WASHINGTON REPORT
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Dicamba-Tolerant Crop Labels Revised for 2018

On October 13, 2017, EPA announced label changes for Extendimax, Engenia, and Fexapan herbicides. These label changes impose the following additional requirements for 2018:

- Classifying products as "**restricted use**," permitting only certified applicators with special training, and those under their supervision, to apply them; dicamba-specific training for all certified applicators to reinforce proper use;
- Requiring farmers to **maintain specific records** regarding the use of these products to improve compliance with label restrictions;
- Limiting applications to when **maximum wind speeds are below 10 mph** (from 15 mph) to reduce potential spray drift;
- Reducing the times during the day when applications can occur (**sunrise to sunset**);
- Including **tank clean-out language** to prevent cross contamination; and
- Enhancing susceptible crop language and record keeping with **sensitive crop registries** to increase awareness of risk to especially sensitive crops nearby.

The Restricted Use classification applies only to the labeled uses for Extendimax, Engenia, and Fexapan. Pre-existing dicamba herbicides (e.g. Clarity, Banvel) are not subject to the Restricted Use classification. For more information: https://www.epa.gov/ingredients-used-pesticide-products/registration-dicamba-use-genetically-engineered-crops

The updated labels can be found at:
- Engenia Herbicide, EPA Registration Number 7969-345
- XtendiMax with VaporGrip Technology, EPA Registration Number 524-617
- FeXapan herbicide plus VaporGrip Technology, EPA Registration Number 352-913

For up to date information on tank mixes and nozzles:
- www.engeniatankmix.com
- www.xtendimaxapplicationrequirements.com
- www.fexapanapplicationrequirements.dupont.com

EPA will continue to work with state lead agencies and university weed scientists to solicit information and research on physical drift, tank contamination, temperature inversions, volatility, and misuse with the overarching goal to minimize off-target movement and reduce incidents for the 2018 growing season. During the Pesticide Program Dialogue Committee (PPDC) meeting in November, EPA stated that it "will monitor the success of these changes to help inform our decision whether to allow the continued use of dicamba on tolerant soybean and cotton beyond the 2018 growing season."

IARC Review of Glyphosate: A Case of Gross Scientific Negligence

Documents seen by Reuters show how a draft of a key section of the International Agency for Research on Cancer's (IARC) assessment of glyphosate underwent significant changes and

deletions before the report was finalized and made public. Reuters found 10 significant changes that were made between the draft chapter on animal studies and the published version of IARC's glyphosate assessment. **In each case, a negative conclusion about glyphosate leading to tumors was either deleted or replaced with a neutral or positive one.** The full story is at: http://www.reuters.com/article/us-who-iarc-glyphosate-specialreport/in-glyphosate-review-who-cancer-agency-edited-out-non-carcinogenic-findings-idUSKBN1CO251

WSSA feels that the IARC review process for glyphosate was flawed and represents a case of gross scientific negligence. There is no question that IARC arrived at their conclusion due to their inclusion of the positive findings from a selection of studies with known limitations, a lack of reproducible positive findings, and the omission of the negative findings from credible and reliable research. http://wssa.net/wp-content/uploads/WSSA-comments-to-FIFRA-SAP-on-glyphosate.pdf

On November 9, 2017, updated results from the Agricultural Health Study regarding glyphosate use and cancer incidence were published in the Journal of the National Cancer Institute: https://academic.oup.com/jnci/advance-article/doi/10.1093/jnci/djx233/4590280. The Agricultural Health Study (https://aghealth.nih.gov/) has monitored the health outcomes of over 89,000 licensed pesticide applicators and their spouses from Iowa and North Carolina since 1993. 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**. Specifically, among 54,251 applicators, 44,932 used glyphosate, including 5,779 incident cancer cases. In unlagged analyses, glyphosate was not statistically significantly associated with cancer at any site.

EPA is preparing to issue for public comment the registration review draft risk assessments for glyphosate in early 2018. The components of the draft risk assessments will include:

- Human health draft risk assessment that incorporates the cancer re-evaluation, an updated incident report, review of the literature for non-cancer effects, and a summary of the EPA analyses of human milk.
- Ecological draft risk assessment
- Along with the draft risk assessments, EPA will issue a revised cancer white paper and a response to the March 2017 FIFRA Scientific Advisory Panel report.

