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**INDEX OF WITNESS EXAMINATION**

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1           *(Proceedings convened in open court at 1:20 p.m.)*

2           *(Following held outside presence of jury:)*

3           **THE COURT:** Before calling the jury in, I want to make  
4 a little more record about the dispute we had yesterday over  
5 the testimony of Steve Smith. There were objections made by  
6 defense counsel that on redirect examination the plaintiffs  
7 went overboard in treating Smith as an expert witness and  
8 elicited testimony from him about the quality of the labels.

9           I've reviewed the transcript of the testimony  
10 yesterday and I'll still -- I think we -- let me just review  
11 it. The concern that I had was that the defendants had  
12 opened the door to testimony regarding -- expert testimony  
13 regarding the labels when they questioned Mr. Smith at  
14 length about the quality of the warnings on the labels and  
15 what was really needed for a proper label, and that the  
16 point of the testimony was that -- and this was line-by-line  
17 testimony with the two labels that were eventually adopted  
18 and placed on the packages. The line-by-line testimony  
19 elicited by the defense was to the effect that they -- the  
20 plaintiffs, or -- I'm sorry, to the effect that Monsanto  
21 basically did everything that Smith had recommended.

22           It's the impression from the Court that there's really  
23 overlapping testimony about -- that was proper on the  
24 question of notice to the defendants, the lack of proper  
25 warnings, and it seems as though that it necessarily

1 implicates expert testimony about the propriety of the  
2 labels, and that was at least indirectly the implication or  
3 the inference that the defendants were trying to raise by  
4 this cross-examination, especially when the defendants went  
5 line-by-line with Witness Smith about the labels. They  
6 technically did not ask him about the exact propriety of the  
7 labels. The questions were designed, rather: Well, did you  
8 know that the label reflected this, reflected that,  
9 reflected this, reflected that? And, of course, he answered  
10 "no" because the labels were developed later on.

11           Then after the objections to the follow-up questions  
12 on redirect examination by plaintiffs' counsel, even though  
13 I overruled those objections for the reason that it did seem  
14 like the defendants had opened the door, the worst of the  
15 questioning was stricken from the record by far, and that  
16 was the questioning that dealt with the so-called ecological  
17 disaster, so there's no problem with that.

18           And, again, on reviewing the follow-up questions on  
19 direct -- on redirect examination by plaintiffs' counsel,  
20 there was very little elicitation of testimony that could  
21 even be regarded as expert testimony by -- from witness  
22 Smith.

23           In any event there was absolutely no prejudice to  
24 defendants by the elicitation of that minimal testimony  
25 regarding the labels. So the whole thing was very

1 complicated because as I say, there seemed to the court to  
2 be overlapping testimony that pertained first to notice to  
3 the defendants and yet at the same time it implicates expert  
4 testimony on the part of Mr. Smith. In any event, there's  
5 absolutely no prejudice to the defendants from what  
6 happened.

7 All that said, I'm advising counsel for both sides  
8 that there should be no reference for the rest of the trial  
9 for Mr. Smith testifying or being an expert in any way. In  
10 any respect. So, I know that's a complicated response but  
11 the whole thing was complicated about this yesterday.

12 You can bring the jury in.

13 *(Jury in)*

14 **THE COURT:** You may proceed.

15 **MR. RANGLES:** Thank you, Your Honor.

16 **DR. BOYD CAREY, PLAINTIFF'S WITNESS, SWORN**

17 **DIRECT EXAMINATION (continued)**

18 **QUESTIONS BY MR. RANGLES:**

19 Q. Good afternoon, Dr. Carey. We're going to pick back  
20 up where we were, more or less, chronologically.

21 Can we please show Exhibit 173. I don't think -- the  
22 front of the document. We're going to move on in because  
23 this is the front of many documents. Yes, let's start with  
24 this page.

25 What -- Dr. Carey, you're familiar with this document

1 aren't you?

2 A. I am.

3 Q. And this is a Monsanto document?

4 A. Yes.

5 **MR. RANGLES:** Okay. Your Honor, I move 173 into  
6 evidence.

7 **THE COURT:** Ask him to identify it in some other  
8 respect other than it's a Monsanto document.

9 **MR. RANGLES:** Fair enough, Your Honor. Absolutely.

10 Q. *(By Mr. Randles)* Could you characterize what this  
11 document is concerning?

12 A. This is a document outlining plans for a proposed  
13 claims management approach.

14 Q. And this is a document you are very familiar with?

15 A. I'm familiar with it.

16 **MR. RANGLES:** I offer it into evidence.

17 **THE COURT:** Any objections?

18 **MR. MILLER:** No objection.

19 **THE COURT:** All right. It's admitted.

20 ***(Plaintiffs' Exhibit No. 173 admitted)***

21 **MR. RANGLES:** Thank you, Your Honor.

22 Q. *(By Mr. Randles)* All right. Let's publish it for the  
23 jury and you and I will talk through this a little bit.

24 That was part of your planning for claims that  
25 ultimately resulted in the 2017 claims management procedure

1 as we have been discussing, right?

2 A. Yes.

3 Q. This says, "What does claims management success look  
4 like?" You see that up there?

5 A. I do.

6 Q. And I want to look at the very bottom number, bullet  
7 point: "Minimal number of claims or issues that require  
8 financial settlement." Do you see that?

9 A. Yes.

10 Q. And further on in the document you elab -- well, this  
11 idea is elaborated on. We could move to the next entry.  
12 We'll put that up. We'll see if we can get this a little  
13 bit bigger.

14 It says, "Likely issues and resolution. Off-site  
15 movement, no claims settled." You see that?

16 A. I do.

17 Q. And it says, "Label clearly states the applicator may  
18 not spray if there's a risk of off-site movement, and label  
19 also states the applicator's responsible."

20 Do you see that?

21 A. I do.

22 Q. And, so, from the beginning, dating all the way back  
23 to October 2015, Monsanto hadn't made a policy decision that  
24 it would not settle off-target movement claims not only in  
25 '15 and '16, but going forward, correct?

1 A. That is correct.

2 Q. And that is still the policy, isn't it?

3 A. It is.

4 Q. All right. Let's go to the next entry in this  
5 document. And, once again, we have budgeting assumptions  
6 for the claims process, and Xtend trade acres assumption,  
7 cotton assumption. Do you see that?

8 A. I do.

9 Q. Okay. Then let's move to the next entry, which will  
10 be called new assumptions. This one, yes. Thank you.

11 I want to look here: "Overall resources and funding  
12 request for FES." And we already said FES was Field  
13 Engagement Specialists, the folks you would send out for the  
14 '17 growing season forward to look at fields that had  
15 complaints, right?

16 A. Correct.

17 Q. Now, I want to look over here on the right side of the  
18 page at the top. It said, "FES numbers based upon  
19 20 percent of Xtend, XtendiMax chemistry customers.  
20 Assumption: One in five nonchemistry purchasers will call  
21 and want a visit."

22 Did I read that correctly?

23 A. That's correct.

24 Q. And it said -- there's a bullet point under it that  
25 says, "Weed control, crop injury, off-site movement." Am I



1 safe in assuming that what this document is telling us is  
2 those are category of possible complaints?

3 A. That's correct.

4 Q. So going into the release of the new herbicide in  
5 2017, Monsanto internally was estimating that 20 percent of  
6 the customers, one in five, would have problems sufficiently  
7 serious to warrant a personal visit, is that correct?

8 A. Well, we projected that 20 percent would have enough  
9 of an inquiry, enough of a question that it would warrant a  
10 visit. May or may not be a valid claim.

11 Q. I'm not saying that, but I'm saying you projected that  
12 there would be a serious enough request from one in five  
13 that it would warrant a personal visit?

14 A. One in five would call us and we would want to visit  
15 it, yes.

16 Q. Let's show 481, to Court, counsel, and witnesses. If  
17 we could blow up the very top just so that everyone can read  
18 who it's to and from.

19 Do you see this in front of you, Doctor?

20 A. Yes.

21 Q. This is an email from John Chambers to yourself with  
22 another person copied. Do you see that?

23 A. I do.

24 Q. And if we remove the bigger tab, we can see that, just  
25 to update, we -- I'm not going to read it, but this is

1 concerning a presentation by Dr. Stanley Culpepper, is that  
2 correct?

3 A. That's correct.

4 **MR. RANGLES:** Your Honor, I move for admission of 481.

5 **MR. MILLER:** Same objection, Your Honor.

6 **THE COURT:** It's admitted.

7 **(Plaintiffs' Exhibit No. 481 admitted)**

8 Q. (By Mr. Randles) Then, as we --

9 **MR. RANGLES:** May we publish, Your Honor? Thank you,  
10 Your Honor.

11 Q. (By Mr. Randles) There's actually then your email in  
12 the middle of the page, do you see that, to John Chambers?

13 A. I do.

14 Q. Okay. So he's responding to an email you sent. I  
15 want to now look at the text of the email you sent to  
16 John Chambers, all right? We're going to start with this  
17 second full paragraph: "In the meantime I want you to be  
18 aware that this morning Stu sent a copy of the presentation  
19 that Stanley Culpepper and Larry Steckel gave at Beltwide."

20 The following statement appears on one of the slides:  
21 "Injury and EPA may be the driver; very possible EPA could  
22 prohibit tank mixes, and remaining slides go into  
23 significant information about volatility/drift/injury."

24 Did I read that correct?

25 A. You did.

1 Q. So this presentation involved significant information,  
2 as you put it, about volatility, drift, and injury, correct?

3 A. Well, the significant information I was referring to  
4 was about the injury and the EPA being the driver. As a  
5 matter of fact, I said that this statement and the slide  
6 from Dr. Culpepper said very possible EPA could prohibit  
7 tank mixing.

8 Q. I understand, and I know that's true, and -- but,  
9 actually, I'm wanting to focus on the second part of your  
10 sentence.

11 A. Okay.

12 Q. "And remaining slides go into significant  
13 information" -- and "significant information" is your term,  
14 correct?

15 A. Correct.

16 Q. -- "about volatility/drift/injury."  
17 Did I read that correctly?

18 A. Correct.

19 Q. Next paragraph: "This is something that we have kept  
20 tightly confidential within Monsanto, and to my knowledge,  
21 this is the first external communication around it."

22 Did I read that correctly?

23 A. You did.

24 Q. Then you've gone on to say, "I've alerted key  
25 regulatory, legal, and dicamba team members."

1 Did I read that correctly?

2 A. Yes.

3 Q. You did not recommend, in this email, providing this  
4 information to academics, did you?

5 A. Academics already had the information. It was a  
6 public presentation by Dr. Culpepper at a meeting.

7 Q. So this is something we've kept tightly confidential  
8 within Monsanto, so this was the first leak of that  
9 information, is that what you're telling our jury?

10 A. No. What I'm telling you is that, as I mentioned  
11 before, the key in this communication is about a red box on  
12 a slide that Dr. Culpepper had, and that red box had what  
13 I've written here in quotes, and that has nothing to do with  
14 volatility. It has to do with an issue that the EPA was  
15 looking at for another herbicide called Enlist and the  
16 possibility that they could prohibit tank mixing. That's  
17 what the issue was about.

18 Q. So your sentence, "Remaining slides go into  
19 significant information about volatility/drift/injury,"  
20 that's just a gratuitous observation on your part?

21 A. No. It's relevant because, as you've already shown,  
22 we were looking to garner any information we could. And  
23 "significant" in this sentence means there's a lot of  
24 information about volatility, drift, and injury. But the  
25 issue with what we kept tightly confidential within Monsanto

1 was not about that piece.

2 Q. And this was the same time you were prohibiting  
3 academics from doing research with your new product on  
4 drift, volatility, and injury, isn't it?

5 A. It would have been in that period, yes.

6 Q. Let's look at Exhibit 170. We can look at the top  
7 here. I'll need that a little bigger.

8 Now, this is an email exchange between you and  
9 Sarah Fike at Monsanto, correct?

10 A. Yes.

11 Q. And there are other people copied. Then if we look at  
12 the middle of the document, this is your email to Sarah Fike  
13 regarding project priority ratings. Did I read that  
14 carefully?

15 A. That's correct.

16 **MR. RANGLES:** Your Honor, I move for the admission of  
17 this document.

18 **MR. MILLER:** Same objection; relevance.

19 **THE COURT:** Overruled; admitted.

20 **(Plaintiffs' Exhibit No. 170 admitted)**

21 Q. *(By Mr. Randles)* Okay. Let's move into the text of --  
22 let's start with business goal. The project name and  
23 business goal section. Now, this is your proposal, right?  
24 This is your email, this contained in your part of it?

25 A. That's correct.

1 Q. You say, "Project name one, distinguishing volatility  
2 versus physical drift."

3 Did I read that correctly?

4 A. Yes.

5 Q. And you say, "Business goal: Support Xtend commercial  
6 introduction, customer training, freedom to operate, and  
7 liability defense."

8 Did I read that carefully?

9 A. That's correct.

10 Q. This was your proposal. You had a project to do some  
11 scientific research to assist, among other things, in  
12 freedom to operate and liability events, correct?

13 A. That was one of the purposes for doing the project.

14 Q. And this is the first of August 2016, correct?

15 A. I'm sorry?

16 Q. Very top.

17 A. I've got to look at the top. Yes, August 1st, 2016.

18 Q. Okay. Let's go back to the text. So, again, to put  
19 it in context, this is a few days after the Portageville  
20 meeting, correct?

21 A. I can't remember the dates but I'll take that at your  
22 word.

23 Q. July 29th, 2016, okay? EPA compliance advisory comes  
24 out in August of 2016 talking about the damage in Missouri,  
25 correct?

1 A. Okay.

2 Q. You remember that?

3 A. I remember it, yes.

4 Q. So in the middle of all of this you make a proposal to  
5 distinguish volatility, physical drift to support the  
6 freedom to operate and liability defense, correct?

7 A. I made that proposal, yes.

8 Q. This was at the same time you weren't doing  
9 investigations, right?

10 A. Correct.

11 Q. And it was the same time we were talking about  
12 earlier -- and I'm not going to go back into it -- where you  
13 weren't looking into who the offenders were in Missouri,  
14 correct?

15 A. Correct.

16 Q. "Established methods information, demonstrations, and  
17 a body of data to distinguish volatility from physical drift  
18 to aid investigation, resolution, and defense of commercial  
19 off-site movement claims where it is alleged that our  
20 products volatilized."

21 Did I read that correctly?

22 A. That's correct.

23 Q. Does anything in this proposal say anything about  
24 determining the truth or validity of claims of damage from  
25 volatility?

1 A. Well, that's actually the goal as it's written because  
2 we're trying to find ways to definitively tell if an  
3 off-target movement occurrence happened to distinguish  
4 whether that might have been through physical drift or could  
5 it have been through volatility, so that's essentially what  
6 we're trying to demonstrate.

7 Q. Are you telling our jury these two sentences are just  
8 talking about an honest, unbiased scientific inquiry without  
9 a goal of protecting the company?

10 A. I'm telling you that we had conducted the research on  
11 volatility already and it demonstrated that volatility  
12 wasn't a contributor to significant off-target movement. So  
13 we also had learned, through observing and listening to what  
14 had happened with the illegal applications using other  
15 herbicides granted, that people often moved to the  
16 explanation of volatility as the first explanation. So our  
17 science said that volatility with our new formulation was  
18 not going to be an issue for off-target movement if it's  
19 used in accordance with the label. But when off-target  
20 movement occurs it's not always easy to distinguish how it  
21 moved, so we felt it would be important to be able to do  
22 that for various reasons.

