

**EXHIBIT
PLTF-1141**

From: jeffrey.birk@basf.com [jeffrey.birk@basf.com]
Sent: 10/10/2012 11:30:33 AM
To: scott.jackson@basf.com
Subject: Fw: DT System Agreement Update Oct 10 2012 FINAL.pptx
Attachments: _

For your reading entertainment. This is what is being presented to the Agreement Management Team (AMT) this morning.

Warning, the following presentation may contain Voo Doo Science.

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--- Forwarded by Jeffrey H Birk/APN/RTP/BASF-CORP/BASF on 10/10/2012 07:27 AM ---

From: Ronald Repage/NA/BASF
To: Steven J Bove/NVA/RTP/BASF-CORP/BASF@BASF, Jeffrey H Birk/APN/RTP/BASF-CORP/BASF@BASF, Susanne Lingard/APN/RTP/BASF-CORP/BASF@BASF
Cc: Daniel Steltz/NA/BASF@BASF
Date: 10/10/2012 05:04 AM
Subject: DT System Agreement Update Oct 10 2012 FINAL.pptx

Dear Team,

The attached is the final version of what Shea and I will present to the AMT. I think it is consistent with what you sent me. One point we took out is the commercial buffer recommendation of the 240 as this is still a work in progress between the companies.

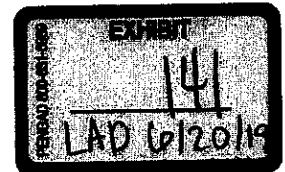
Let me know if you have any additional comments. We present at 3:00pm (9:00 EST).

Thanks

Ron

Ronald Repage
 Group Leader - Global Strategic Marketing, Herbicides

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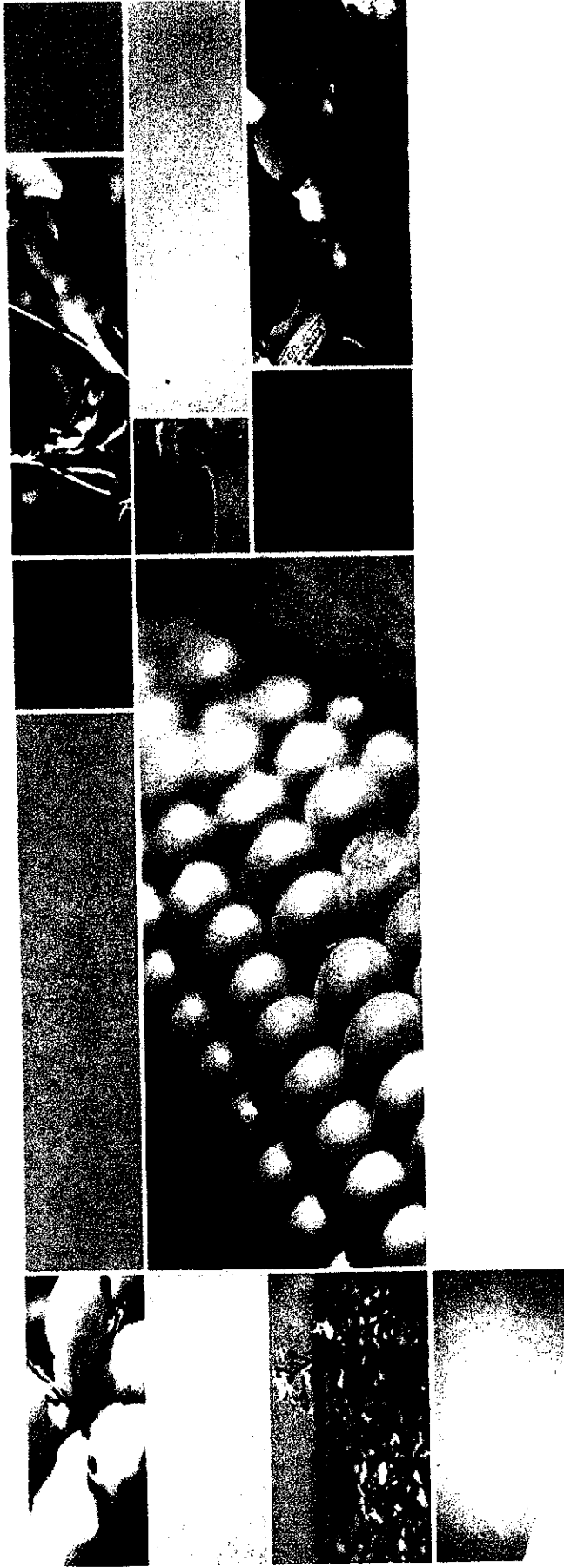
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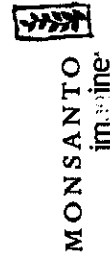
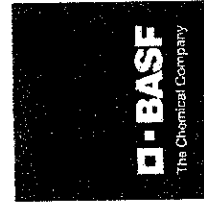
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Dicamba Tolerance System Agreement Working Group Updates October 10, 2012