EPA Finalizes Herbicide Resistance Management Guidance

In September, after many years of collaboration between EPA and weed scientists, EPA finalized its "Guidance for Herbicide Resistance Management Labeling, Education, Training, and Stewardship", which is referred to as Pesticide Registration Notice (PRN) 2017-2. Please see: https://www.epa.gov/pesticide-registration/prn-2017-2-guidance-herbicide-resistance-management-labeling-education.

This guidance applies to all herbicide uses, except for those applied in residential settings (i.e. lawns). One use category that we asked EPA to exclude from this guidance was herbicides applied for aquatic weed control due to the very different nature in how aquatic weeds are managed. For example, using the full-labeled rate for aquatic herbicides is often not feasible and actually in direct conflict with NPDES permit requirements that mandate the "lowest possible

discharge" be conducted for aquatic herbicide applications. However, the resistance management guidance in PRN 2017-2 will still apply to aquatic herbicides.

PRN 2017-2 will apply to any new herbicide products as well as existing herbicides that go through registration review. Most of the resistance management "elements" will be addressed through the herbicide label, which will include the following:

- Placing the MOA on the label (using the WSSA MOA classification)
- Clearly expressing application parameters and full-labeled use rates
- Recommendations to scout the field both before and after application
- How to identify suspected resistance
- How to report lack of performance to the registrant and proactively take action before escaped weeds become widespread in their fields
- A list of herbicide resistance BMP's (using WSSA and HRAC guidance)
- Information to help make growers aware of herbicide resistant weeds found in their local area

The registrants will also be responsible for reporting new cases of suspected and confirmed resistance to EPA and users, and in certain circumstances, may be required to follow additional guidance such as "apply only with another MOA".

The last major part of PRN-2017-2 will be dependent upon the weed management stakeholder community (crop advisors, university extension, commodity groups, registrants, etc…) to provide educational and training materials for growers and users at the local level. EPA states "the most successful strategies for herbicide resistance management will be tailored for local conditions" and that the stakeholder community "work collaboratively" to design effective material. Guidance for developing resistance management plans and remedial action plans are provided in Appendix 1 at the end of PRN 2017-2.

USDA to Re-engage Stakeholders on Revisions to Biotechnology Regulations

On November 6, USDA-APHIS announced it was withdrawing a proposed rule to revise the Agency's biotechnology regulations and will re-engage with stakeholders to determine the most effective, science-based approach for regulating the products of modern biotechnology while protecting plant health.

In June, the National and Regional Weed Science Societies submitted comments to APHIS regarding their proposed rule for the importation, interstate movement, and environmental release of certain genetically engineered (GE) organisms. While we complimented APHIS on the many positive aspects of the proposal, we encouraged APHIS to re-propose a rule that minimizes regulatory uncertainty related to their weed risk assessment model.
Our submitted comments are at: http://wssa.net/wp-content/uploads/Weed-Science-Societies-Comments-on-APHIS-biotech-proposal_FINAL.pdf

National Cover Crop Survey Results Indicate Weed Control Benefits

Results from the 5th annual cover crop survey conducted by the Conservation Technology Information Center (CTIC) with help from Purdue University and funding from the American

Seed Trade Association (ASTA) and USDA's Sustainable Agriculture Research & Education (SARE) are now available. The surveys and results are at www.sare.org/covercropsurvey.

The 2016-2017 survey received results back from 2,102 farmers, of which 88% used cover crops while 12% of the respondents did not. About 80% of the farmers who participated were commodity producers, while 20% are involved in some form of horticulture or produce production. The average volume of cover-crop acres has steadily risen from 217 acres in 2012 to 451 acres in 2017.

Cereal rye remained the top choice of farmers for cover cropping, followed by oats and radish. Sixty-five percent of the cover crop users reported planting mixes of cover crops in 2016. Questions got more detailed on topics such as "planting green," meaning farmers drilled their cash crops into a standing cover crop. The survey showed 39% had done so. Of that group, 61% of those farmers who planted into a standing cover crop considered their weed control had improved. Just 8% stated that weed control was more challenging with that practice.

Another 25% said cover crops always help improve control of herbicide-resistant weeds for those farmers that use cereal rye as a cover. An additional 44% said they sometimes saw benefits controlling herbicide-resistant weeds. About 31% said they saw no benefit from that practice.

And, yet, among farmers who do not use cover crops, another 42% of respondents said one reason they don't use cover crops is their concern over the possible spread of resistant weeds.