23 Q. That's very interesting. Do you remember what my  
24 question was?

25 A. I apologize. I thought I answered your question.



1 Q. What the question was: Are you telling the jurors  
2 these two sentences are describing just an objective  
3 scientific search for the truth unrelated to defending the  
4 company?

5 A. The purposes -- one of the purposes of this work is  
6 related to helping defend the company, but the objective is  
7 absolutely scientific.

8 Q. 2A, middle of the second sentence: "And a body of  
9 data to distinguish volatility from physical drift to aid  
10 investigation, resolution, and defense, commercial off-site  
11 movement claims."

12 That's what it says, isn't it?

13 A. That's what it says.

14 Q. And we're going to get into specific documents, but  
15 the investigation goals were to protect the company, right?

16 A. The investigation goals were, first, to respond to a  
17 customer need and to determine what actually happened, as is  
18 always the case.

19 Q. Okay. And that's your testimony to the jury, that was  
20 the goal of the investigation?

21 A. It's my testimony what I've said are my words, my  
22 project, my objective, yes.

23 Q. So this -- the fact that liability defense is  
24 mentioned in both sentences is just a coincidence to your  
25 otherwise objective scientific inquiry, is that what you're

1 telling the jury?

2 A. What I'm telling the jury is that the purpose for  
3 research can have multiple purposes. When you conduct the  
4 research or demonstrations, whatever it turned out to be in  
5 this case, that needs to be done unbiased. It needs to be  
6 determining the truth and accuracy. And, in fact, as I read  
7 that, it tells me that's exactly what we're trying to do.

8 Q. Well, I think everyone can read these two sentences  
9 for themselves and decide what "liability defense" means.  
10 Can we agree on that?

11 A. Totally agree.

12 Q. All right. Let's go to Exhibit 219. You recognize  
13 this document, don't you?

14 A. I'm not sure about this one. I think you showed one  
15 earlier.

16 Q. This is a year later. This is the EPA compliance  
17 advisory from July of 2017.

18 A. That's -- yeah. That's different.

19 Q. You recognize this document though as well, don't you?

20 A. I haven't seen this document. I was in a different  
21 role at the time. This in July of 2017, so I wasn't  
22 directly engaged with this type of thing.

23 Q. You don't recall me showing you this document in your  
24 deposition?

25 A. Maybe you did.

1 Q. Okay. Down at the bottom of the page it lists a  
2 Monsanto Bates number. You see that?

3 A. Yes.

4 Q. So Monsanto received this document from the EPA  
5 regarding dicamba crop damage?

6 A. Okay.

7 Q. You see that? Bottom of the page, again, that number,  
8 that's what that indicates. Bottom right-hand corner, long  
9 number?

10 A. I thought you asked me if this -- what the subject of  
11 this was, so I was looking towards the top.

12 **MR. RANGLES:** I've got to take care of a foundation  
13 issue now. Your Honor, I offer 219 into evidence.

14 **MR. MILLER:** Same objection, Your Honor.

15 **THE COURT:** Overruled admitted.

16 **(Plaintiffs' Exhibit No. 219 admitted)**

17 Q. (By Mr. Randles) All right. Now let's look at what --  
18 you can publish to the jury.

19 Okay. "Crop Damage Complaints Related to Dicamba  
20 Herbicides Raising Concerns." You see that as the title?

21 A. I do.

22 Q. You see the date, July 2017?

23 A. Yes.

24 Q. Now, this is in the middle of the first growing season  
25 where your new herbicide had been released, correct?

1 A. The first herbicide had been released, yes.

2 Q. I'm trying to avoid supposedly low volatility but I  
3 think I'm just going to go back to that. When your  
4 supposedly low volatility herbicide had been released, this  
5 is the middle of the first growing season, isn't it?

6 A. This is the first growing season where we had an  
7 approved product for the technology.

8 Q. You had an improved product?

9 A. Approved.

10 Q. Approved product. Okay. I misheard. Because let's  
11 look at what the EPA says here. Let's go to Agricultural  
12 Concerns: "Despite the conditional approval of new dicamba  
13 products with drift reduction agents and further use  
14 restrictions set in place prior to the 2017 growing  
15 season "-- I want to pause here.

16 EPA approved the new XtendiMax with VaporGrip and  
17 Engenia for the 2017 growing season, right?

18 A. Correct.

19 Q. And the EPA also set additional restrictions on use,  
20 didn't it, of those products?

21 A. I believe that's the case. I can't remember exactly  
22 the -- I believe that's the case.

23 Q. That's what it's talking about here, isn't it, in  
24 "further use restrictions set in place prior to the 2017  
25 growing season"?

1 A. That's correct.

2 Q. "Some states are reporting high numbers of dicamba  
3 complaints. By early July we already had reports of  
4 hundreds of complaints received by state agencies in  
5 Arkansas, Missouri, Tennessee, a significant increase from  
6 last year."

7 Do you see that?

8 A. I see that.

9 Q. So the off-label spraying occurred in '16, but when  
10 the new products were out in the middle of that growing  
11 season, EPA says, "We're seeing a significant increase in  
12 last year from reports." That's what it says here, isn't  
13 it?

14 A. That's what it says.

15 Q. And it says, "Both physical drift and volatilization  
16 of dicamba from the target application site have been  
17 reported. The underlying causes of the various damage  
18 reports are still being investigated."

19 Did I read that correctly?

20 A. You did.

21 Q. Let's go to Exhibit 175. Now, during the same month,  
22 July 2017, of the compliance advisory we just read, you  
23 authored this document, didn't you?

24 A. Yes, I did.

25 Q. Okay. And it was concerning Xtend inquiry

1 investigation guidance, correct?

2 A. Correct.

3 **MR. RANGLES:** Your Honor, I offer Plaintiffs' 175.

4 **MR. MILLER:** No objection, Your Honor.

5 **THE COURT:** It's admitted.

6 **(Plaintiffs' Exhibit No. 175 admitted)**

7 Q. (By Mr. Randles) I want to go initially to the "do not  
8 visit." Here you go, yeah. Down a little further. Yeah.

9 All right. Now, this is guidance you're providing  
10 through this document to the people doing the investigation,  
11 correct?

12 A. Correct.

13 Q. I mean these are the rules, right?

14 A. This is our policy, our guidance to our field people,  
15 yes.

16 Q. Okay. Bottom bullet point: "Do not visit a driftee  
17 inquiry if the driftee is not a MON customer. See brands,  
18 traits, or crop protection."

19 Did I read that correctly?

20 A. Yes.

21 Q. And that was the policy then, that if someone called  
22 saying, *I've got a problem with off-target movement of*  
23 *dicamba*, if they weren't a Monsanto customer, you wouldn't  
24 investigate, right?

25 A. That's correct.

1 Q. And the phrase "driftee" is actually a phrase your  
2 team invented, isn't it?

3 A. It's a term that we just needed to demonstrate and  
4 differentiate between someone who might have caused a drift  
5 issue versus someone who may have received a drift issue, so  
6 it was a term of convenience in our own terminology.

7 Q. And this document was given to the Field Engagement  
8 Specialists who were on -- who were the people on the  
9 ground, correct?

10 A. I believe it was, yes.

11 Q. Let's go to 178. This is still July of 2017. Do you  
12 recognize this email exchange between you and Tom Carlson at  
13 Monsanto?

14 A. Clearly, I wrote this at the top, but I need to take a  
15 look at it. I don't recognize it at the moment.

16 **MR. RANGLES:** Your Honor, I offer 178.

17 **MR. MILLER:** Same objection, Your Honor.

18 **THE COURT:** Overruled; admitted.

19 **(Plaintiffs' Exhibit No. 178 admitted)**

20 Q. (By Mr. Randles) I want to go to the Key Don'ts section  
21 in this document. Well, can you make the box a little  
22 bigger. I'd like to get his name at the bottom of that  
23 section, okay? There you go.

24 And this is a portion of email you drafted because it  
25 says, "Thanks, Boyd" down at the bottom, right?

1 A. Yes.

2 Q. Okay. You say, "The key don'ts are: Do not visit a  
3 driftee inquiry if the farmer is not a customer." Again,  
4 seed, trait, or chemical, right?

5 A. Correct.

6 Q. "And, note, 'driftee' is meant as an internal term  
7 only."

8 Did I read that correctly?

9 A. Correct.

10 Q. And that was one of your key don'ts, correct?

11 A. Well, the don't is, do not visit a driftee inquiry if  
12 the farmer's not a customer. And the note about driftee is  
13 just a reminder that that's an internal term.

14 Q. Still in July 2017 -- let's do 179. Up here at the  
15 top, this is an email exchange between Sara Allen and a  
16 number of people at Monsanto, including Ty Witten,  
17 regarding, "Subject: OTM." That's off-target movement,  
18 right?

19 A. That's correct.

20 Q. -- dash, "driftee midwest region." Do you see that?

21 A. Yes.

22 **MR. RANGLES:** Okay. Your Honor, I offer 179 into  
23 evidence.

24 **MR. MILLER:** Same objection, Your Honor.

25 **THE COURT:** Overruled; admitted.



1                   **(Plaintiffs' Exhibit No. 179 admitted)**

2       Q.     (By Mr. Randles) Let's start at the paragraph that  
3 begins at the top. It says, "Ty, we got nine more  
4 off-target driftees from the midwest region yesterday, so up  
5 to 38 now, including comments from HGS on this updated  
6 filtered spreadsheet. It is obvious some consider  
7 themselves good MON customers and are expecting a contact."

8                   Did I read that correctly?

9       A.     That's correct.

10     Q.     Okay. Then I want to go to the "I will" on purchase  
11 history. I believe it may be the next page. You got it?

12     Okay.

13                   It says, "I filtered my spreadsheets for the OTM  
14 driftees, 29 to date, and attached it to give you a list of  
15 customers (known non-MON are clearly marked)."

16                   Do you see that?

17     A.     I do.

18     Q.     -- "that I will need a purchase history to determine  
19 if they are "good MON customers" and thus need a dispatch."

20                   Did I read that correctly?

21     A.     Yes.

22     Q.     So one of the factors to determine if someone  
23 warranted a visit was whether they were a good MON customer,  
24 and that was determined from their purchase history,  
25 correct?

1 A. The terminology "good Monsanto customer" relates to  
2 checking to make sure that if someone is in good standing  
3 with respect to their payments and bills. That's what it  
4 refers to.

5 Q. So if they are behind in payments to Monsanto and have  
6 an off-target movement problem, Monsanto won't send anybody,  
7 will they?

8 A. Well, at this time -- we've already stated, I believe,  
9 at this point in time that our practice wasn't to visit  
10 non-Monsanto customers.

11 Q. Yes, but I'm asking you another question.

12 In evaluating Monsanto customers -- non-Monsanto  
13 customers don't get a visit, we're clear on that. But in  
14 determining which Monsanto customers get a visit, the  
15 purchase history is pulled to see if they're good Monsanto  
16 customers, correct?

17 A. The issue was that our data wasn't always perfect and  
18 sometimes when someone called in we needed to verify. They  
19 may have been a customer five years, ten years ago,  
20 something of that nature, and showed up as a current  
21 customer when they weren't really a current customer. So  
22 that's what this is referring to.

23 Q. Didn't you just say it was also important to find out  
24 if they were paid up-to-date?

25 A. That's part of it, yeah.

1 Q. Exhibit 180. Now, we're still -- we're now in August  
2 of 2017. See this email, Ty Vaughn to Ty Witten, "Forward  
3 Frey Farms in Bootheel." Do you see that?

4 A. I do.

5 Q. You've seen this document before in the deposition?

6 A. I saw in the deposition.

7 **MR. RANGLES:** Your Honor, I offer Plaintiff 180.

8 **MR. MILLER:** Same objection, Your Honor.

9 **THE COURT:** Overruled; admitted.

10 **(Plaintiffs' Exhibit No. 180 admitted)**

11 Q. (By Mr. Randles) Before we get into it, I want to lay a  
12 bit of a foundation.

13 We talked about -- we talked about non-MON customers.  
14 MON service purchase histories are analyzed in terms of  
15 whether they get a visit, but certain Monsanto customers  
16 certainly are going to get a visit based on their size,  
17 isn't that correct?

18 A. I don't -- I can't say that.

19 Q. Let's look and see what the document says about that.  
20 Let's go to -- on the wanted follow-up portion. "Ty wanted  
21 to follow up on the Frey Farms report on dicamba at their  
22 Kennett farm in the Bootheel."

23 Do you know where Kennett is?

24 A. Generally, yes.

25 Q. Down deep in the Bootheel, right?

1 A. Yes.

2 Q. Not right by -- not far from Bader Farms, that area,  
3 right?

4 A. Okay.

5 Q. Close to Campbell? A few miles away, right?

6 A. Okay.

7 Q. I don't know if you're saying okay if you know that or  
8 you're just willing to --

9 A. I don't know the geography well enough to confirm  
10 that. I trust you.

11 Q. Fair enough. Okay. "We are going to have them into  
12 St. Louis, STL, the morning of September 14 and would like  
13 to have a follow-up to their concerns and issues they  
14 experienced."

15 Next paragraph: "Kristin: To get you up to speed,  
16 Frey Farms is a strategic account for our Siminis team.  
17 They are the largest buyer of our watermelon seed in the  
18 entire U.S. and are 100 percent on board with our corn  
19 program."

20 I read that correctly?

21 A. Yes.

22 Q. Do you have any reason to doubt the facts stated about  
23 the purchase history of Frey Farms here?

24 A. No basis to doubt that, no.

25 Q. "Their watermelon Liberty -- their watermelon, Liberty

1 soybean seeds, and sweetcorn were hit pretty hard by dicamba  
2 use in the Bootheel."

3 Do you see that?

4 A. I do.

5 Q. "I would like to work with your team to acquire  
6 marketing opportunities to transition them to our program  
7 and also look into hosting a Xtend training session for  
8 growers and applicators around the Kennett area."

9 Did I read that correctly?

10 A. Yes.

11 Q. Now, I want to break that last part up. "I want to  
12 talk with your team to acquire marketing opportunities to  
13 transition them to our program." Now, you understand this  
14 team went down there and tried to recruit Frey Farms to buy  
15 dicamba-tolerant seed for their soybean going forward, just  
16 as this document suggests. You know that happened, don't  
17 you?

18 A. I can't confirm that. I assume it did.

19 Q. Do you also know -- and it says, "Also look into  
20 hosting a Xtend program training session for growers and  
21 applicators around the Kennett area."

22 Are you aware the separate training program was held  
23 for farmers near Frey Farms to try to minimize the risk of  
24 off-target movement to Frey Farms?

25 A. I'm not aware whether a training program was or wasn't

1 held or whether it was specifically to, quote, unquote,  
2 "protect" Frey Farms or not. I don't know.

3 Q. You haven't reviewed Greg Starling's testimony about  
4 this incident?

5 A. I don't recall that.

6 Q. The jury will see that at a later point.

7 Do you know whether anyone scheduled additional  
8 training for the neighbors in Campbell, Missouri around  
9 Bader Farms?

10 A. I do not.

11 Q. Now, Frey Farms is the biggest purchaser of your  
12 watermelon seeds in the country, right?

13 A. That's what this says.

14 Q. This is the response they got from folks at Monsanto.  
15 This email outlines what the response is going to be,  
16 correct?