DEVELOPMENT WG UPDATE



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2012 Field Weed Control Results

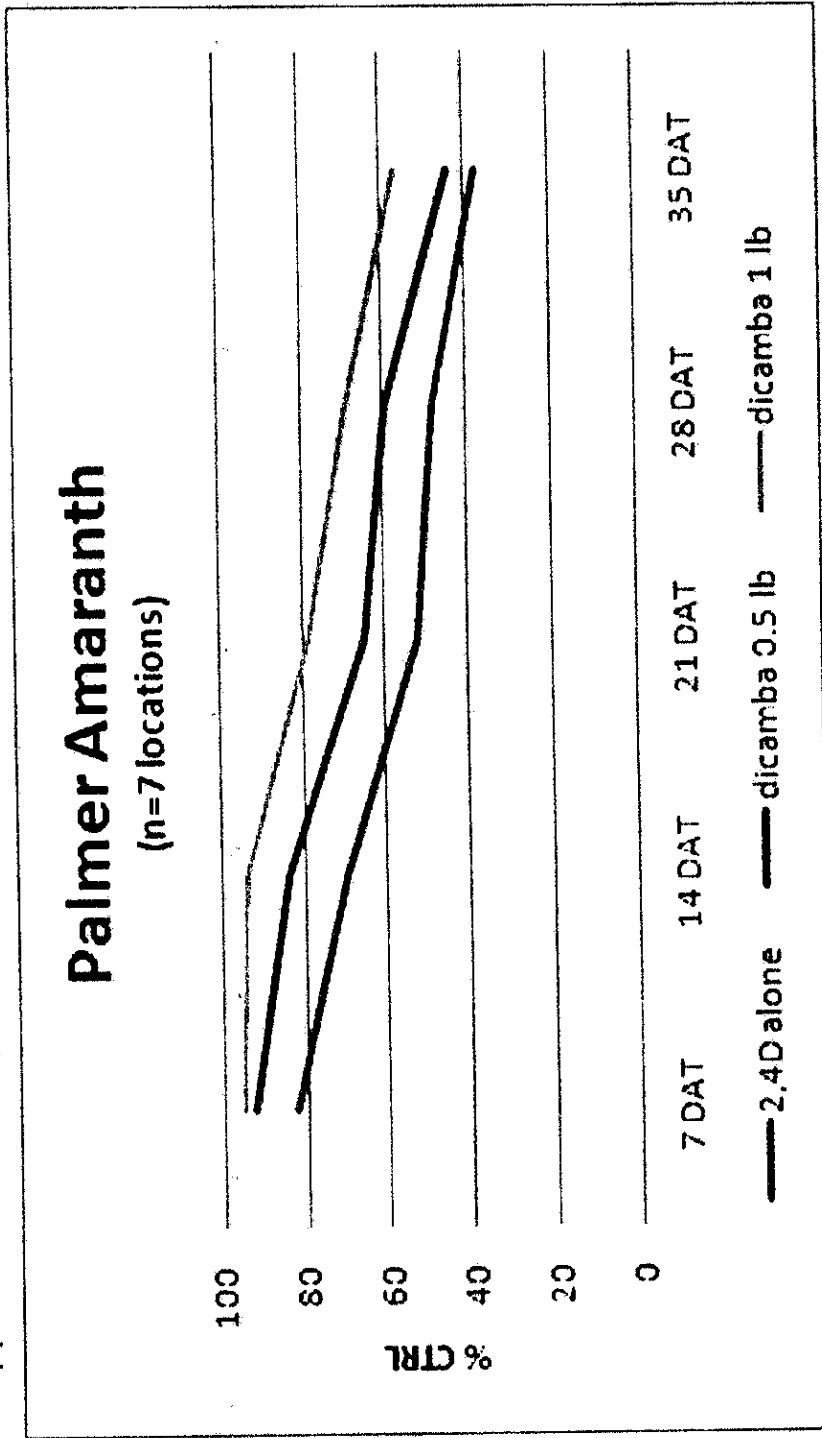
- Residual weed control: Dicamba (0.5 -1 lb/A) > 2,4D (.75 to 1 lb/A)
- POST: Dicamba + glyphosate outperformed 2,4-D + gly across most broadleaf species
 - Superior Waterhemp and Palmer pigweed control
 - Slight advantage for 2,4-D + gly on Velvetleaf
- System with residual combinations applied preplant/PRE necessary for optimum control (especially with resistant weed populations)
 - Programs including dicamba preplant burndown fb dicamba OTT are best
- Extremely to Ultra Coarse droplet sprays (e.g. TTI nozzle) provide good weed control at recommended dicamba rates (3/8 to 1 lb/A)
 - Additional work focused on nozzle impact on Liberty combinations and glyphosate grass control needed
- AMS did not improve control of dic + gly combos (even on VL) at recommended rates



