



Council of Producers &
Distributors of Agrotechnology

2018 Summer Conference

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Proposal: CPDA Certified “DRA” program?

- ▶ Driftable fine is defined based on the spray particle size
- ▶ Bouncing off and shattering are related to the particle size

ASABE Classification System (ASABE S-572.1)

- ▶ The American Society of Agricultural and Biological Engineers (ASABE) developed a droplet size classification system (ASABE S-572.1) that ranges from extremely fine to ultra coarse, based on DV values measured in microns (*Figure 3*). The droplet size category recommended for use with a particular pesticide may be listed on the product label.

ASABE S-572.1: droplet size classification system

Category	Symbol	Color Code	Approximate VMD Range (microns)
Extremely Fine	XF	Purple	<60
Very Fine	VF	Red	61-105
Fine	F	Orange	106-235
Medium	M	Yellow	236-340
Coarse	C	Blue	341-403
Very Coarse	VC	Green	404-502
Extremely Coarse	EC	White	503-665
<u>Ultra Coarse</u>	UC	Black	>665

CPDA: DRA?

- ▶ Jim Reiss, David Bower (CPDA meeting, May 2018)
 - ▶ **Droplet Retention Agent?**
- ▶ Discuss and gain support from the experts out our CPDA
 - ▶ Meeting with Greg Krug, Brad Fritz, Clint Hoffmann in North Platte, July 12th, 2018
 - ▶ Bonus Bill Bagley was present too
 - ▶ Agreements: Focusing what CPDA can do!!

Droplet Distribution

Nozzle	PSI	Solution	DRT Added	%<105 µm	%<141 µm	%<200 µm	%<300 µm	%<400 µm	%<500 µm	%<600 µm	%<700 µm	%<800 µm	%<900 µm	%<1000 µm
TJ8002	40	DI Water	None	10.57	21.06	41.75	74.84	92.98	99.15	99.98	100	100	100	100
TJ8002	40	1.47% RoundUp PowerMax w/ AMS	None	15.85	28.78	51.17	81.46	94.95	99.31	99.98	100	100	100	100
TJ8002	40	1.47% RoundUp Power Max w/ AMS	0.25% oil emulsion DRT	7.15	17.09	38.78	74.33	93.51	99.47	100	100	100	100	100
TJ8002	40	1.47% RoundUp Power Max w/ AMS	0.06% DR-2000	3.89	7.56	15.47	32.6	52.03	71.55	88.16	96.47	99.19	99.99	100
AIXR11004	40	DI Water	None	1.08	2.79	7.59	21.42	41.67	64.51	84.96	97.26	99.88	100	100
AIXR 11004	40	1.47% RoundUp PowerMax w/ AMS	None	1.96	4.66	11.43	28.16	49.16	70.63	87.8	97.6	99.81	100	100
AIXR11004	40	1.47% RoundUp Power Max w/ AMS	0.25% oil emulsion DRT	0.55	1.76	5.71	18.58	38.61	62.21	84.31	97.28	99.95	100	100
AIXR11004	40	1.47% RoundUp Power Max w/ AMS	0.06% DR-2000	0.74	1.63	3.97	11.19	23.42	39.61	59.03	78.66	92.49	99.94	99.99
TTI11004	63	DI Water	None	0.82	2	5.24	15.11	30.16	48.34	68.6	87.27	96.12	99.96	99.99
TTI11004	63	1.47% RoundUp PowerMax + 0.67% Engenia	None	0.64	1.69	5.06	15.66	31.52	49.94	69.62	87.49	96.14	99.96	99.99
TTI11004	63	1.7% RoundUp PowerMax	None	0.78	1.92	5.42	16.26	32.25	50.65	70.19	87.81	96.25	99.96	99.99
TTI11004	60	1.47% RoundUp Power Max w/ AMS	0.06% DR-2000	0.12	0.58	1.95	6.75	15.81	28.93	46.66	67.61	86.6	98.27	99.71

Droplet Distribution

Nozzle	PSI	Solution	DRT Added	% (141-600) µm	% (141-700) µm	% (200-600) µm	% (200-700) µm
TJ8002		40DI Water	None	78.92	78.94	58.23	58.25
TJ8002		401.47% RoundUp PowerMax w/ AMS	None	71.2	71.22	48.81	48.83
TJ8002		401.47% RoundUp Power Max w/ AMS	0.25% oil emulsion DRT	82.91	82.91	61.22	61.22
TJ8002		401.47% RoundUp Power Max w/ AMS	0.06% DR-2000	80.6	88.91	72.69	81
AIXR1100 4		40DI Water	None	82.17	94.47	77.37	89.67
AIXR 11004		401.47% RoundUp PowerMax w/ AMS	None	83.14	92.94	76.37	86.17
AIXR1100 4		401.47% RoundUp Power Max w/ AMS	0.25% oil emulsion DRT	82.55	95.52	78.6	91.57
AIXR1100 4		401.47% RoundUp Power Max w/ AMS	0.06% DR-2000	57.4	77.03	55.06	74.69
TTI11004		63DI Water	None	66.6	85.27	63.36	82.03
TTI11004	63	1.47% RoundUp PowerMax + 0.67% Engenia	None	67.93	85.8	64.56	82.43
TTI11004	63	1.7% RoundUp PowerMax	None	68.27	85.89	64.77	82.39
TTI11004	60	1.47% RoundUp Power Max w/ AMS	0.06% DR-2000	46.08	67.03	44.71	65.66

Next?

- ▶ Seeking input from CPDA members
 - ▶ Endorse /Modify the concept
- ▶ If the members agree it is a feasible approach, next step
 - ▶ Looking for volunteers to develop the protocol, program
 - ▶ Potential date: Monday Oct. 22nd, Washington DC