17 A. Well, I have to look at the rest of the response here  
18 to see if it says what actually transpired.

19 Q. It's outlining a plan, isn't it?

20 A. It's a request, yes.

21 Q. Okay. And, again, the jurors will see from people on  
22 the ground what actually -- how this actually carried out.

23 But, Monsanto does not sell peach trees, never has,  
24 right?

25 A. Not to my knowledge.

1 Q. So Monsanto had no economic interest in providing  
2 expert training for Bill Bader's neighbors, did it?

3 A. We provided and have aggressively provided training  
4 all over the United States.

5 Q. That was not my question. They're talking about  
6 holding a specific Xtend training session in Kennett where  
7 Frey Farms is located. There was no economic advantage to  
8 holding a separate one in Campbell for Bill Bader's  
9 neighbors, correct?

10 A. I assume there are soybean customers and corn  
11 customers all over the Bootheel. I don't have any knowledge  
12 of us having any training events near Mr. Bader's farm or  
13 not.

14 Q. If Frey Farms, the largest purchaser of watermelon  
15 seeds in the country, was unhappy with Monsanto and stopped  
16 buying those seeds, that would be a serious economic impact  
17 to Monsanto, wouldn't it?

18 A. It would.

19 Q. If, however, Bader Farms, which grows peach trees and  
20 peaches that Monsanto doesn't sell goes out of business,  
21 that is of zero economic impact to Monsanto, isn't it?

22 A. Well, based on my discussion with Mr. Bader, I was  
23 under the impression he grew a lot of other crops, including  
24 soybeans. But we don't sell peaches and that would not be  
25 an impact to us.

1 Q. If the 1,000 acres of peaches at Bader Farms just went  
2 away, that's of no economic importance to Monsanto, is it?

3 A. Not a direct economic importance to Monsanto, no.

4 Q. Let's look at 518. Well, once again, we start with  
5 the usual cover that is frequent on many things. Let's move  
6 to the relevant page so that we can more easily identify  
7 this document. You see it's the 2015 document.

8 A. I see that, yes.

9 Q. Now, you are familiar with this document?

10 A. I don't believe I've seen this document. This  
11 looks -- if you can go back, if there was a date.

12 Q. Sure. Actually, I showed it to you at your  
13 deposition, but I'm not saying you have to remember.

14 A. Okay. If you showed it to me, then I've seen it.

15 Q. Okay. 2015, Coastal Training, or Coastal RLT  
16 Planning, Bollgard, XtendFlex.

17 A. I see it. I don't recall that, but I see it.

18 Q. Let's go back to the page we just discussed. This is  
19 a page talking about the tools under development, including  
20 the Dicamba Inquiry Form, correct?

21 A. Yes.

22 Q. You see that?

23 **MR. RANDLES:** Your Honor, I offer 518 into evidence.

24 **MR. MILLER:** Same objection, Your Honor.

25 **THE COURT:** Overruled; admitted.



1           **(Plaintiffs' Exhibit No. 518 admitted)**

2           **THE WITNESS:** Just to clarify, I do not recall seeing  
3 this.

4 Q.    *(By Mr. Randles)* Fair enough. It's not a memory game.  
5 Says, "Tools under development." "Tools available or under  
6 development," precisely. Do you see that?

7 A.    Yes.

8 Q.    And it says, "Dicamba Inquiry Form." Do you see that?

9 A.    I do.

10 Q.    I want you to look at the last bullet point here.  
11 "Developed to gather data that could defend Monsanto."

12        Did I read that correctly?

13 A.    Yes.

14 Q.    Now, just to be sure our jurors are clear, the Dicamba  
15 Inquiry Form is what your Field Engagement Specialists take  
16 with them to fill out to report back what they see to  
17 Monsanto, correct?

18 A.    To collect information, that's correct.

19 Q.    And the purpose of this form, according to this  
20 Monsanto document, is, "it's developed to gather data that  
21 could defend Monsanto."

22        Did I read that correctly?

23 A.    Well, that's one bullet on the page, so -- yes, that's  
24 one element.

25 Q.    Well, that was consistent with the policy never to

1 settle, wasn't it?

2 A. Well, so the inquiry form would also be utilized to  
3 capture information on other types of inquiries as well.

4 But with regards to OTM, or off-target movement, we also  
5 wanted to gather data to understand what might have happened  
6 in those situations so that we could continuously improve  
7 and refine our recommendations if we had information to do  
8 so.

9 Q. So is this just another unbiased search for the truth  
10 by Monsanto?

11 A. Every time we investigate an inquiry, a complaint,  
12 we're looking for what really happened, the truth.

13 Q. But the truth must always be subject to gathering data  
14 for defending Monsanto, isn't that right?

15 A. That's not correct.

16 Q. Well, the truth always leads to no settlement though,  
17 doesn't it?

18 A. That's not correct.

19 Q. Let's look at 92. See this email from Commercial  
20 Operations to a number of people at Monsanto. You see that?

21 A. I do.

22 Q. And it says, "Subject: Forward COLT Dicamba claims  
23 process."

24 Do you see that?

25 A. I do.

1           **MR. RANGLES:** Your Honor, I would like to offer 92.

2           **MR. MILLER:** Same objection, Your Honor.

3           **THE COURT:** Overruled; admitted.

4           **(Plaintiffs' Exhibit No. 92 admitted)**

5           Q.    (By Mr. Randles) Let's go to the claims chart. We can  
6 blow that part up.

7                Says, "Incident management flowchart, 2016."

8                Do you see that?

9           A.    Yes.

10          Q.    "Call comes into CAM, off-site movement." See that?

11          A.    Yes.

12          Q.    Now, this is your decision tree, right?

13          A.    Well --

14          Q.    Two possibilities in two columns. You see that?

15          A.    I see the two columns, yes.

16          Q.    They all lead to the bottom, to no settlement,  
17 correct?

18          A.    Correct.

19          Q.    And the no settlement of off-target movements was a  
20 hard and fast Monsanto policy decision, wasn't it?

21          A.    It was consistent with our history in selling  
22 herbicides for decades, and that's been consistent from the  
23 very beginning and continues to this day.

24          Q.    So your policy's always been, we won't settle claims  
25 no matter what, right?

1 A. That -- we settle claims. I've settled a lot of them.

2 Q. But none for off-target movement?

3 A. Not for off-target movement.

4 Q. Not one ever, right?

5 A. To my knowledge.

6 Q. So when you prepare a form for someone to go out and  
7 look at off-target movement damage and the form says its  
8 purpose is to defend Monsanto, and the person knows good and  
9 well Monsanto isn't going to settle, are you saying that  
10 won't influence the prism through which they gather their  
11 facts?

12 A. We're asking our people to search for the truth in  
13 those investigations.

14 Q. So is your opinion that they would be entirely  
15 comfortable reporting back, this is Monsanto's fault? Is  
16 that your view?

17 A. I think if people believe that happened, they would  
18 come back and say that.

19 Q. And that would be received with a white-out of the "no  
20 settlement," and "settlement" written in large letters?

21 A. Our policy's consistent. It's on the label. It's  
22 been there from the beginning and is consistent with the  
23 industry standard.

24 Q. So the final line of the investigation, "we will not  
25 settle," has already been written, but you're telling our

1 jurors that, with the final line written, people are just  
2 going to go out and impartially gather the facts. Is that  
3 what you're telling me?

4 A. What we found when our FES team has gone out and our  
5 own representatives in other cases have gone out and  
6 investigated inquiries, in many, many cases we find out that  
7 maybe it wasn't even an issue related to dicamba, and we  
8 learned something from that. We might find out that it was  
9 an issue related to dicamba but happened for a specific  
10 reason, which we can then hopefully utilize in our training  
11 in the succeeding years to better improve our  
12 recommendations and our training.

13 Q. Do you remember what my question was?

14 A. Can you please repeat it.

15 Q. Okay. Are you telling our jurors that, given that the  
16 bottom line sentence is written, there will not be a  
17 settlement and Monsanto was not responsible, they're then  
18 going to go out knowing that, and viewing it through that  
19 prism, and be completely objective? Is that what you're  
20 telling us?

21 A. I'll tell you that we instruct our people to look for  
22 the facts, not to make conclusions and bring that  
23 information back, and we do not ask them to go with a  
24 preconceived conclusion.

25 Q. Even though you designed the form to defend Monsanto

1 according to your own document, right?

2 A. Well, this is from 2015, and I'm quite confident this  
3 isn't the document or the final program that we went out  
4 with.

5 Q. But somehow the no settlement policy remains, right?

6 A. That's been consistent in our history as a company,  
7 and it continues.

8 **MR. RANGLES:** Your Honor, let's show 190 for  
9 transmittal, and then 191.

10 Q. (By Mr. Randles) Up at the top -- if we can get a  
11 little bit bigger -- is an email from Dan Schultz at  
12 Monsanto. Do you see that?

13 A. Yes.

14 Q. To Ryan Rubischko at Monsanto. Do you see that?

15 A. Yes.

16 Q. You told us, at least in '16, rob so worked for you?

17 A. No. Mr. Rubischko was a colleague of mine in that  
18 period of time. He was in a private management role and I  
19 was in a technical development role, so we worked together.

20 Q. You were peers. I apologize.

21 A. Yeah.

22 Q. Subject: XtendiMax question on waiving surcharges to  
23 match marketplace. Well, that's not so much what we get a  
24 little bit later. Let's take that out, get to the part --  
25 here you go.

1 I'm not so much interested in the surcharge but the  
2 part where it talks about in the middle of that paragraph --  
3 okay. Can you see this?

4 All right. About of the third sentence it refers to,  
5 "I will forward you some interesting market research I  
6 received from Purdue today."

7 And we're going to return to what else was said, but  
8 do you see that in the middle of that paragraph?

9 A. Yes. I just want to read the paragraph to get the  
10 context because I don't recall seeing this.

11 Q. And you may feel free. We're going to return to this  
12 email in a minute. I'm just laying foundation.

13 A. Okay.

14 Q. Okay? You see that? And then I would like to show  
15 the attachment, which is 191. You see this up at the top,  
16 "Purdue Ag Retail Survey Highlights Challenges Ahead,"  
17 distributed by Bank of America?

18 A. Okay. I see the Bank of America, yes. Interesting  
19 overview.

20 **MR. RANGLES:** Your Honor, I would like to offer 191  
21 for notice, and 190.

22 **MR. MILLER:** Same objection, Your Honor.

23 **THE COURT:** Overruled; admitted.

24 **(Plaintiffs' Exhibit Nos. 190 and 191 admitted)**

25 Q. (By Mr. Randles) Okay.

1 A. Sir, can you help me with the Purdue part? I didn't  
2 see that.

3 Q. It was at the very top. You see that in the blue?

4 A. Okay. There it is. I see it.

5 Q. And we're going to come back to this in a minute.

6 Now, I want to go back to the transmittal email, which  
7 is 190. Let's go right back to where we were. We're going  
8 the start, again, with the discussion with Purdue in the  
9 middle of the paragraph. Do you see that, "I will forward  
10 you some interesting market research I received from Purdue  
11 today"? Do you see that?

12 A. I do.

13 Q. "Interesting assessment that much of the Xtend acreage  
14 was planted to protect themselves from neighbors who might  
15 be using dicamba?"

16 Do you see that?

17 A. I do.

18 Q. "Gotta admit, I would not have expected this in a  
19 market research document."

20 Did I read that correctly?

21 A. Yes.

22 Q. Now, let's go to the Purdue document, which we are  
23 offering for notice of the survey, and let's pull that first  
24 clip of that. Okay. The first page: "Rapid extend launch  
25 positive for MON, negative for Dow." I'm trying not to



1 read -- here we go. We're going to start with respondents.  
2 It gives the method of the survey, and then in the middle,  
3 the content.

4 "Respondents noted that the rapid adoption was driven  
5 by both superior yielding genetics as well as a defensive  
6 maneuver to protect from potential spraying of dicamba by  
7 neighbors."

8 You see that?

9 A. I do.

10 Q. Now, are you familiar with the term "defensive  
11 planting"?

12 A. I have heard that term, yes.

13 Q. And what it means essentially is planting a crop -- in  
14 this case, Xtend seeds -- to protect oneself from potential  
15 damage from your neighbors, correct?

16 A. That's an accurate description.

17 Q. And you've been familiar with that term for quite a  
18 while, haven't you?

19 A. I don't know how long but certainly we've heard  
20 customers comment to that for a few years now, yes.

21 Q. And are you familiar with a Monsanto policy to use the  
22 fact that a person has been damaged as a marketing  
23 opportunity to get them to buy the Xtend system?

24 A. I'm not familiar with that.

25 Q. Let's look at 177. This is an email from

1 Ron Flannagan. He's a Monsanto person, right?

2 A. Ron was at the time, yes. At this time he was.

3 Q. He has a Monsanto email, right?

4 A. Correct.

5 Q. Okay. It's sent August the 7th of 2017 to you,  
6 Boyd Carey, right?

7 A. Yes.

8 Q. Okay. "Forward: TA help with driftee people."  
9 Did I read that correctly?

10 A. Yes.

11 **MR. RANGLES:** Your Honor, I offer 177.

12 **MR. MILLER:** Same objection, Your Honor.

13 **THE COURT:** Overruled; admitted.

14 **(Plaintiffs' Exhibit No. 177 admitted)**

15 Q. (By Mr. Randles) Let's turn to the subsequent paragraph  
16 here. Can you pull that down for me a little. Okay. Never  
17 mind.

18 And so this is John's email to you, John Cantwell.

19 "It appears" -- now, it deals with a bunch of the CAM  
20 emails. I'm actually going to go to -- let's deal with the  
21 "I".

22 "I think we can significantly grow business and have a  
23 positive effect on the outcome of 2017 if we reach out to  
24 all the driftee people."

25 Did I read that correctly?

1 A. Yes.

2 Q. "Most investigations I did involved the driftee  
3 people. Most driftee people were interested in the  
4 technology and can be walked back to neutrality on the  
5 damage affecting yield and in many cases turned into new  
6 users."

7 Did I read that correctly?

8 A. Yes.

9 Q. And that was sent to you on August 7th of 2017, wasn't  
10 it?

11 A. It was.

12 Q. Like to show you Exhibit 198.

13 A. Can I explain this statement?

14 Q. If your lawyer wants you to. I think it's pretty  
15 self-explanatory.

16 **THE COURT:** Your lawyer should be examining you with  
17 respect to this.

18 **THE WITNESS:** Okay.

19 Q. (By Mr. Randles) Up at the top, from Ryan Rubischko to  
20 Bernard Whelan and others. You see that?

21 A. I do. I do.

22 Q. "Regarding IFCA Ag retail dicamba survey report."

23 Did I read that correctly?

24 A. Yes.

25 **MR. RANGLES:** Your Honor, I'm going to deal with this

1 one first, then I'll lead with the attachment separately.

2 I would like to move Plaintiff 198 into evidence.

3 **MR. MILLER:** Same objection, Your Honor.

4 **THE COURT:** Overruled; admitted.

5 **(Plaintiffs' Exhibit No. 198 admitted)**

6 Q. (By Mr. Randles) "We are meeting with the Illinois  
7 Fertilizer and Chem Association next Tuesday in St. Louis to  
8 discuss this recently conducted survey of their retail  
9 members about their experiences this summer when spraying  
10 dicamba formulations in the Xtend crop system."