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Dicamba Shows Better Residual than 2,4-D on GR-Palmer Amaranth

Single application to bare ground; evaluation of % CTRL at DAT given below



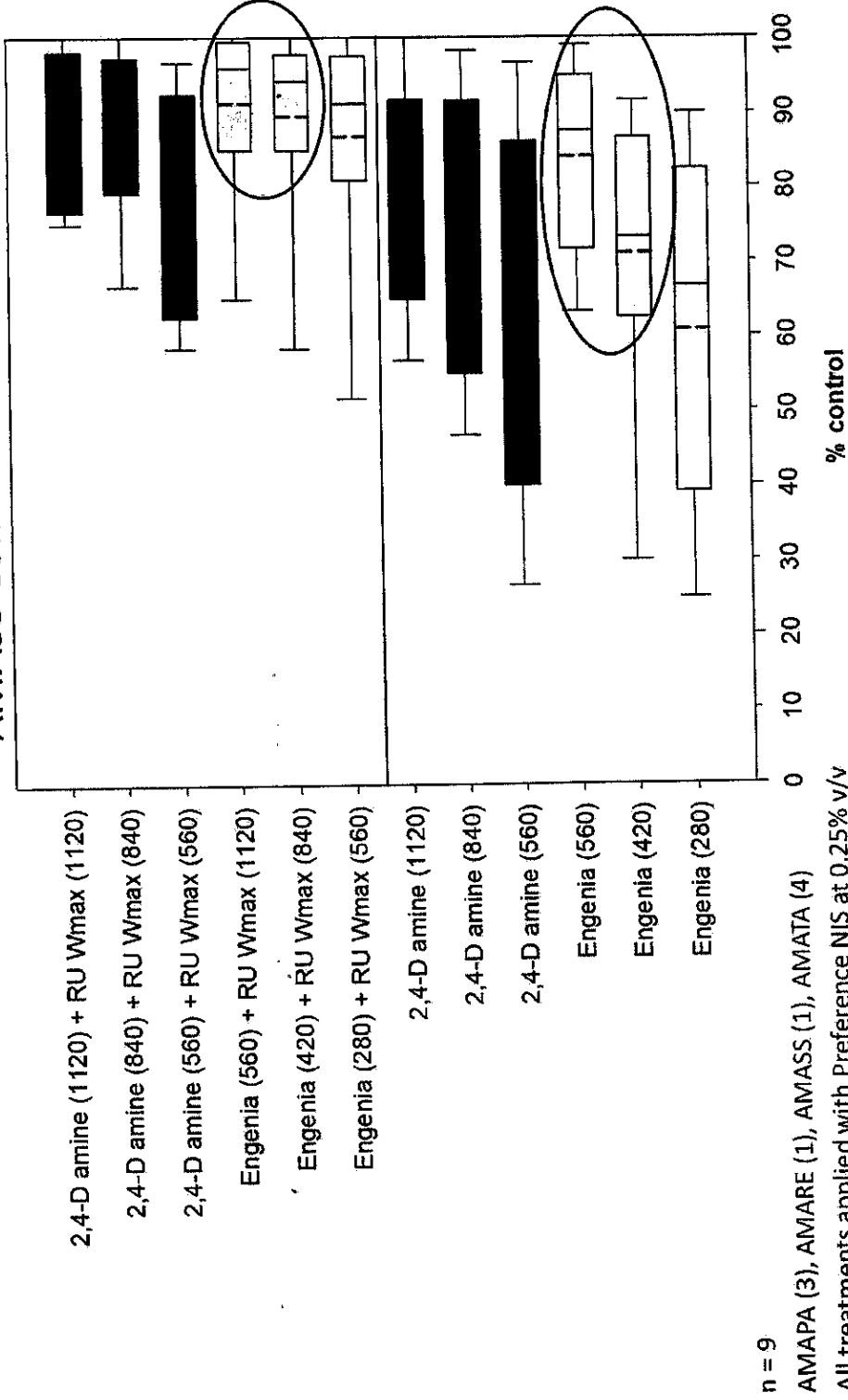
2,4-D applied at 1.0 lb ae/A



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Engenia Outperformed 2,4-D on Amaranthus Species Dicamba & 2,4-D POST Efficacy Comparison

AMASS Control in Corn at 3-5 WAT



n = 9

AMAPA (3), AMARE (1), AMASS (1), AMATA (4)