National Invasive Species Awareness Week: Feb. 26 – Mar. 2, 2018

Planning for National Invasive Species Awareness Week (NISAW) is underway for 2018. In addition to the seminars and webinars in Washington DC during the week, we'd like to highlight invasive species prevention and management activities occurring throughout the year. Activities will be posted on www.nisaw.org as they become available. If you are interested in getting involved with NISAW or would like to sponsor events during the week, please contact me at Lee.VanWychen@wssa.net or Rick Otis with the Reduce Risks from Invasive Species Coalition (RRISC) at rick.otis@rrisc.org.

2017 Census of Agriculture Underway

The USDA National Agricultural Statistics Service (NASS) has begun mailing questionnaires to over 3 million U.S. producers for the Census of Agriculture, which is conducted once every 5 years. For more info: www.agcensus.usda.gov

The census response deadline is February 5, 2018. Responding to the Census of Agriculture is required by law and requires NASS to keep all information confidential and only publish in aggregate form to prevent disclosing the identity of any individual producer or farm operation. NASS will release the results of the census in February 2019.

2017 National Weed Survey Results in Grass Crops Available

Results from the 2017 survey of the most common and troublesome weeds in grass crops are available at: http://wssa.net/wssa/weed/surveys/. The crops surveyed included: 1) corn, 2) rice, 3) sorghum, 4) spring cereal grains, 5) winter cereal grains, 6) pastures, rangeland, other hay, and

7) turf. In addition to the survey data, we have provided a powerpoint with the results summary of the top ranked weeds in each crop. Below are summaries for corn and for pastures, rangeland and other hay.

Top 6 Weeds in Corn

(50 survey respondents)

	MOST COMMON		MOST TROUBLESOME
1	common lambsquarters (30)*	1	Palmer amaranth (21)*
2	foxtail spp. (27)	2	waterhemp (20)
3	waterhemp (19)	3	morningglory spp. (18)
4	morningglory spp. (17)	4	giant ragweed (17)
4	pigweed spp. (17)	5	common lambsquarters (16)
6	Palmer amaranth (16)	6	kochia (12)

* number of survey respondents who listed the weed species as one of their top 5 weeds in this crop.

- foxtail spp. included giant, green and yellow foxtail.
- morningglory spp. included ivyleaf morningglory.
- pigweed spp. included redroot and smooth pigweed and Powell amaranth.

Top 5 Weeds in Pasture, Rangeland, other Hay

(39 survey respondents)

	MOST COMMON		MOST TROUBLESOME
1	Bromus spp. (11)*	1	Canada thistle (12)*
1	Canada thistle (11)	2	horsenettle (11)
1	horsenettle (11)	3	leafy spurge (8)
4	dandelion (8)	4	Bromus spp. (7)
4	spiny amaranth (8)	5	sandbur spp. (6)
		5	knapweed spp. (6)

* number of survey respondents who listed the weed species as one of their top 5 weeds in this crop.

- Bromus spp. included downy, smooth, and Japanese brome.
- sandbur spp. included field sandbur.
- knapweed spp. included spotted, Russian, and diffuse knapweed.

For 2018, we will be in the third year of a 3 yr year rotation among broadleaf crops, grass crops, and non-crop areas. The 2018 survey will focus on the most common and troublesome weeds in the following non-crop areas: 1) aquatic – irrigation & flood control, 2) aquatic – lakes, rivers,

reservoirs, 3) aquatic – ponds, 4) forestry, 5) natural areas – parks, wildlife refuges, 6) ornamentals, and 7) right-of-ways – rail, road, utility.

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Meetings of the National and Regional Weed Science Societies

Jan. 9 - 11, 2018 Northeastern Weed Science Society (NEWSS), Philadelphia, PA www.newss.org
Jan. 22 - 24, 2018 Southern Weed Science Society (SWSS), Atlanta, GA www.swss.ws
Jan. 29 - Feb. 1, 2018 Weed Science Society of America (WSSA), Arlington, VA www.wssa.net
Mar. 12-15, 2018 Western Society of Weed Science (WSWS), Garden Grove, CA www.wsweedscience.org
Jul. 15 - 18, 2018 Aquatic Plant Management Society (APMS), Buffalo, NY www.apms.org
Dec. 3 - 6, 2018 North Central Weed Science Society (NCWSS), Milwaukee, WI www.ncwss.org