11 Did I read that correctly?

12 A. Yes.

13 Q. And this is 2017, correct?

14 A. Correct.

15 Q. So the seed and the new herbicide, both being used,  
16 right?

17 A. Both were available for use and purchase, yes.

18 Q. Now, let's -- I want to show you 199, which is the  
19 attachment. You look at the top, this is from the Illinois  
20 Fertilizers and Chemical Association. Do you see that?

21 A. Yes.

22 Q. Dated August 28th, 2017. We go to the first paragraph  
23 there, it identifies the survey. Do you see that?

24 A. I do.

25 **MR. RANGLES:** Your Honor, I offer 199 for notice.

1           **MR. MILLER:** Same objection, Your Honor.

2           **MR. MANDLER:** Same objection, Your Honor.

3           **THE COURT:** Overruled; admitted.

4           **(Plaintiffs' Exhibit No. 199 admitted)**

5           Q.    (By Mr. Randles) Okay. Let's go to the first section.

6                    This is one question in the survey: "If you applied  
7           dicamba to soybeans, did you experience any instances of  
8           symptoms in adjacent sensitive soybean fields? If no,  
9           provide the approximate number of soybean acres you treated  
10          with dicamba, and then proceed to Question 26 to provide  
11          information on your experience with the product."

12                   So, again, this question is, "If you applied the new  
13          herbicides, did you get symptoms in your nearby soybean  
14          fields?"

15                   Now, if you look down here, "yes" is listed at 80  
16          some-odd percent. Do you see that?

17          A.    Yes.

18          Q.    "No" is between 15 and 18 percent there on the bottom.  
19          Do you see that?

20          A.    I do.

21          Q.    Let's go to the second portion of this. We're going  
22          to go to a Comment section here.

23                   Okay. We have another question: "Did you see  
24          symptoms in adjacent fields of non-DT soybeans even when the  
25          wind was not blowing toward that field during the time of

1 application?"

2 Do you see that?

3 A. I see that.

4 Q. And, again, we have somewhere around 85 percent "yes."

5 Do you see that?

6 A. I do.

7 Q. And somewhere around 15 percent "no." Do you see  
8 that?

9 A. I see it.

10 Q. "Retailers provided extensive comments on this  
11 question."

12 Do you see that?

13 A. Yes. This is all -- I've not seen this before but I'm  
14 following.

15 Q. "They stated that many of their problems occurred in  
16 non-DT soybean fields that were in the opposite direction of  
17 the Xtend fields at the times they made their application."

18 Do you see that?

19 A. I do.

20 Q. "They cited volatility and vapor drift as their main  
21 suspicions for damage since they were especially careful to  
22 choose days to apply when winds were in the opposite  
23 direction of the sensitive soybeans."

24 I read that correctly?

25 A. Yes.

1 Q. Now, we talked about following the label correctly --  
2 following the label earlier, right?

3 A. Yes.

4 Q. Survey addresses that, too. It says, "They expressed  
5 strong -- they had followed the label and put their best  
6 applicators on the job and observed symptoms when winds  
7 shifted towards the sensitive fields days later, and  
8 especially in hot conditions. They also wondered if an  
9 inversion event days later caused the product to move from  
10 the applied fields."

11 Did I read that correctly?

12 A. Yes.

13 Q. When Monsanto received this sort of information from  
14 the Illinois Fertilizer and Chemical Association, what, if  
15 anything, did it do in response?

16 A. I'm not -- I've not seen this before, so I can't speak  
17 for what was or wasn't done in response to this.

18 Q. Well, we can talk about what wasn't done. Same  
19 product still on the market, right?

20 A. That's correct.

21 Q. Monsanto maintains the same position, that if you use  
22 it according to the label, it won't do these things,  
23 correct?

24 A. Correct.

25 Q. And here's my question: When you hear over and over

1 from your customers that the product behaves in a way  
2 different than you say it will, doesn't that give you pause?

3 A. We pay attention to that feedback, yes, and we  
4 challenge it against the research that we do to verify.

5 Q. Your research you do at Monsanto, that's what you  
6 compare it against?

7 A. And research that we've sponsored at the universities  
8 now.

9 Q. So reports from thousands of farmers around the  
10 country regarding untold numbers of acres in the real world  
11 weighs less in your mind than the research you're doing that  
12 tells it's not a problem?

13 **MR. MILLER:** Objection, Your Honor. Assumes facts not  
14 in evidence.

15 **THE COURT:** Overruled.

16 **THE WITNESS:** All those aspects are considered and  
17 taken into account.

18 Q. (By Mr. Randles) Well, I'm sure they're considered, but  
19 my question is: Does it actually result in any changes?  
20 And let me break that down. Same product still on the  
21 market, right?

22 A. Same product.

23 Q. Monsanto maintains its same position that it's never  
24 responsible for off-target movement, correct?

25 A. Correct.



1 Q. Monsanto maintains the same position that it will  
2 never settle an off-target movement claim, correct?

3 A. We do not settle off-target movement claims.

4 Q. And Monsanto maintains the same position that if  
5 off-target movement occurs, you can't blame the product;  
6 it's the applicator's fault, correct?

7 A. Our experience with investigating these claims  
8 indicates exactly that.

9 Q. Your investigation supports that conclusion, that's  
10 what you're telling us, right?

11 A. That's correct.

12 Q. But the conclusions of all of these users doesn't  
13 weigh nearly as heavy in your calculation as your paid  
14 investigators' claims going out filling out your form,  
15 correct?

16 **MR. MILLER:** Objection, Your Honor.

17 **THE COURT:** I'll sustain that objection.

18 Q. (By Mr. Randles) You haven't changed anything because  
19 of this survey, have you?

20 A. The label has some additional requirements from the  
21 first registration, and that may have been -- may or may not  
22 have been implicated in some of the things that we've seen,  
23 but we are still selling the product. The data experience  
24 and research demonstrate that it doesn't move off-target if  
25 applied according to label.

1 Q. Not all the data. This is data, isn't it?

2 A. It's a survey.

3 Q. Of real world users in real world conditions, right?

4 A. Correct.

5 Q. You can take that down now. I'd like to switch for a  
6 few moments to ask you about Bill Bader particularly and  
7 your interactions with him.

8 Now, you were not in charge of claims in 2015, were  
9 you?

10 A. No.

11 Q. And had you heard that Bill Bader called Monsanto with  
12 concerns about off-target movement in 2015?

13 A. At some point I became aware of that, and certainly by  
14 the first conversation I had with Mr. Bader by phone the  
15 summer of 2016, certainly by then I'd heard about it.

16 Q. And as you said earlier, you had two conversations  
17 with Mr. Bader by phone, correct?

18 A. Yes.

19 Q. You did not call him of your own volition, did you?

20 A. Well, I was made aware that he had called and members  
21 of our legal team had talked with him, and they wanted me to  
22 talk with him because he wanted to talk with someone else at  
23 the company.

24 Q. So you called him back at the direction of lawyers,  
25 right?

1 A. That's correct.

2 Q. Now, he's the only driftee you've ever called, isn't  
3 he?

4 A. I investigated at least one other claim.

5 Q. Put up 52. You recall in your deposition:

6 *"Q. As we sit here today you can't remember talking to*  
7 *any noncustomer driftee other than Bill Bader, is that*  
8 *correct?*

9 *"A. That's correct."*

10 That was a question I asked and the answer you gave?

11 A. Technically I was correct in my deposition. The other  
12 claim that I investigated was a person who had applied the  
13 product. I apologize.

14 Q. Okay. So you called somebody who applied your  
15 product, but Bill Bader's the only noncustomer you ever  
16 called, right?

17 A. That's correct.

18 Q. You did that at the direction of the lawyers, right?

19 A. Correct.

20 Q. Now, when you called Bill Bader, you did not tell him  
21 that Monsanto's policy was you weren't going to send anybody  
22 down no matter what he said to you? You didn't tell him  
23 that, did you?

24 A. I did not.

25 Q. In either phone call you didn't tell him that, did

1 you?

2 A. Well, I did make it clear to him that I wasn't coming  
3 to visit.

4 Q. But you didn't tell him the policy was, no matter what  
5 he said, you weren't coming?

6 A. I don't recall.

7 Q. And after one of your calls with Bill Bader, you got  
8 together with your team in a conference room in St. Louis to  
9 discuss what might be the problem on Bader Farms, didn't  
10 you?

11 A. I don't remember that.

12 Q. Okay. And you don't remember telling me in your  
13 deposition that you brainstormed with your team? And then I  
14 asked you: "You can't determine symptomatology from a  
15 conference room in St. Louis; you have to actually go?"

16 A. I honestly don't remember that.

17 Q. Play clip 55.

18 *"Q. And the fact is we can sit in a conference room in*  
19 *St. Louis and speculate on what might look like dicamba,*  
20 *but you testified earlier the only way to know is to go*  
21 *walk the field and look at it, right?*

22 *"A. I testified that many different things can cause*  
23 *the same type of symptomatology as dicamba, and to*  
24 *understand what really happened in the field would take*  
25 *more than just an observation of what the symptoms are.*

1            "Q. And would take more than sitting in this conference  
2            room in St. Louis speculating, wouldn't it?

3            "A. Yes.

4            "Q. You have to actually go look" --

5            **THE COURT:** Stop.

6            **MS. GEORGE:** It wasn't publishing for the jury.

7            **MR. RANGLES:** That's fine. They heard it. Okay. I'm  
8            content to move on, Your Honor. They heard my thick accent  
9            asking and him answering.

10          Q. (By Mr. Randles) So you don't remember, as you sit here  
11          today, meeting with your team, brainstorming about what  
12          might be going on at Bader Farms?

13          A. I don't remember a specific meeting with my team to do  
14          that, if it occurred.

15          Q. So this was summer of '16 when you had conversations  
16          with Bill Bader?

17          A. Yes.

18          Q. I want to show one -- I want to show 90, Exhibit 90.  
19          I'm sorry. This is an email from John Chambers to  
20          Jennifer -- I'm not going to attempt to pronounce her last  
21          name -- at Monsanto, correct?

22          A. Yes.

23          Q. It says, "Disease impact versus drift impact north  
24          delta."

25                 Do you see that?

1 A. Yes.

2 **MR. RANGLES:** Your Honor, I want to offer Plaintiff  
3 90.

4 **MR. MILLER:** Same objection, Your Honor.

5 **THE COURT:** Overruled; admitted.

6 **(Plaintiffs' Exhibit No. 90 admitted)**

7 Q. (By Mr. Randles) Let's publish it to the jury. Before  
8 we highlight anything, I want to show them, in big letters  
9 in the bottom, it says, "Suspected dicamba damage begins to  
10 come into focus for Bootheel soy farmers."

11 You see that?

12 A. I do.

13 Q. And there's a link to a St. Louis Post-Dispatch  
14 article. Do you see that?

15 A. Yes.

16 Q. We're not going to get that link. I just wanted to  
17 point that out to you. So this email is -- we can pull  
18 that -- is transmitting this article about dicamba damage in  
19 the Bootheel, correct?

20 A. It looks to be the case, yes.

21 Q. All right. Let's go to that sentence right above it.  
22 "I'm not sure how we will be able to separate the two, but  
23 we need to make sure disease impact is not overlooked in the  
24 conversation around drift."

25 Do you see that?

1 A. I do.

2 Q. So in response to this Article about dicamba damage to  
3 the Bootheel, this Monsanto document says, well, we need to  
4 make sure disease isn't overlooked, doesn't it?

5 A. It does.

6 Q. And, again, you had not walked a single field of  
7 dicamba damage at this point in time?

8 A. Personally, no.

9 Q. Well, no one had from Monsanto if they were following  
10 the policy, right?

11 A. That's correct.

12 Q. And you certainly hadn't been to Bader Farms yet, had  
13 you?

14 A. I had not.

15 Q. No one had from Monsanto, correct?

16 A. To my knowledge, that's correct.

17 Q. Okay. We're going to move forward to September 1st,  
18 2016, and I want to -- first of all, I want to ask you a  
19 threshold foundational question. I want you to assume that  
20 Bill Bader's lawsuit was filed in November of 2016, all  
21 right?

22 A. Okay.

23 Q. It's important -- November of 2016.

24 **MR. RANGLES:** Your Honor, I'd like to show the witness  
25 and the Court, counsel, 154.

1 Q. (By Mr. Randles) Now, this is an email to you from  
2 Joe Sandbrink, isn't it?

3 A. It is.

4 Q. And this is the cover of a forwarding of the report of  
5 a report on a legislative hearing, correct?

6 A. Think so.

7 **MR. RANGLES:** Your Honor, I offer 154 into evidence.

8 **MR. MILLER:** Same objection, Your Honor.

9 **THE COURT:** Overruled; admitted.

10 **(Plaintiffs' Exhibit No. 154 admitted)**

11 Q. (By Mr. Randles) Let's go to the relevant page. Now,  
12 did you ask Mr. Sandbrink to cover this legislative hearing  
13 yourself?

14 A. No. I know Mr. Sandbrink from working with him many  
15 years at Monsanto. He had retired, and at this point he was  
16 working with -- for another company, but we kept in touch  
17 from time to time and he knew, in my role, I might be  
18 interested in this.

19 Q. And he was a paid consultant for Monsanto at this time  
20 in '16, wasn't he?

21 A. I don't know if it was at this time or not.

22 Q. He works for Monsanto again, doesn't he? He  
23 un-retired?

24 A. I don't know if he's working for us at this point or  
25 not.



1 Q. You just don't know?

2 A. I don't know.

3 Q. Let's start with "as."

4 "As I said earlier, the Missouri Extension rep thinks  
5 Mr. Bader may be looking at this as an opportunity to cash  
6 in on a problem that has existed in his peach orchard and  
7 that is not related to auxin chemistry."

8 Pause here. This is a good two months before the  
9 lawsuit was filed. I want you to assume the date's correct.  
10 This is September 1st, 2016. All right?

11 A. Okay.

12 Q. Mr. Bader's invited Monsanto folks down more than  
13 once, you more than once, right?

14 A. At least once.

15 Q. Now, Mr. Sandbrink, to your knowledge, had not toured  
16 Bader Farms, had he?

17 A. Not to my knowledge.

18 Q. Okay. But he says, without anybody from Monsanto  
19 having been there, "Opportunity to cash in on a problem that  
20 has existed in his peach orchard." He's making the  
21 conclusion that the problem was already there without ever  
22 coming to look?

23 **MR. MILLER:** Objection. Completely misrepresenting  
24 what that sentence says.

25 **THE COURT:** Overruled. He can answer.

1           **MR. RANGLES:** Well, he's relaying a conversation with  
2 someone he had -- I'm content with that. The Missouri  
3 Extension rep --

4           **MR. MILLER:** Thank you, counsel.

5           Q.     *(By Mr. Randles)* Some unnamed person thinks Mr. Bader  
6 may be looking as an opportunity to cash in on the problem?

7           A.     Mr. Sandbrink was just capturing notes and he relayed  
8 what a Missouri Extension rep said. It wasn't Mr. Sandbrink  
9 saying that.

10          Q.     But he's relaying it was some, as we'll see in a  
11 moment, to cash in on a problem that has existed in his  
12 peach orchard that is not related to auxin chemistry. Do  
13 you have any idea if that unnamed Extension rep had toured  
14 Bader Farms?