All treatments applied with Preference NIS at 0.25% v/v

Mean value indicated with dashed bar

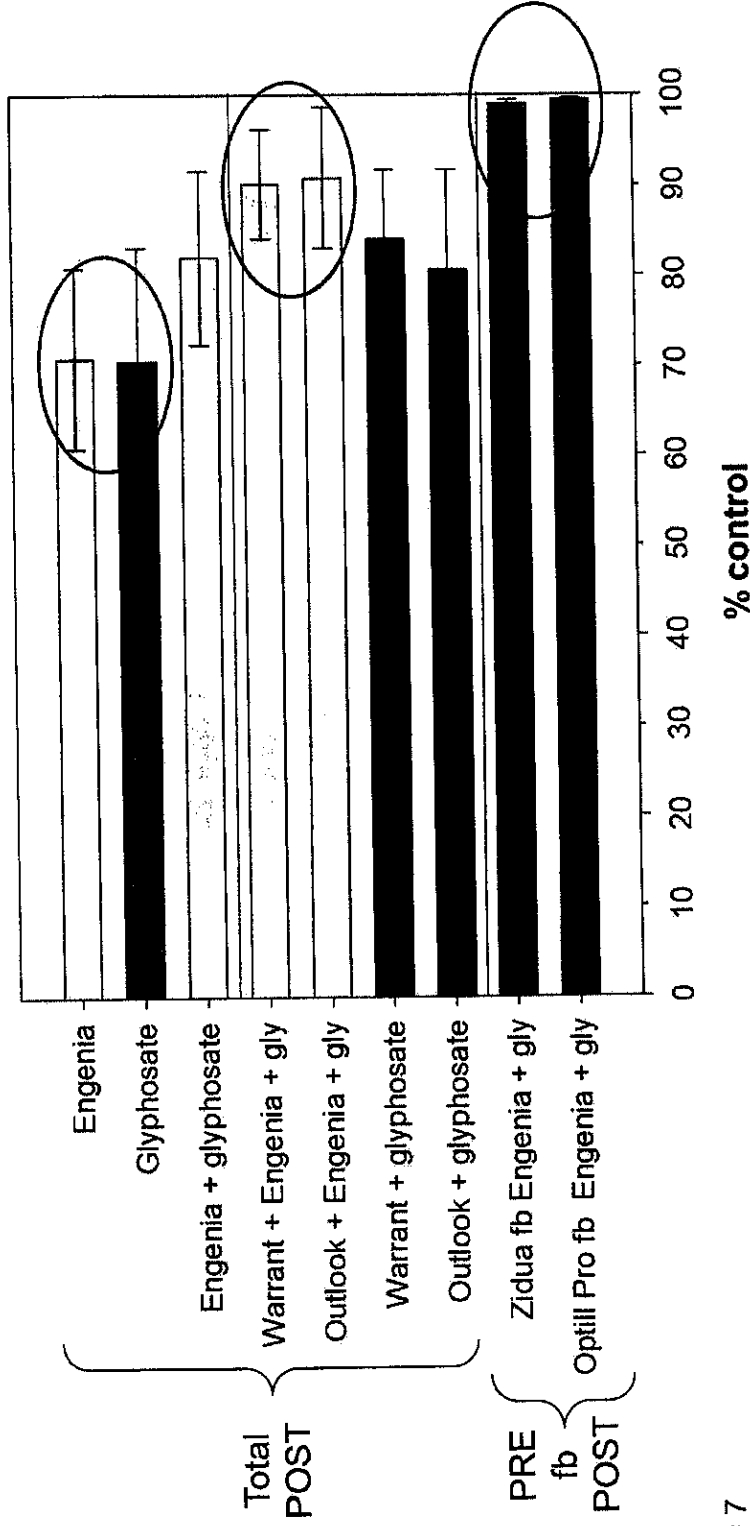


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Efficacy of Engenia Herbicide

Efficacy Programs for DT-Soybeans – Midwest

AMASS Control at 8-10 WAP



n = 7
 AMAPA (1), AMATA (4), and AMARE (2)
