of anti-pesticide fear overtaking science-based logic.
- The rating by IARC is based on limited information that included one joint paper authored by IARC itself. However 40 years of science-based evidence indicates glyphosate does not cause cancer. This includes the 2014 German assessment on behalf of the EU that conducted a full periodic review.
- Currently regulatory agencies in several countries are reviewing the registration and approved
 uses of glyphosate. We encourage growers to submit comments to regulatory agencies, such as
 the U.S. EPA, during the public comment period and share the many benefits and economic
 impact of glyphosate.
- Growers are encouraged to post, share and tweet a copy of your letter to EPA to amplify your point of view and help educate the public on the importance of glyphosate to modern agriculture.

Scotts/ Major Retailers

- It is critical that the IARC panel's findings on glyphosate (a major active ingredient in Roundup® brand herbicides) be interpreted with great care. The evidence, based on scientific studies spanning 40 years, does not demonstrate that glyphosate causes cancer in humans or animals.
- IARC conducts a limited data review, which is different than the comprehensive database review that public health authorities undertake.
- It's important to put this 2B classification into perspective. Many common exposures are classified in Category 2B, including coffee, alcohol and pickled vegetables.
- Roundup remains a trusted solution within our lawn and garden product offering.