15          A.     I don't.

16          Q.     Mr. Sandbrink doesn't say so, does he? We talked  
17 earlier how tenured professor at the University of Missouri,  
18 of weed science, Dr. Kevin Bradley, gave presentations at  
19 the Portersville meeting about Bader Farms that you heard,  
20 didn't you?

21          A.     Yes.

22          Q.     And I think it's fair to say that Dr. Bradley did not  
23 say this at that Portageville meeting, did he, that Bader  
24 Farms' problem is unrelated to auxin chemistry?

25          A.     I don't know if Dr. Bradley was at this particular

1 meeting even. I don't know who the Missouri Extension rep  
2 is.

3 Q. I don't either, but --

4 A. It could be multiple people.

5 Q. But we know who Dr. Kevin Bradley is, tenured  
6 professor at University of Missouri?

7 A. Yes, sir.

8 Q. Extension department. It's his department, right?

9 A. He's a key member of that department, yes.

10 Q. A very senior person, right?

11 A. I'll take your word for that.

12 Q. You know that yourself, don't you?

13 A. I know of Dr. Bradley, and he's a weed science  
14 extension professor, yes.

15 Q. Then it goes on to say, "Will be interesting to see  
16 where this one goes. All I know is, a decent lawyer will  
17 have a field day with Mr. Bader if he gives similar  
18 testimony as he gave yesterday."

19 Read that correctly?

20 A. Yes.

21 Q. Now, did you ever write back to Mr. Sandbrink and say,  
22 *well, you know, we can't say -- no one can say if this*  
23 *problem's existed in his orchard without going to look at*  
24 *it?* Did you ever say that?

25 A. I didn't say that to Mr. Sandbrink. I didn't

1 necessarily think I needed to because he wasn't relaying the  
2 comments; he was just relaying comments from the Extension  
3 rep.

4 Q. And we just relayed at this same point in time a  
5 little bit earlier email went around at Monsanto regarding  
6 problems in the Bootheel saying, don't forget to talk about  
7 disease, right?

8 A. That email -- I'm sorry. Are you suggesting they're  
9 connected in some way?

10 Q. I'm asking a question right now. An email talking  
11 about damage in the Bootheel said, "Make sure we don't  
12 forget about disease"?

13 A. It did.

14 Q. Okay. Then Mr. Sandbrink says this in an email to  
15 you. Was he just emailing you for the fun of it or did you  
16 have a relationship with him?

17 A. As I said before, I worked with Mr. Sandbrink for --  
18 on and off for several years. At this point in time he was  
19 working for another company. As part of his job he was  
20 going to be at this meeting anyway and shared these notes  
21 with me.

22 The letter or the email you mentioned earlier about  
23 distinguishing diseases, I see that as a responsible  
24 approach and a responsible observation made by someone in  
25 the field that there are diseases and they can be -- can be

1 mistaken for other things.

2 Q. Put 90 back up. Exhibit 90, Your Honor, in evidence.  
3 St. Louis Post-Dispatch article, link at the bottom:  
4 "Suspected Dicamba Damage Begins to Come Into Focus for  
5 Bootheel Soybean Farmers," right?

6 A. Yes.

7 Q. Then the bottom sentence, the sentence right above  
8 that where the headline talks about dicamba, says, "We need  
9 to make sure disease impact is not overlooked."

10 That's what it says, isn't it?

11 A. That's what it says.

12 Q. And, again, this is -- disease impact isn't  
13 overlooked. Nobody from Monsanto had gone to any of these  
14 places, so how could they diagnose disease impact?

15 A. Well, our TAs -- and Larry Ganan is a TA, or a  
16 Technical Agronomist, spends probably every day in a field  
17 in the summertime.

18 Q. We're talking about '16. You testified no one from  
19 Monsanto walked any of these damaged fields in '16?

20 A. He's in fields all the time. It doesn't mean he's in  
21 an alleged damaged field.

22 Q. So if he's just in some field somewhere for some  
23 reason, he has the ability to intuit what the cause of  
24 damage is on other fields?

25 A. That's a gross mischaracterization.

1 Q. We'll leave that for the jury. Let's go to  
2 Exhibit 175.

3 **THE COURT:** That's been admitted.

4 **MR. RANGLES:** It hasn't been admitted. No, no, don't  
5 show the jury.

6 **THE COURT:** It has been admitted.

7 **MR. RANGLES:** It has?

8 **COURTROOM DEPUTY:** Yes.

9 **MR. RANGLES:** Well, I was being cautious. I  
10 apologize.

11 Q. (By Mr. Randles) This is the Xtend Inquiry  
12 Investigation Guidance, at the top. Do you see that?

13 A. Yes.

14 Q. Let's go to Item number 2: "What to look for during  
15 the course of investigation and information collection."

16 Do you see that?

17 A. I do.

18 Q. "Are symptoms consistent with those typically caused  
19 by dicamba?"

20 Do you see that?

21 A. Yes.

22 Q. And then right underneath it, the first bullet point  
23 says, "Could symptoms potentially be caused by another  
24 nondicamba factor?"

25 Do you see that?

1 A. I do.

2 Q. And then it asks, are there Xtend fields in the area  
3 with the same symptoms?

4 A. Yes.

5 Q. Now, I'm puzzled by that bullet point because Xtend  
6 fields could not have symptoms of dicamba drift on them,  
7 could they?

8 A. That's correct.

9 Q. Because they're immune?

10 A. That's correct.

11 Q. Okay. Bullet point number two: "Environmental stress  
12 (high temperatures, drought, other)."

13 Did I read that correctly?

14 A. Yes.

15 Q. Next bullet point: "Other nondicamba herbicides or  
16 products applied to the field or drifted from another source  
17 field."

18 Did I read that correctly?

19 A. Yes.

20 Q. So we have in this document a directive to your field  
21 people to look for other things it might be, like  
22 environmental stress, which would include temperatures and  
23 drought, other non-dicamba herbicides or products, don't it?

24 A. I wrote this, and it's, frankly, modeled after  
25 something I had 25 years ago in another company, training my

1 sales people on how to properly investigate field issues.  
2 And this is the type of thing that a responsible  
3 investigation would include. You consider -- you try to  
4 eliminate other factors. You try to consider all the  
5 potential causes that might cause the symptomatology that  
6 you may see, and that's what we were trying to do here.

7 Q. Are you telling our jurors that your Field Engagement  
8 Specialists are just as eager to attribute damage to dicamba  
9 as they are these other factors?

10 A. No.

11 Q. I didn't think so. Let's go to 197. Roundup Ready.  
12 You see this, "Roundup Ready Xtend Crop System Update." Do  
13 you see that?

14 A. Yes.

15 Q. And I don't know if we have a written date on it, but  
16 we do have a date from the metadata. Is there an -- on the  
17 next page, or on the bottom?

18 **MS. GEORGE:** On your notes.

19 **MR. RANGLES:** Yeah, I know. I just meant on this.

20 Q. (By Mr. Randles) From the metadata we have a date of  
21 October 31st of 2017, all right?

22 A. October -- okay.

23 **MR. RANGLES:** Okay. And this is Xtend Crop System  
24 Update. Your Honor, I move for the admission of 197.

25 **MR. MILLER:** Same objection, Your Honor.



1           **THE COURT:** Overruled; admitted.

2           **(Plaintiffs' Exhibit No. 197 admitted)**

3           **MR. MILLER:** Mr. Randles, can you give me that date  
4 again?

5           **MR. RANGLES:** I sure do. October 31st of 2017 is what  
6 we have.

7           **MR. MILLER:** Thank you.

8           Q.    *(By Mr. Randles)* And you will see some little -- some  
9 internal evidence for this date. Let's go to the page --  
10 first page. This says, "Summary of Inquiries as of  
11 10/26/17."

12                   Do you see that?

13           A.    Yes.

14           Q.    And, actually, above it in red it says, "Learnings  
15 from 2017 season."

16                   Do you see that?

17           A.    Yes.

18           Q.    And it goes on to say, "If a customer experienced weed  
19 performance issues or symptomatology regarding possible  
20 off-target movement, Monsanto deployed Field Engagement  
21 Specialists, FES, and the objective was to gather  
22 information as to the nature of inquiry and offer  
23 opportunity to educate during the field visit."

24                   Do you see that?

25           A.    Yes.

1 Q. With a total of 3800 inquiries. And if you look here,  
2 we have 769 for performance/weed control and 16 for crop  
3 response. There are five non-ag urban -- I don't actually  
4 know where they fit, but they don't fit in the calculation  
5 I'm about to talk about, okay? And then we have off-target  
6 movement applicator and off-target movement non-applicator.  
7 Do you see that?

8 A. Yes.

9 Q. And I did a little -- we did a little calculation on  
10 calculator because I can't do this in my head, perhaps you  
11 can. When you add the two off-target -- I guess when you  
12 add all the off-target movements, because we have other  
13 crop, 20 -- I did it again. Other crops, 23, and non-ag  
14 urban, five. When you add those together the distribution  
15 of claims is, 79.6 percent is off-target movement, and the  
16 remainder is other. I'm not asking you to take my word for  
17 it. Know if you can do it in your head, but when you look  
18 at these numbers, does that sound about right to you?

19 A. I'll trust your calculations.

20 Q. So earlier when we were talking about sort of what the  
21 distribution would be in claims, and I indicated you had  
22 predicted 80 percent would be off-target movement, your  
23 calculation was almost exactly correct, wasn't it?

24 **MR. MILLER:** Objection. Assumes facts not in  
25 evidence.

1           **THE COURT:** Overruled.

2           **THE WITNESS:** I have to say I don't recall the  
3 distribution and the projections.

4           Q.     *(By Mr. Randles)* Fair enough. I don't need to  
5 particularly give you credit for that. But the distribution  
6 of claims works out to about almost exactly 80 percent  
7 off-target movement, and the 20.4 percent being other  
8 causes, correct?

9           A.     Okay.

10          Q.     And that results in a number of claims slightly above  
11 what you projected but still within the ballpark of -- we  
12 have around 3,000, little bit over that, off-target movement  
13 claims, as you testified earlier, correct?

14          A.     Yes, correct.

15          **MR. RANGLES:** That's all the questions I have.

16          **THE COURT:** We'll take a recess for another ten or 12,  
17 15 minutes. Remember the admonition I've given you  
18 repeatedly. You can go to the jury room. We'll call you  
19 back shortly.

20                 *(Jury out)*

21                 *(Following conducted outside presence of jury:)*

22          **THE COURT:** Before we recess, I want to make a record  
23 again that I've tried to make repeatedly, that the Court  
24 will entertain motions -- or limiting instructions on nearly  
25 all of these exhibits that have been introduced with this

1 witness and others, for that matter, and a lot of his  
2 testimony, too, so that the jury would understand that this  
3 evidence is not being offered -- or a lot of it is not being  
4 offered for the truthfulness of it, but instead, is being  
5 offered just to prove notice to Monsanto. Now, I take it  
6 then the absence of any request for limiting instructions is  
7 a matter of strategy then for the defendants.

8 So, in any event, I just want you all to know that I'm  
9 willing to make those -- offer those -- give those limiting  
10 instructions.

11 With that, we'll be in recess for ten or 15 minutes.

12 *(Court recessed from 2:57 p.m. to 3:24 p.m.)*

13 **THE COURT:** Preliminary matters?

14 Okay. Bring the jury in.

15 *(Jury in)*

16 **THE COURT:** Mr. Miller.

17 **MR. MILLER:** Thank you, Your Honor.

18 **CROSS-EXAMINATION**

19 **QUESTIONS BY MR. MILLER:**

20 Q. Good afternoon, Dr. Carey. I know you've had a long  
21 day. Unfortunately, it's not quite over yet.

22 Dr. Carey, I want to go back to Exhibit 154. That was  
23 towards the end of Mr. Randles's examination of you. And if  
24 we could have 154 already in evidence up on the screen,  
25 please.

1           And this is the email that Mr. Sandbrink sent to you  
2 on September 1, 2016, is that right?

3 A.       Yes.

4 Q.       And he summarized a meeting he attended on August 31,  
5 the day before, 2016, is that correct?

6 A.       Yes.

7 Q.       Now, just to be clear, was Mr. Sandbrink an employee  
8 of Monsanto at that time?

9 A.       I don't believe he was an employee at this time. He  
10 was working with West Central.

11 Q.       And what is West Central?

12 A.       They are a distribution company, distribute  
13 herbicides, pesticides, agricultural products.

14 Q.       Let's go to the last page, to the section that  
15 Mr. Randles -- or at least part of the section Mr. Randles  
16 was talking to you about. And if we could blow up, please,  
17 Ms. Bedard, the bottom half of that paragraph. Thank you.

18           Now, I want to make this clear. There's a line here  
19 that says, "As I said earlier, the Missouri Extension rep  
20 thinks Mr. Bader may be looking at this as an  
21 'opportunity' -- quote, unquote -- to cash in on a problem  
22 that has existed in his peach orchard that is not related to  
23 auxin chemistry," correct?

24 A.       Yes.

25 Q.       Let's break this down. First of all, Mr. Randles,

1 when he first asked you about this -- and, frankly, in his  
2 opening statement -- said it was a Monsanto employee who  
3 said that Mr. Bader was looking to cash in. Is the Missouri  
4 Extension rep a Monsanto employee?

5 A. No.

6 Q. What's a Missouri Extension rep?

7 A. Well, a Missouri Extension rep in this context would  
8 be probably -- a Missouri Extension agent is probably the  
9 proper term.

10 Q. Let's explain to the jury, if they don't know, what is  
11 Missouri Extension? What does that mean?

12 A. Well, at every land grant university -- and the  
13 University of Missouri is the land grant university for the  
14 State of Missouri -- the mission of that university -- part  
15 of the mission is to have an extension department. And the  
16 extension department goes all the way back to  
17 Abraham Lincoln. And they chartered these land grant  
18 universities to take the information and the learning from  
19 the university and the research out into the countryside,  
20 out into the rural areas, and that's what a lot of extension  
21 agents for agriculture do.

22 Q. So they're working with the farmers?

23 A. Yes.

24 Q. And, in fact, Mr. Randles said that Dr. Bradley that  
25 he referred to is the head of the Missouri Extension project

1 or section out there, correct?

2 A. Yes.

3 Q. And if Mr. Randles is right, then this Missouri  
4 Extension rep would be working under Dr. Bradley, is that  
5 correct?

6 A. In that case, I think that would be correct. I don't  
7 believe Dr. Bradley's the extension director for the  
8 university, but I don't know. I'm not that familiar with  
9 all of the people in the --

10 Q. I'm just simply assuming what Mr. Randles said.

11 A. Okay.

12 Q. Okay. So the Missouri Extension rep says that he  
13 thinks Mr. Bader may be looking at this as an opportunity to  
14 cash in on a problem that has existed in his peach orchard  
15 that is not related to auxin chemistry. What is auxin  
16 chemistry?

17 A. The term "auxin" is a description. Each herbicide  
18 has -- belongs to a different class of chemistry, and the  
19 class of chemistry for dicamba, or 2,4-D, is auxins.

20 Q. And so if I'm reading this correctly, the Missouri  
21 Extension rep is saying, in his opinion, the problem at the  
22 Bader peach orchard is not dicamba or any other auxin  
23 chemistry; it's something that's existed before, correct?