 Engenia and glyphosate = 420 and 840 g ae/ha, respectively.
 Zidua rates were adjusted according to soil texture.
 Outlook and Warrant = 630 and 1484 g/ha, respectively.
 All POST treatments included Preference (0.25% v/v).



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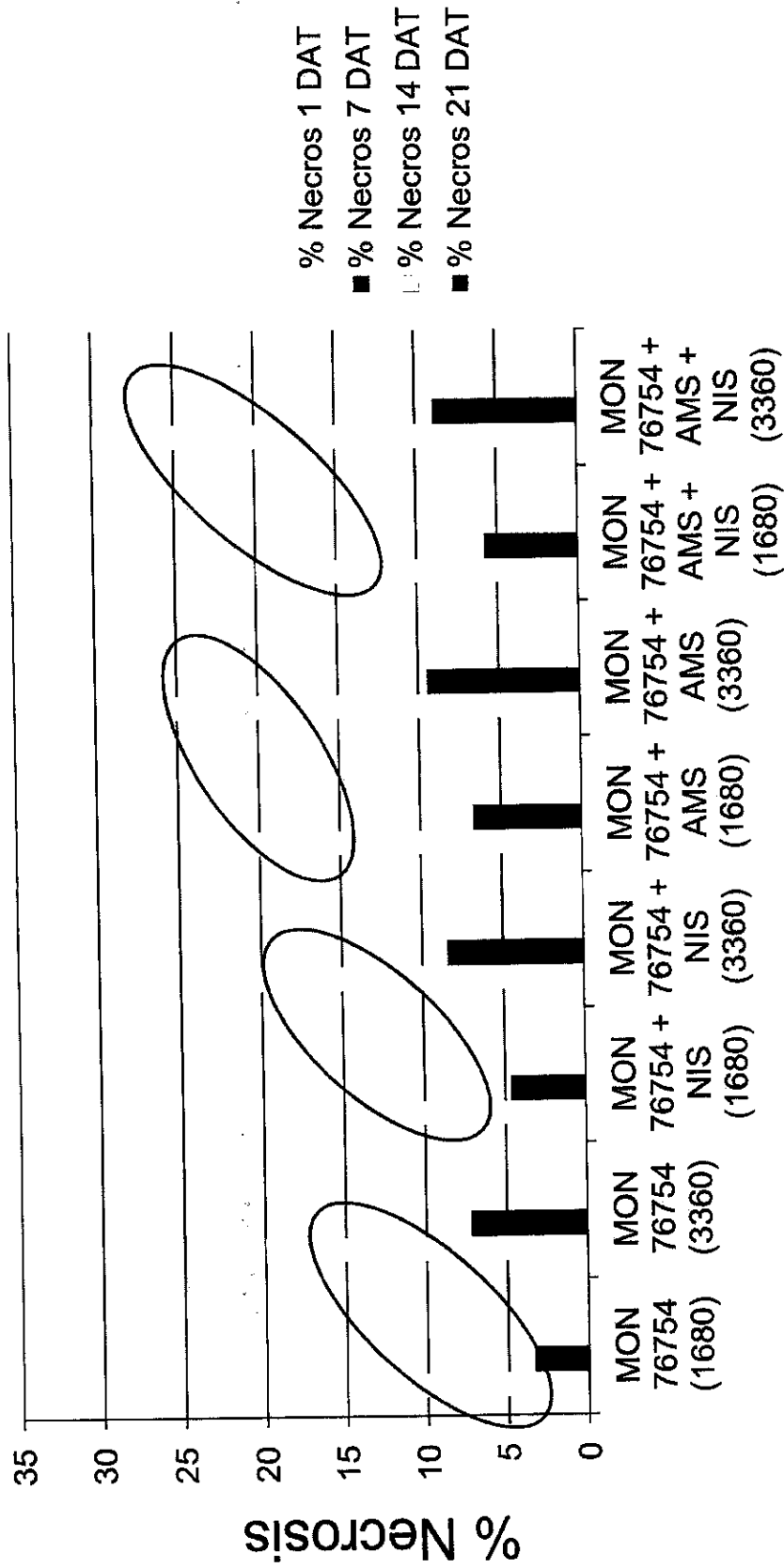
2012 Field Crop Tolerance Results