24 A. That's what's communicated here.

25 Q. By the way, the word "disease" does not appear there,

1 does it?

2 A. No.

3 Q. And, by the way, Missouri Extension -- you were asked  
4 a lot of questions about independent academic research. You  
5 recall those questions from Mr. Randles?

6 A. Yes.

7 Q. And when you have universities doing academic research  
8 for agricultural issues such as herbicides, is that the  
9 extension part of the university that does it?

10 A. Well, yes. Well, using Dr. Bradley's example, he's  
11 the extension weed scientist for the State of Missouri.

12 Q. So this Missouri Extension rep that's giving his  
13 opinion that the damage at Bader peach farm has nothing to  
14 do with dicamba, he works in the area of the university that  
15 the plaintiffs' counsel was suggesting we should be going to  
16 for independent information, is that fair?

17 A. That's correct.

18 Q. Okay. Let's scroll up a little bit and show some of  
19 the things Mr. Randles didn't ask you about.

20 Can we blow up that whole paragraph. Thank you,  
21 Ms. Bedard.

22 Now, this paragraph summarizes -- Mr. Sandbrink's  
23 writing down notes about what Mr. Bader said himself at the  
24 meeting, correct?

25 A. Yes.



1 Q. And Mr. Sandbrink says -- if you go to the second  
2 line. "It was very difficult," starting there. Thank you.

3 He says that, "It was very difficult to follow  
4 Mr. Bader, but basically he had the USDA." And who would  
5 the USDA be?

6 A. The USDA is the United States Department of  
7 Agriculture agency.

8 Q. They work for Monsanto?

9 A. No.

10 Q. Mr. Bader testified or stated that the USDA came out  
11 to test his peaches for glyphosate, dicamba, and 2,4-D and  
12 he stated that the results came back negative for 2,4-D and  
13 dicamba, correct?

14 A. That's what it says.

15 Q. So, Mr. Bader stated at this meeting that his peaches  
16 were tested by the federal government for dicamba, and the  
17 test was negative, is that fair?

18 A. That's what it says.

19 Q. And he claimed they wouldn't give him the glyphosate  
20 results, right?

21 A. Again, that's what it says.

22 Q. And then Mr. Sandbrink goes on to say that Mr. Bader  
23 claims that he will lose 40 percent of his peach crop this  
24 year due to dicamba even though it was not detected in the  
25 samples, correct?

1 A. Correct.

2 Q. Mr. Sandbrink then gives an editorial comment, it  
3 looks like, where he says, "Huh?" Is that right?

4 A. Yes.

5 Q. And then he continues on talking about this.  
6 Mr. Sandbrink said, "The symptoms that he described in the  
7 St. Louis Post-Dispatch article a couple of weeks ago did  
8 not correlate with growth regulatory chemistry."

9 And did you understand Mr. Sandbrink to be talking  
10 about an article that appeared in the Post-Dispatch where  
11 Mr. Bader was describing symptoms he saw at his peach  
12 orchard?

13 A. Yes.

14 Q. Okay. And when he says that the symptoms that  
15 Mr. Bader described "did not correlate with growth  
16 regulatory chemistry," what is growth regulatory chemistry?

17 A. "Growth regulator" is another terminology used to  
18 describe herbicides, including dicamba and 2,4-D as the most  
19 common.

20 Q. Okay. So, Mr. Sandbrink is saying that Mr. Bader is  
21 giving descriptions of symptoms that don't go with dicamba?

22 A. That's correct.

23 Q. And then he goes on to say what Mr. Bader said in the  
24 article. "He," Mr. Bader, "described 'shot holes' through  
25 the leaves."

1 Do you see that?

2 A. I do.

3 Q. What are shot holes?

4 A. Shot holes is a term, common term, that agronomists  
5 use when they're diagnosing plants that have small holes in  
6 the leaves. So shot hole really comes from, if you could  
7 imagine shooting a leaf with a shotgun, it might look like  
8 shot holes.

9 Q. And does dicamba cause shot holes in leaves?

10 A. That's not a symptom I would associate with dicamba.

11 Q. What -- and you're a weed scientist, correct?

12 A. Yes.

13 Q. What generally causes shot holes in weeds -- in  
14 leaves?

15 A. Well, could be multiple things, but it certainly could  
16 be insects or potentially a disease.

17 Q. So, when we look at this entire paragraph,  
18 Mr. Sandbrink was letting you know what the Missouri  
19 Extension representative's opinions were of Mr. Bader's  
20 claims, correct?

21 A. Yes.

22 Q. And you were asked a lot of questions about claims by  
23 Mr. Randles. Do you recall those -- well, at least some of  
24 those numerous questions you were asked?

25 A. I do.

1 Q. And does a claim that someone has, even if they  
2 honestly believe it, that their crop was injured by dicamba,  
3 does that mean that, in fact, their crop was injured by  
4 dicamba?

5 A. Well, not necessarily. And we often interchangeably  
6 use the word "claim" or "inquiry" internally, but it's --  
7 generally it's someone who thinks they have a problem but  
8 you don't know what the real problem may or may not be  
9 until, you know, a proper investigation can be done, and  
10 many times it's difficult to do that.

11 Q. And so, in fact, sometimes people will file claims,  
12 official claims, with say a state regulatory agency claiming  
13 one thing and it turns out to be something else, right?

14 A. That's very possible, yes.

15 Q. You were asked, for example, about the Frey claims, is  
16 that right --

17 A. Yes.

18 Q. -- during your examination by Mr. Randles?

19 A. Yes.

20 Q. And could we see, please, Exhibit 180, which is  
21 already in evidence. And if we could go to the second page,  
22 please. I think this is the section that Mr. Randles talked  
23 about. Second page, down at the bottom there, second  
24 paragraph down. Yeah. Thank you.

25 Mr. Randles pointed out to you that the Freys said

1 that, right in the middle, "their watermelon, liberty  
2 soybeans, and sweetcorn were hit pretty hard by dicamba use  
3 in the Bootheel," correct?

4 A. That's what it says.

5 Q. That's what the Freys believed happened, correct?

6 A. Yes.

7 Q. And watermelons, they're a specialty crop, aren't  
8 they?

9 A. We would call them a specialty crop.

10 Q. Just like peaches, right?

11 A. Certainly a different crop, but a specialty crop. Not  
12 what we call a row crop, broad-acre crop.

13 Q. And, so, apparently the Freys believed that their  
14 specialty crop, watermelons, were hit hard by dicamba,  
15 correct?

16 A. That's what this says, yes.

17 Q. And you're aware that they filed a claim with the  
18 Missouri Department of Agriculture, right?

19 A. I understand that's the case.

20 Q. And are you -- claiming that they were hit by dicamba,  
21 right?

22 A. Yes.

23 Q. And are you aware that the Freys later withdrew that  
24 complaint because afterwards they realized themselves what  
25 they thought was actually wrong, that it wasn't dicamba,

1 that it was some other cause?

2 A. I'm aware of that.

3 Q. So is it fair to take the number of claims that come  
4 in and say that those are all dicamba damage?

5 A. Not -- it shouldn't be assumed automatically that they  
6 are all dicamba damage, no.

7 Q. And you talked a little bit about investigations, and  
8 we'll get to this a little later, but if you're doing an  
9 investigation as a weed scientist to figure out if there's a  
10 problem with a crop, somebody suspects it's a particular  
11 cause, in this case dicamba, what are some of the steps you  
12 need to take to do a proper investigation to determine if  
13 the claim is what actually happened? Tell the ladies and  
14 gentlemen of the jury, please.

15 A. Well, the most important thing probably would be to  
16 visit the alleged field or crop that's impacted as quickly  
17 as possible because you want to be able to find out what  
18 symptoms are or are not there. And the first thing to do  
19 is, as I had mentioned previously, from your experience and  
20 other resources, you have make a determination. Do the  
21 symptoms I see, are they consistent with what typically we  
22 see with that particular type of problem, be it a herbicide  
23 or something else, even a disease or whatever? If it's not,  
24 it's good to look for -- well, in either case it's good to  
25 look at surrounding fields to find out if the

1     symptomatology are in the other fields, because it helps  
2     you eliminate the possibility of whatever happened only  
3     happened in that field.  Maybe what happened was something  
4     that was a management practice that was on that field, and  
5     that management practice may not have happened on the other  
6     fields.

7             But the most important part is understanding the  
8     symptomatology, identifying that, being open to any  
9     potential cause, not eliminating or concluding anything from  
10    the very first investigation but following up with questions  
11    to eliminate and hopefully narrow it down to what actually  
12    happened.

13    Q.     And you talked about eliminating alternative causes.  
14    Is that part of a proper investigation?

15    A.     Yes.

16    Q.     Could you explain what that means to the ladies and  
17    gentlemen of the jury.

18    A.     Well, an example -- for instance, I talked earlier  
19    about, one of the guidances we have is that if you saw  
20    symptomatology in -- let's say it's an Xtend -- or a soybean  
21    field.  If there's an Xtend field nearby, you could check  
22    that Xtend field to see, hey, do the same symptoms show up  
23    in that field?  If they show up in that field and they're  
24    very consistent with the field that you're concerned about,  
25    there's a good likelihood that it's not caused by dicamba in

1 that example because the dicamba couldn't have caused those  
2 same symptoms in that comparison field. That's just one  
3 example.

4 Q. Okay. And what about if you went to a separate -- a  
5 field right next door that had sensitive crop -- soybeans  
6 are the most sensitive things for dicamba, is that fair?

7 A. Soybeans are as sensitive as any plant we're aware of,  
8 yes.

9 Q. And if you had a non-dicamba-tolerant soybean field  
10 right next to a field that thought it might have been hit by  
11 dicamba, and there was no dicamba symptomatology in that  
12 soybean field, would that give you some information?

13 A. It absolutely would. You want to make those --

14 Q. What would it tell you?

15 A. Well, if you see the symptomatology in the non-dicamba  
16 soybeans and if it's next to a dicamba field, and those  
17 symptoms are consistent with what you would expect to see  
18 with dicamba, you should start investigating what happened  
19 in that other field. Did that -- was dicamba even applied  
20 in that field or was it applied in any other area around the  
21 field?

22 Q. What if you have a non-dicamba-tolerant soybean field  
23 right next to the field you're investigating and that  
24 non-dicamba soybean field has no symptoms of dicamba? Is  
25 that an indicator that there's not dicamba?



1 A. Could be. Again, you'd need to know what the  
2 circumstances around it were.

3 Q. You can't tell from just one factor?

4 A. No, no. You need to eliminate things. You need to  
5 fully investigate.

6 Q. And speaking about people believing what might have  
7 caused losses to them, Mr. Randles asked you about a couple  
8 phone calls that you had with Mr. Bader. You spoke with  
9 Mr. Bader twice in 2016, correct?

10 A. Correct.

11 Q. Mr. Randles didn't ask you about what was discussed in  
12 those phone calls. I'm going to.

13 Let's talk about the first call. Was that in July of  
14 2016, do you recall?

15 A. It was in July.

16 Q. And tell us what Mr. Bader and you talked about.

17 A. Well, Mr. Bader described to me that he was having  
18 problems with his peach trees, and he mentioned that he had  
19 problems in 2015, which would have been the previous year.

20 Q. Did he tell you what the problems were caused by in  
21 2015?

22 A. He indicated that there had been an application made  
23 by -- aerially, or through a crop duster --

24 Q. Crop duster. Okay. Go ahead.

25 A. -- nearby. That applicator had applied, he indicated,

1 Roundup 2,4-D, and Valor.

2 Q. What's Valor?

3 A. Valor's a herbicide used for soybeans. It's a  
4 preemergence or a soil-applied herbicide called flumioxazin.

5 Q. Is not dicamba?

6 A. No, no.

7 Q. And is Roundup dicamba?

8 A. No. Roundup is glyphosate.

9 Q. Is 2,4-D dicamba?

10 A. No.

11 Q. Okay. Go ahead.

12 A. So he indicated that he had had the state out, he also  
13 had the insurance company for the aerial applicator both to  
14 his farm and that they had both taken samples of his peaches  
15 for potential residue analysis.

16 Q. Now, let me ask you: The aerial application, did he  
17 say what that was over? Was it an in-crop or was it a  
18 burndown?

19 A. I don't know if he said, but if it had Valor in it, it  
20 would not have been over top of a soybean crop. It would  
21 kill the crop. It was very likely a burndown herbicide.

22 Q. So you can use Valor over burndown just like you can  
23 legally use dicamba over burndown, is that fair?

24 A. That's correct.

25 Q. And a burndown -- when we're talking about application

1 onever a burndown, what is a burndown?

2 A. Yeah. Burndown is when a grower might want to get the  
3 weed control established before they actually plant the  
4 crop, and often times it might be in a no till situation  
5 where they aren't tilling the weeds, so -- but they have to  
6 manage those weeds some way, shape, or form before they try  
7 to plant their actual crop. So we typically refer to that  
8 as a burndown because it burns the weeds down so that you  
9 can plant your crop.

10 Q. And Mr. Bader told you during that call that that  
11 aerial application, that cropduster burndown, took place  
12 April 11th F 2015?

13 A. Yes.

14 Q. And, now, in 2015, Monsanto had started selling Xtend  
15 cotton, correct?

16 A. That's correct.

17 Q. In April in the Bootheel is anybody spraying dicamba?  
18 Even if they're doing it illegally, is anybody spraying  
19 dicamba over the top of cotton in the Bootheel on  
20 April 11th, 2015?

21 A. That would be -- that would be too early and those  
22 components of that spray would kill the crop anyway.

23 Q. So this problem that Mr. Bader had predated, according  
24 to him, the time period when Xtend would even have been  
25 started -- excuse me, when even illegal applications of

1 dicamba could have been made over the top of Xtend crops?

2 A. If illegal applications over the top were being made  
3 they would have happened much after this point in time.

4 Q. And, so, Mr. Bader told you that the state came in and  
5 took samples, is that right?

6 A. Yes.

7 Q. What did they find, according to Mr. Bader?

8 A. He indicated they did find dicamba in the samples, in  
9 the peach tissue samples.

10 Q. Is there any way that dicamba at that time of year  
11 could have come from an illegal spray over an Xtend crop?

12 A. No.

13 **MR. RANGLES:** Objection, Your Honor.

14 **THE COURT:** Just a second.

15 **MR. RANGLES:** He hasn't been qualified as an expert in  
16 this area.

17 **MR. MILLER:** It's Farming 101, Your Honor, and he's  
18 been asked a variety of things.

19 **THE COURT:** He's been offered as a weed scientist by  
20 you, I think, so --

21 **MR. MILLER:** Correct.

22 **MR. RANGLES:** I offered him as Monsanto executive. He  
23 is a weed scientist as well.

24 **MR. MILLER:** I agree, Your Honor. He has -- thank  
25 you.

1           **THE COURT:** I think he's qualified as an expert.

2           **MR. MILLER:** Thank you, Your Honor.

3           Q.     *(By Mr. Miller)* Go ahead, Dr. Carey. Is there any way  
4           that the dicamba that was detected in Mr. Bader's fields in  
5           2015 by the State of Missouri from their testing of his  
6           leaves could have come from a dicamba application over Xtend  
7           crop?

8           A.     No.

9           Q.     What did he tell you about what was found? He said  
10          they found some dicamba, right?

11          A.     He did.

12          Q.     What else did they find?

13          A.     He indicated they also found glyphosate. Glyphosate  
14          was at five times the concentration of the dicamba that they  
15          found.