- Soy crop safety is acceptable with straight dicamba and MON premix formulations
 - Precautionary statement about necrosis needed especially when additional adjuvant (NIS, Deposition Aids, and/or AMS) is used.
- Temporary soy leaf droop can occur 6 to 36 hrs after application (consider label language).
 - AMS increases leaf droop especially in combo with NIS
- Cotton response is higher than soy: 5% necrosis with solo dic and >10% with dic + glyphosate. NIS + AMS increase impact (as high as 20+%).
 - Further investigation needed
- Other AI's in tank mix (insecticides, fungicides, herbicides) do not tend to increase crop response in cotton and soy but more testing needed.



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Cotton Necrosis Observed with MON 76754, NIS and AMS Combinations



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2012 Field Volatility Results

- Spray drift is a much greater concern than volatility, but volatility can become an issue when drift is managed.
- Field data show AMS increases volatility (>5X)
 - Clarity + AMS > Banvel alone
- Soybean observations show lower volatility of Engenia vs Clarity and trend towards lower volatility with MON 76754 vs Clarity + gly-K tank mix (MON).
- Some glyphosate salts show greater volatility (IPA)
- 2,4-D choline (MON formulation) + glyphosate tank mix also shows increased volatility with AMS (DAS states their premix is not affected by AMS).



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2012 Field Drift Results

- Even with BMPs employed, 5% soybean foliar symptomology sometimes detected to >200ft; ht effects measured to 100ft
- Drift distance to 5% injury was greatest with AIXR fb TTI = ULD nozzles
 - TTI nozzle generally reducing drift 25 to 35% (compared to AIXR)
- Nozzle recommendation evolving
 - Regulatory guidance towards “TTI” type nozzle based on buffer distance considerations
 - Venturi TTI / ULD type nozzles reduce spray drift to < 3% of applied
 - Pulse Width Modulation technology using large orifice non-venturi nozzles may be an additional option
 - Need to identify additional nozzle options available in Extremely Coarse to Ultra Coarse droplet range for commercial recommendation



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BMP Update

- Apply to small weeds < 4 inch
- Use systems approach --- dicamba + glyphosate integrated with residuals, other MOAs and agronomic practices
- Label language to warn of potential crop response
- Boom Ht < 24 inches
- Wind speed – 3 to 15 mph (10 mph if sensitive crop downwind)
- Nozzles – very coarse to ultra coarse (VMD>349 microns)
 - This may change to extremely coarse to ultra coarse (>500 microns) depending on Regulatory buffer guidance and nozzle test results
- Drift reduction agents should be used
- NIS at 1/4% may be added
- Technical recommendation is no AMS
 - Need recommendations for weed control without AMS under stress and hard water (dicamba / glyphosate rates, AMS alternatives...)
 - Need data and talking pts by Dec. for academic discussions
 - Need deeper discussion on gly salts
- Buffer distance sufficient to maintain satisfied customers



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REGULATORY WG UPDATE



Status of Current Dicamba Regulatory Submissions:

Country	Submission	Submit/Approve
USA	DT Soy Deregulation (USDA) ()	July 2010 – 1Q 2013?
	DGA in DT Soy (EPA) ()	April 2010 – 3Q 2013
	DLVF Conventional and DT Soy (EPA) ()	May 2012 – Sept 2013
	MON DGA Premix in DT Soy (EPA) ()	3Q 2013 – 4Q 2013
	MON DLVF Premix in DT Soy (EPA) ()	4Q 2013 – 2Q 2014*
	DT Cotton Deregulation (USDA) ()	2Q 2012 – 4Q 2013/2014
	DGA in DT Cotton (EPA) ()	3Q 2012 – 4Q 2013/2014

*Will not be available for 2014 launch with DT soy.



Status of Current Dicamba Regulatory Submissions:

Country	Submission	Submit/Approve
Canada	DT Soy Trait Approval (CFIA) ()	Nov 2010 – Nov 2012
	DGA in DT Soy (PMRA) ()	April 2010 – 2Q 2013
	DLVF in DT Soy (PMRA) (); Proposed, based on timeline for DGA in DT Soy approval	2Q 2013 – 3Q 2014
Brazil	DGA Conventional Crops ()	Dec 2011 – Dec 2014
	DGA in DT Soy (dependent on trait approval) ()	2Q 2015 – 4Q 2018
	DLVF in DT Soy ()	3Q 2015 – 2Q 2019
Argentina	DT Soy Trait Approval ()	4Q 2013 – 4Q 2015
	DGA in DT Soy ()	4Q 2014 – 2Q 2015
	DLVF in DT Soy ()	4Q 2014 – 2Q 2015?



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Dicamba Import Tolerance/MRL Actions

Japan	<ul style="list-style-type: none">• Soybean• FSC transfer ADI review to MHLW by October 2012• May 2010 – 4Q 2013
Korea	<ul style="list-style-type: none">• Soybean, corn• Recent decision that KFDA no longer adopting Codex, so import tolerance submission activated• Coordination with MON submission, with KFDA consultation.• October 2012 – October 2013
Taiwan	<ul style="list-style-type: none">• Soybean, corn• 4Q 2011 – 4Q 2013
CODEX*	<ul style="list-style-type: none">• MRLs set for majority of US crop uses in 2011• After negotiations with EU to continue review, JMPR approved use of Principle of Proportionality, so MRL of 5 ppm moves to CCPR in 2013.• Backup Strategy for Soybean: generating 8 new trials to support reduced use rate on label; to be reviewed in 2013 for 2014 approval.
EU*	<ul style="list-style-type: none">• All crops submitted by BASF February 2009.• MRLs set for all crops except soybean in 2011.• EU awaiting outcome of Codex approach for soybean decision and coordination with MON submission currently under review.



Update on Specialty/Sensitive Crop Tolerances

- Strategy has shifted to a late season treatment as potential new crop uses for weed control to establish broad set of tolerances
- In 2013, conduct over 300 GLP crop residue trials with a pre-harvest treatment of Engenia
 - Crop selected based on value and/or public perception
 - Proposed use at a 1/8 lb/A (112 g ae/ha) preharvest treatment (0-2 d PHI) as appropriate by crop type and edible fraction
 - Covers US and potential export
 - First submissions to EPA 2Q 2014 with approvals by 2015 remaining crops groups approved by early 2017.



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Results

Treatment	Mix	Nozzle	VMD ₅₀	Wind	Mean Wind		Peak Wind		Resulting Buffer	
					(mph)	(mph)	(mph)	(mph)	1 lb/ac	0.5 lb/ac
T1	Clarity	XR	236	L	4.85	6.28	293	147	Low Wind Speed	
T2	Clarity	TTI	713	L	4.67	5.81	58	29		
T3	Clarity	AIXR	432	L	4.07	5.13	53	27		
T4	22H	XR	256	L	4.86	5.96	>380	250		
T5	22H	TTI	590	L	7.05	8.79	60	30		
T6	22H	AIXR	419	L	5.36	6.88	240	120		
T7	22H+rpm	XR	202	L	8.15	10.08	268.00	134		
T8	22H+rpm	TTI	673	L	7.24	8.67	13.00	7		
T9	22H+rpm	AIXR	360	L	4.29	5.30	527.00	264		
T10	clarity	XR	236	H	8.57	10.85	264	132	High Wind Speed	
T11	clarity	TTI	713	H	8.47	10.13	123.00	62		
T12	clarity	AIXR	432	H	9.71	11.79	347	174		
T13	22H	XR	256	H	4.34	5.85	>380	250		
T14	22H	TTI	590	H	7.35	9.59	212	106		
T15	22H	AIXR	419	H	8.03	9.82	367	184		
T16	22H+rpm	XR	202	H	9.01	11.30	>380	>380		
T17	22H+rpm	TTI	673	H	10.25	12.87	266.00	133		
T18	22H+rpm	AIXR	360	H	10.44	12.94	>380	>380		