16          Q.     Okay. What else did they find?

17          A.     2,4-D, which they indicated was 11 times the  
18          concentration of the dicamba that was found.

19          Q.     So they found some dicamba, correct?

20          A.     That's correct.

21          Q.     They found five times the amount of glyphosate, right?

22          A.     Yes.

23          Q.     And they found 11 times the amount of 2,4-D?

24          A.     Correct.

25          Q.     And, by the way, what type of herbicide, what family

1 of herbicide does 2,4-D belong to?

2 A. It's in the same class or chemistry as dicamba. It's  
3 an auxin herbicide, acts in a very similar manner in the  
4 plant as dicamba.

5 Q. And it gives some of the same -- similar  
6 symptomatology as dicamba?

7 A. Very similar, yes.

8 Q. And did Mr. Bader tell you -- in your first phone call  
9 with Mr. Bader, did he tell you that what his loss was in  
10 2015 from this aerial application of these other herbicides?

11 A. Well, he indicated that he believed he would lose  
12 50 percent of his crop, and --

13 Q. For 2015?

14 A. Or he had lost 50 percent of his crop --

15 Q. Okay.

16 A. -- and 10,000 peach trees.

17 Q. So let me make this clear. In 2016, the first time  
18 you're talking to Mr. Bader, he told you that, as a result  
19 of an aerial crop spray of 2,4-D, Valor, and glyphosate, and  
20 then -- and I guess some dicamba in the burndown, he lost  
21 half his peach crop in 2015, and 10,000 trees were killed?

22 A. That's what he told me.

23 Q. Did he tell you during that phone call at all that he  
24 suffered any damage in 2015 to his peach orchard from  
25 dicamba that had been sprayed over an Xtend crop?

1 A. I don't recall. I don't remember.

2 Q. You took notes of that, correct?

3 A. I took notes of the conversations, yes.

4 Q. Do you need to check your notes to refresh your  
5 recollection?

6 A. No. I don't -- I don't think so. Not in this case.

7 Q. So, he did not tell you that?

8 A. Can you repeat the question so I'm sure.

9 Q. Did he tell you that any of his 2015 loss was as a  
10 result of dicamba sprayed over Xtend crop?

11 A. I don't recall him telling me that. And he talked  
12 about the aerial application was his problem.

13 Q. Now, did he talk to you about what he claimed was  
14 going on in 2016?

15 A. Yes.

16 Q. What did he tell you?

17 A. He felt that his peach trees were again being  
18 impacted.

19 Q. By what?

20 A. Well, in this instance he said it was illegal  
21 applications of Roundup, plus Banvel.

22 Q. Illegal applications of Roundup and Banvel?

23 A. Yes.

24 Q. Okay. What's Roundup? Glyphosate?

25 A. Yes. Roundup is glyphosate.

1 Q. And what is Banvel?

2 A. Banvel is an old formulation of dicamba.

3 Q. In fact, that's the original one?

4 A. Well, a very old one we'll say.

5 Q. Okay. And did Mr. Bader tell you what the illegal  
6 applications of Banvel and glyphosate were sprayed over?

7 A. Yes. He believed they were being sprayed over Xtend  
8 crops.

9 Q. Did he know -- okay. And did he tell you -- so that  
10 was 2016 he was making that claim?

11 A. This is 2016 we're talking about.

12 Q. What did he tell you his damage was that he was  
13 alleging from that?

14 A. I think he said he felt he would lose 25,000 trees,  
15 and a thousand acres of those trees were peaches is what he  
16 said.

17 Q. Did Mr. Bader make any discussion of a lawsuit in that  
18 call?

19 A. He talked about -- he said that farmers in that area  
20 were hiring attorneys left and right.

21 Q. What about him?

22 A. He told me his attorney had talked to a Don Downing in  
23 St. Louis. He wanted me to know that.

24 Q. So did he talk about the possibility of a lawsuit?

25 A. He did. He said --



1 Q. I'll just leave it at that. What did you tell  
2 Mr. Bader about what products Monsanto had or did not have  
3 on the market at that time regarding his allegation that he  
4 was hit with Banvel and 2,4-D?

5 A. Well, I made it clear that in 2016, or even before  
6 that in 2015, that no dicamba herbicide was registered for  
7 applications over the Xtend crops, cotton or soybeans, and  
8 that Monsanto didn't even sell or market any kind of a  
9 dicamba formulation. So, clearly, if the applications were  
10 being made, they were illegal.

11 Q. And what about the glyphosate? Because he said he got  
12 hit by off-target movement of glyphosate, and Monsanto was  
13 selling glyphosate, right?

14 A. We do sell glyphosate in the form of Roundup. He felt  
15 that potentially -- I think his theory was that the  
16 glyphosate and the dicamba, from whatever formulation was  
17 being sprayed, volatilized together onto his crop. And I  
18 shared with him that if he had glyphosate and he had dicamba  
19 in his crop, that they didn't get there together by  
20 volatilization because glyphosate does not volatilize. It  
21 would more than likely, almost certainly, be an off-target  
22 movement situation if that's, in fact, what was in his crop.

23 Q. Specifically a physical drift --

24 A. Yes.

25 Q. -- situation? And we'll get to physical drift in a

1 few minutes.

2 Let me move on to the second phone call you had with  
3 Mr. Bader.

4 A. Yes.

5 Q. Do you recall what month that was?

6 A. It was in August.

7 Q. Of 2016 still?

8 A. Yes.

9 Q. And what did you all talk about in that phone call?

10 A. Well, Mr. Bader wanted me to know that -- he wanted to  
11 know what our stance was going to be regarding what was  
12 happening to his farm and in the Bootheel.

13 Q. What did you tell him?

14 A. Well, I told him similarly, you know, from the first  
15 conversation, that we didn't market dicamba formulation, so  
16 if dicamba was getting into -- if dicamba was getting into  
17 his crop, it was coming from illegal applications.

18 Q. Now, did Mr. Bader make any comments about his belief  
19 as to whether all of his problem was from dicamba or not?

20 A. He said he understood that not all of his problem was  
21 from dicamba is what he said.

22 Q. For 2016?

23 A. For 2016.

24 Q. Did you discuss anything about the farmers who were  
25 allegedly spraying old formula dicamba?

1 A. Well, he acknowledged that he understood that they  
2 knew there were illegal applications.

3 Q. So they were breaking the law by doing that?

4 A. Yes.

5 Q. Did you discuss, in either of these calls, whether  
6 Mr. Bader had already contacted the authorities, if you  
7 will, the state and federal agencies that have authority to  
8 come in and investigate these things?

9 A. Well, in 2016 he indicated that the FDA had been there  
10 and had taken samples of his peaches.

11 Q. And you found out from Mr. Sandbrink later that,  
12 according to Mr. Bader, those peaches came back negative for  
13 dicamba, correct?

14 A. Assuming those are the same samples they were  
15 referring to.

16 Q. That's fair. Okay. What else did he tell you?

17 A. He also said he had the Missouri Department of Health  
18 out to his farm as well.

19 Q. Dr. Carey, I want to talk about -- I want to move on  
20 to a slightly -- it's a related, but a different topic here.

21 The word "drift" has been thrown around a lot, and  
22 then we've heard the word "volatility" and we've heard the  
23 term "off-target movement." I want to break those down so  
24 everybody understands what we're talking about with that  
25 terminology, okay?

1 A. Sure.

2 Q. What does "off-target movement" mean?

3 A. It's a term to describe any time a pesticide, when  
4 it's applied, ends up in a place where it's not supposed to  
5 be, you know, where you didn't intend for it to go, which  
6 where you intended for it to go is -- in this case is on the  
7 crop and the weeds -- in different ways.

8 Q. I'm sorry. I apologize for interrupting you. You  
9 want it to go on the crop of the weeds and stay there?

10 A. Exactly.

11 Q. Is there only one type of off-target movement?

12 A. No. There's multiple ways that that can possibly  
13 happen.

14 Q. Okay. One of the words that has been thrown around a  
15 lot is "drift," and that's also known as physical drift,  
16 right?

17 A. Yes.

18 Q. Tell the ladies and gentlemen of the jury, what is  
19 drift when you're talking about off-target movement?

20 A. Well, if you can envision a sprayer, regardless of the  
21 size -- it could be a small, you know, yard sprayer, it  
22 could be a very large agricultural sprayer. When the spray  
23 in the water comes out the nozzle there are small droplets,  
24 and those small droplets are intended to hit the crop and  
25 intended to hit the weed to control the weed, but if there's

1 wind, the wind can physically move those droplets  
2 off-target. And the smaller the droplet, the more likely or  
3 the more possible it is for the wind to move those. We call  
4 that physical drift of a physical spray droplet.

5 Q. And usually that's often short-term to just drift?

6 A. Yes.

7 Q. Okay. Can dicamba drift?

8 A. Yes. Any herbicide -- any pesticide, including  
9 herbicides, when they're applied through a nozzle and a  
10 sprayer, some level of drift will occur.

11 Q. Why is that?

12 A. It's just physics, Mother Nature.

13 Q. Okay. So anything that you spray out of this, it's  
14 going to go -- some of it's going to move a little bit?

15 A. Correct.

16 Q. And so are there precautions that can be taken to try  
17 and limit drift for any herbicide?

18 A. Yes, absolutely, and that's --

19 Q. Like what?

20 A. Well, really choosing nozzles that will produce  
21 droplets that are less prone to drift.

22 Q. And we're talking about the nozzles that go on the  
23 boom arms of the sprayer?

24 A. The spray boom, yes.

25 Q. Basically the herbicide comes down a tank, goes down

1 the boom, and out the little nozzles, right?

2 A. A good demonstration. The boom height -- the higher  
3 the boom height is, the more likely it's going to allow the  
4 drops to catch wind. The speed of the sprayer. There are  
5 multiple factors that can be managed and reduce the  
6 potential for physical drift.

7 Q. Is dicamba any more prone to physical drift than any  
8 other herbicide on the market?

9 A. No, no. Physical drift's really about a spray  
10 droplet. And a meaningful difference is -- there's no  
11 meaningful difference if it's dicamba in the droplet or  
12 Roundup or another herbicide.

13 Q. Does physical drift have anything to do with 2,4 --  
14 anything to do with volatility?

15 A. They're separate types of off-target movement.

16 Q. And we'll get to volatility in a minute.

17 Now, you've said, I think, a number of times, that  
18 industry standard for manufacturers -- that they're not  
19 responsible for off-target movement. Do you recall that?

20 A. I do.

21 Q. Could you explain that to the ladies and gentlemen of  
22 the jury. What is that standard and why is that the rule?

23 A. Well, it's -- I would call it an industry standard.  
24 If you look at multiple different manufacturers of  
25 herbicides, multiple different products, you may find the

1 exact same language that's used, for instance, on our  
2 XtendiMax with VaporGrip label. And it says essentially  
3 that maintaining herbicides on target or avoiding spray  
4 drift is the responsibility of the applicator.

5 Q. Why would that be?

6 A. Well, any application that's made -- every application  
7 that's made is its own unique situation. And, of course,  
8 those applications are being made in the real world on farms  
9 or other places where herbicides are used, so you have  
10 different factors that vary, from the wind speed, the  
11 humidity, the temperature, the potential of an inversion, or  
12 no inversion, as well as the unique situation where the  
13 field is placed. Is it around other sensitive crops or is  
14 it in the middle of hundreds of other acres of the same  
15 crop?

16 There's a lot of factors involved, so the applicators  
17 are required to be certified to understand those situations,  
18 and they're in the best position, really the only position  
19 to make a responsible decision as to whether the application  
20 should or should not be made under the circumstances they  
21 have at that point in time.

22 Q. So, we've talked some about the first category of  
23 off-target movement, physical drift, or drift, right?

24 A. Yes.

25 Q. Second category, tank contamination. What's that?

1 A. That's usually the second most common type of  
2 off-target movement.

3 Q. Is drift the first most common type?

4 A. Physical drift's the most common, yes.

5 Q. Okay. Tell us about the second most common.

6 A. So, tank contamination is what it says. Basically, if  
7 you make an application of one herbicide, you've got that  
8 herbicide in a spray solution, water solution in your tank.  
9 If you want to spray a different herbicide, potentially move  
10 to a different crop or a different area to spray, you first  
11 need to clean out the original herbicide because that  
12 herbicide may not -- that original herbicide may injure  
13 where you're going next. So you've got to be sure that  
14 you've adequately cleaned out the spray tank, all the  
15 equipment so that there's no contamination over to that new  
16 application.

17 Q. And what happens if you don't do that right?

18 A. Well, if you don't do that right -- it depends on the  
19 herbicide, it depends on the crop that you're going to, but  
20 certainly with dicamba it's very active and effective, so a  
21 very small amount of dicamba, for instance, especially over  
22 a soybean crop that's not tolerant, can cause symptoms.

23 Q. What's the third most -- what's the third type of  
24 off-target movement?

25 A. Volatility is usually the third type of off-target



1 movement that we train on.

2 Q. And could you explain to the ladies and gentlemen of  
3 the jury -- excuse me, ladies and gentlemen of the jury,  
4 what that means?

5 A. So, if you think about a compound, whether it's a  
6 liquid or even a dry compound -- but think of a liquid like  
7 water. When you heat water up high enough, it turns into a  
8 gas. Or I always like to use the analogy of putting  
9 gasoline in my lawnmower. If you've ever seen the fumes  
10 rise off of the gasoline, that's evaporation, or  
11 volatilization, into a gaseous form.

12 So, some herbicides have the quality of being more  
13 volatile or more likely to volatilize than others. The  
14 chemistry of dicamba, the molecule itself, not the  
15 formulation --

16 Q. The original form?

17 A. The original form, the active ingredient, if you will.  
18 2,4-D is another one. Clomazone is another one. But those  
19 chemistries have more of a propensity to volatilize.

20 Q. Now, if something volatilizes up off the field that it  
21 was sprayed on, does that immediately mean it's going to be  
22 off-target movement, it's going to hit another field? Or  
23 what else has to happen?

24 A. Well, it has to be in a sufficient concentration to  
25 cause, you know, a problem in an off-target location. It

1 would need to be moved in that sufficient concentration  
2 without dilution or enough dilution to basically render it  
3 ineffective.

4 Q. What do you mean, "dilution"?

5 A. Well, you can think about the example of perfume. If  
6 you spray perfume on your skin, you can smell it across the  
7 room, but eventually it dilutes to the point where you no  
8 longer smell it. It basically dilutes itself into the  
9 atmosphere. That's an analogy.

10 Q. Okay. Now, we'll come back to those a little later,  
11 okay?

12 I want to talk some and ask you some questions  
13 about -- oh, there was one thing I forgot to ask you about,  
14 and that's on tank contamination. Is tank contamination,  
15 the second form of off-target movement -- is dicamba any  
16 more prone to off-target movement through tank contamination  
17 than any other herbicide on the market?

18 A. In this situation -- again, any herbicide potentially  
19 can be prone to tank contamination. What matters is how  
20 much is contaminated and what crop, or where does it end up  
21 going after that. But any can be prone to tank  
22 contamination and that's why all labels are very clear about  
23 being very effective in cleaning out the tanks.