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Summary

- Spray droplet VMD_{50} values for Clarity and Engenia demonstrate similar drift potential.
- Spray buffer determinations for Clarity and Engenia are comparable given variable wind speed.
- The largest contributing factor to spray drift that we can control is the nozzle. Limit label to the use of specific nozzles in the range of TTI.
- Roundup Powermax can degrade the spray quality with XR and AIXR nozzles, reducing droplet quality one class e.g. from very course to course droplets. TTI nozzle not affected.
- Work with existing data to achieve a required spray buffer of 106 ft.



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COMMERCIAL WG UPDATE



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FTO Outreach Strategy Delivered Strong Support in First Comment Period, Positive Feedback on Stewardship Approach

Upcoming outreach strategy to include:

- Positive support for USDA to deliver timely deregulation
- Support coordinated framework between USDA and EPA
- Address key issues with state regulatory agencies to facilitate timely state registration
- Support for application requirements and recommended formulations
- Support and collaboration on industry initiatives to reinforce stewardship messages
- Outreach to specialty crop growers and organizations

USDA Comment Period #1 Results:

	Enlist Soy Vector**	Enlist Soy Stack	Enlist Corn
Total # of comments	174	1331	5691
% positive	57	12	2
States	22	24	28
Academics	15	12	14
Ag Groups	18	16	12
Channel Partners	21	11	42
Farmers	33	55	63

*USDA still processing comments



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Update from Dicamba Advisory Council and Stakeholder Management: Additional Weed Control Tools, of Systems and High Marks for Progress

Dicamba Advisory Council:

- Low volatility formulations
- Large scale testing – drift and volatility
- Progress on establishing specialty crop tolerances
- Tank clean out solution
- Education and training progress & programs

Opportunities:

- Additional information - specialty crops trials
- Training with state & industry groups – i.e. Spray Attention

Stakeholder Management / Industry Initiatives:

- Coordinated messaging, presentations, and field tours with key industry / academics/ key state officials/key crop commodity organizations, and specialty crop stakeholders
- USB weed resistance management education and stewardship initiative
 - Training, education, awareness for spray application and use of new products
- Driftwatch



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DT Soy Comment Period Strategies to Build on Established Support

USDA Public Comment Period Two:

- Focus will be on specific technical or regulatory needs as well as targeted follow-on support from the first comment period with heavy academic input
- Address any gaps identified from opponents comments in first comment period or elsewhere

EPA Public Comment Periods:

- Monitor submitted comments
- Anticipate opponents objections and ensure handful of supportive comments from knowledgeable farmers and leading academics.



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Spray Attention Industry Initiative Progressing

USB initiative Background

- United Soybean Board approved funding of broad initiative focused on stewardship of weed management tools
- Reinforces Application Requirements/BMPs



Recent Actions

- RFP awarded to Bill Johnson and several extension agents
- Education programs focused on herbicide resistance management BMPs using print and web-based media (podcasts, videos) in addition to field days and meetings in each of the participating states.
- State specific recommendations will be developed that are consistent with the WSSA teaching modules.
- Industry group of six aligned on "Spray Attention", propose change tagline to "Do It Right"



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Monsanto and BASF will Restrict the use of AMS in Dicamba Brands

- Humidome data indicated AMS increases the potential volatility of dicamba salts
- 2012 field trials confirmed that AMS increases volatility potential
- MON/BASF aligned that both companies will restrict the use of AMS on branded dicamba
 - No plans to restrict through other avenues
- Communication timing:
 - NOV/DEC: Will amend label and distribution and academics
 - Will develop communication plans and timing and Q&A that both companies will align upon.
- The decision of glyphosate salts was tabled until additional data can be generated and analyzed



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Buffer Alignment

- Monsanto submitted data to EPA on DGA (July 2012)
 - Monsanto proposed 100' for 0.5 lb/A and 175' for 1 lb/A.
 - Monsanto to meet with EPA in Oct 2012 on the proposed buffer.
- BASF's preliminary DLVF field data incorporating DRT methodology
 - Data support a 106' for 0.5 lbs/A and 212' for 1 lb/A
 - Bridging to DGA endpoints
- Establish joint team to discuss printed label buffer distance



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