24 Q. You got to thoroughly clean out the tank whether  
25 you're using dicamba or 2,4-D or Valor or whatever?

1 A. That's correct.

2 Q. All right. Let me switch topics, switch gears here.  
3 I want to started going through a few more documents that  
4 Mr. Randles went through with you. Can we go to Plaintiffs'  
5 282, please. And this is already in evidence. And could we  
6 go to the page that Mr. Randles called up, I think it's page  
7 12.

8 282? I thought that was in. That was the first one  
9 he used, Your Honor. It's the big power point, big thick  
10 thing.

11 Okay. Page 12 of that, please. Okay. Mr. Randles  
12 asked you some questions about the Xtend crop system when he  
13 was referring to this page, correct?

14 A. Yes.

15 Q. And I want to be very clear. I want you to be clear  
16 with the jury. What is the Xtend crop system?

17 A. The Xtend crop system is a -- it's a marketing term,  
18 basically the crop system, and what it refers to is the  
19 individual products. So, the crop system would include the  
20 soybean -- in this case we use soybean with a trait, or  
21 Xtend soybeans. It would also include the herbicide that  
22 would be registered for it, only the low volatility  
23 herbicide that's actually registered for use. And in our  
24 case, that's XtendiMax with VaporGrip. And for BASF, that's  
25 Engenia. Corteva markets a product called FeXapan. And now

1 Syngenta markets a product called tavium. Those four would  
2 be the only four registered for applications over the crop.

3 It would also include, as this slide demonstrates, our  
4 Roundup Ready PLUS. This has been -- or, at this time it  
5 was called Roundup Ready PLUS, and that's a program by  
6 which -- by using components of what we call the system, the  
7 more components of the system you use, you have the  
8 opportunity to get a rebate on additional herbicides because  
9 it's really important not to use just a dicamba herbicide  
10 and a soybean or the cotton system. That's not a strong  
11 stewardship approach to manage the potential for weed  
12 resistance.

13 Q. Why not?

14 A. Because when you rely on one herbicide exclusively or  
15 almost exclusively, you have a strong selection pressure if  
16 there happens to be a resistant weed out there. It might be  
17 one in a thousand, one in a million. If you use multiple  
18 different herbicides with different modes of action, even if  
19 that one weed might be or potentially could be resistant to  
20 one of the modes of action, one of the other modes of action  
21 is much more likely to control it, and that's a basic  
22 practice that is really important for the long-term  
23 sustainability of the products.

24 Q. Now, let me ask you this, Dr. Carey: When you're  
25 talking about the Xtend system, does the Xtend system

1 include any dicamba?

2 A. No. It's got to be -- there's only -- as I mentioned,  
3 there's only four current products registered for use. They  
4 have to be the low volatility products that we've produced  
5 and marketed.

6 Q. And that's XtendiMax with VaporGrip for us; Engenia  
7 from BASF; FeXapan from Dow?

8 A. Is was. Now it's Corteva. Yes.

9 Q. And then the fourth one?

10 A. Fourth one is tavium from Syngenta.

11 Q. Is Banvel part of the Xtend system, crop system?

12 A. No, never has been and it never will, or we won't  
13 support a registration for a product like that.

14 Q. Is Clarity part of the Xtend crop system?

15 A. No.

16 Q. It's never been approved over the top of Xtend seed?

17 A. Not for commercial use, no.

18 Q. Okay. Can someone -- are these things sold together?  
19 Are they bundled? Does Monsanto sell the seed with the  
20 XtendiMax?

21 A. No. They're independent products. A farmer can buy  
22 the seed and choose whether he does or doesn't want to buy  
23 one of the products that are registered for the weed  
24 control, the herbicides. Or, frankly, the herbicides have  
25 labels for other uses beyond just the Xtend crop, so grower

1 has the opportunity to purchase one or both.

2 Q. Well, let's say the grower wants to have dicamba for  
3 his Xtend seed, he wants to have a low volatility dicamba.  
4 Can he just walk in and say, *Give me the Xtend system?* I  
5 mean, wouldn't the person know --

6 A. No.

7 Q. -- well, here's what it is?

8 A. No. We don't market it that way. We don't sell it  
9 that way. There's no price for the system together as a  
10 bundle. I'm not an expert in marketing law or anything, but  
11 I'm pretty certain that that might be an illegal way to  
12 market a product.

13 Q. An illegal way?

14 A. An illegal way. But I'm beyond my knowledge on that.  
15 That's what we've been told before.

16 Q. Okay. When Xtend cotton was first sold in 2015,  
17 Mr. Randles asked you some questions in which he said it was  
18 sold without any available herbicide. Do you recall those  
19 questions?

20 A. Yes.

21 Q. Is that accurate? When Xtend cotton was first sold in  
22 2015, were farmers just supposed to plant it and not have  
23 any herbicide to spray over the top of it?

24 A. No. That's a good point. To be clear, the XtendFlex  
25 cotton -- in 2015, even though there was no registration for

1 the use of a dicamba product over that cotton, that cotton's  
2 no different than any other cotton in the marketplace. Any  
3 herbicide that's registered for non-Xtend cotton or  
4 XtendFlex cotton could be used. And in the case of cotton,  
5 it also had a new trait for cotton, which was the  
6 glufosinate trait, which enabled Liberty to be used over  
7 that cotton. So, really, you could use any registered  
8 product, plus a new trait and herbicide in this case,  
9 Liberty.

10 Q. So with Xtend cotton -- you said glufosinate was for  
11 the first time available. That was the first time Monsanto  
12 had a cottonseed that was resistant to glufosinate?

13 A. That's a first time we had a cottonseed resistant to  
14 glufosinate, yes.

15 Q. What about Xtend soy in 2016? When that was sold, is  
16 it accurate to say that Xtend soy was sold in 2016 with no  
17 available herbicide?

18 A. Again, it's important to be clear that any registered  
19 herbicide for soybeans -- Xtend soybeans or non-Xtend  
20 soybeans -- can be used on Xtend soybeans. So all the other  
21 products that are available for weed control were there.  
22 The one that's not, obviously, it was the new one that we  
23 were pursuing, which was, of course, dicamba.

24 Q. That was low volatility dicamba?

25 A. Low volatility dicamba.

1 Q. XtendiMax eventually, correct?

2 A. Yes.

3 Q. Okay. Well, let me ask you this, Dr. Carey: If  
4 you're introducing -- if Monsanto is starting to sell Xtend  
5 cottonseed in 2015 -- let's start there chronologically,  
6 okay? But it's illegal to use any form of dicamba over it  
7 at that time. Why -- what's the reasoning for selling the  
8 seed in 2015? Why are you selling it then if you can't use  
9 the dicamba-tolerant trait?

10 A. Well, the varieties, the XtendFlex varieties, are  
11 high-performing varieties. They were the best germplasm or  
12 varieties in cotton that we had available. And typically  
13 what we found when we've launched new traits over the years  
14 is that growers like to get some experience with those new  
15 varieties. In this case they would not be able to legally  
16 apply the dicamba, but they would get a chance to get  
17 agronomic experience and understand how those products  
18 performed in the absence of that tool.

19 Q. Now, you were not working in the Xtend area in 2015,  
20 correct?

21 A. Correct. Not until the end of the year at least.

22 Q. What about 2016 when Xtend soy was released, the seed,  
23 before there was any legal -- any dicamba that could legally  
24 be sold over the top, what was the reason for that?

25 A. Same reasons really. The best varieties we had were



1 in the Xtend -- were Xtend varieties. And part of that was  
2 because we'd had delays in EPA registration of the  
3 herbicide, which gave our breeders more and more time to  
4 improve those products as they were anticipating potential  
5 launches even earlier than that.

6 Q. So when the breeders are making a new seed and  
7 cross-breeding, or however it is they do it, are they just  
8 focusing on, for example, just the dicamba-tolerant trait or  
9 are they trying to improve whatever they can improve in the  
10 seed?

11 A. That's a good point. Certainly the trait's important,  
12 but no matter how good or bad the trait is, that product's  
13 only as good as the agronomic performance, the yield  
14 potential, and its disease resistances. So, a breeding  
15 organization -- and, frankly, every breeding organization is  
16 continuously year-to-year improving their varieties, and so  
17 typically the newest varieties are usually the best  
18 performing varieties.

19 Q. Now, Dr. Carey, I want to go on to another document  
20 that Mr. Randles showed you. Could we have Plaintiffs'  
21 Exhibit 608, please. And that's already in evidence. And  
22 it's page 56. This is the M&M picture. Thank you.

23 Dr. Carey, Mr. Randles asked you about this. Do you  
24 recall that?

25 A. I do.

1 Q. And I want to drill down on this. Mr. Randles said a  
2 few times he didn't want to get into the details. I do.

3 Let's talk about what we're looking at here. You  
4 talked about off-target movement, you talked about drift,  
5 and you talked about volatility, correct?

6 A. Correct.

7 Q. In this slide, when it says, "How much Clarity per  
8 acre does one need to ruin a snap bean field," and you see  
9 the drop there about the size of a peanut M&M, are we  
10 talking about something where it volatilizes and goes over  
11 and hits down or is this a direct spray?

12 A. Well, one of the reasons I think I mentioned -- well,  
13 first of all, I think this is a great slide and it's a great  
14 educational tool to get the point across to applicators, but  
15 it needs to be in the right context from the standpoint  
16 that, I'm pretty certain that that amount of Clarity -- and  
17 I'm assuming that's actually water in the example, but if  
18 that were Clarity, that -- if that were sprayed uniformly  
19 over a field it would ruin a snap bean field. I don't think  
20 the -- I don't think I would say that, you know, if it  
21 volatilized from this drop, that an entire snap bean field  
22 would be impacted. But, regardless, it's an excellent  
23 educational tool.

24 Q. And let's talk about what you just said a little bit  
25 more. When you're talking about a herbicide that

1 volatilizes, even if you've got a herbicide that in some  
2 situations volatilizes, are you talking about all of it just  
3 evaporating up? Like the entire drop that's been spread out  
4 over an entire acre, every single molecule volatilizing and  
5 moving off?

6 A. No. Typically it's a relatively small amount of the  
7 overall amount that was originally applied. You know, in  
8 the case of dicamba, of course, it is very effective, and  
9 relatively small amounts will cause symptomatology, which is  
10 what people typically see when it actually does volatilize  
11 like a -- you know, a situation like Banvel or if a  
12 product's applied with AMS or other things.

13 Q. That's another thing I wanted to ask you. This is  
14 comparing this drop of directly sprayed Clarity to a peanut  
15 M&M, correct?

16 A. I'm sorry. Can you say that again.

17 Q. Sure. This slide is comparing a drop of Clarity  
18 specifically to a peanut M&M, right?

19 A. Yes.

20 Q. And was Clarity ever approved for use over the top of  
21 Xtend crops?

22 A. No.

23 Q. And do you know if this comparison would be the same  
24 for XtendiMax or Engenia, or do you know?

25 A. Well, I think, again, in a bright context, different

1 loadings of active ingredient are different in a product  
2 like Engenia versus Clarity versus XtendiMax. So, those are  
3 just details that would need to be understood.

4 Q. I want to go on, please, to Exhibit 151 that  
5 Mr. Randles showed you. This is already in evidence. And  
6 if we can go down to the notes area in the middle there. I  
7 believe that's what Mr. Randles pulled up. Yeah, right down  
8 there. Down a little lower, please. Yeah, perfect. Thank  
9 you.

10 And Mr. Randles asked you about, in the middle there,  
11 where it says, "protocols determined to have no potential to  
12 compromise regulatory strategy, you may proceed -- TD may  
13 proceed protocols determined to have potential to compromise  
14 regulatory strategy," you have to take one of these two  
15 actions, either terminate or recommend for review, right?

16 A. Yes.

17 Q. You recall his questions about those?

18 A. Yes, I do.

19 Q. And if we scroll down a little more -- that's all  
20 right. Sometimes it works, sometimes it doesn't. If we can  
21 scroll down a little more down there.

22 Mr. Randles pointed out that one of the things was  
23 testing for volatility, correct?

24 A. Yes.

25 Q. Now, that's not the only protocol objective that would

1 come under this scrutiny, correct?

2 A. Correct.

3 Q. What are the other ones?

4 A. Well, as indicated, herbicide impacts to sensitive  
5 areas, which, of course, can happen from physical drift or  
6 any other off-target movement. Synergy was mentioned  
7 earlier today, had become a significant issue with the  
8 Enlist herbicide that was at EPA and we anticipated would  
9 impact our registration. And then, of course, new  
10 performance claims beyond those already established, or  
11 competitor formulations. That's the list that we had here.

12 Q. Could we go back up to the first box that you made,  
13 Ms. Bedard, please. Okay. Sorry.

14 Dr. Carey, I want to ask you about this language  
15 saying, "potential to compromise regulatory strategy." Can  
16 you explain to the ladies and gentlemen of the jury your  
17 understanding of what that means?

18 A. Well, what we meant here was that our regulatory  
19 organization was very clear with us that EPA would require  
20 absolutely high quality data conducted under the protocols  
21 that they -- in the way that they, being EPA, would require,  
22 and that basically means GLP.

23 Q. What is GLP?

24 A. Good laboratory practices.

25 Q. What is good laboratory practices?

1 A. Well, it's a -- and I'm not an expert because I've not  
2 done GLP work. Usually --

3 Q. What generally do you know about it?

4 A. It's essentially the highest level of laboratory -- or  
5 not "laboratory" -- field research work conducted under  
6 strict controls and measures to insure that the protocols  
7 are followed and conducted to the highest degree of quality,  
8 and actually has components and elements of it that prevents  
9 the potential for bias because you -- as the company, you  
10 don't do that work yourself; you have to contract a  
11 third-party who's certified to do that work and do it under  
12 those requirements.

13 Q. So, the "compromising regulatory strategy" refers to  
14 using only GLP testing?

15 A. It does.

16 Q. Why would that compromise the regulatory strategy if  
17 you don't use good laboratory practices?

18 A. Well, especially if it's a type of testing that you're  
19 not qualified to do, don't have experience doing -- and,  
20 frankly, our TD organization do not do, we're not certified  
21 to do that type of work -- if a mistake is made it could  
22 lead to misinterpretation or misrepresentation.

23 Q. Was -- is it your understanding that this language  
24 about compromising regulatory strategy have anything to do  
25 with, we don't want to do any testing if it's going give us

1 a result we don't like?

2 A. No. We were conducting the research that needed to  
3 happen on volatility and on other aspects of the protocol  
4 development, but it was being done under controlled  
5 circumstances.

6 Q. Now -- and does EPA require GLP before herbicide is  
7 approved for volatility anyway?

8 A. Well, again, I'm not a regulatory person, but my  
9 understanding is, this type of research would have required  
10 GLP studies because it's a unique type of research.

11 Q. And that kind of gets me into another area I want to  
12 talk with you about that Mr. Randles asked you about, and  
13 that is academic testing and the stopping of academic  
14 testing in 2015.

15 What is your understanding as to why Monsanto stopped  
16 academic testing on volatility in 2015 prior to the EPA  
17 approving XtendiMax with VaporGrip?

18 A. Well, it relates back to this discussion that EPA's  
19 requirements are very specific, and they were going to  
20 require GLP results, and we wanted to insure that any work  
21 that we did followed that protocol, followed those  
22 requirements.

23 Q. Well, don't academics do their studies, their field  
24 studies, under good laboratory practices, GLP?

25 A. That's not a typical -- as I said before, honestly,

1 very few research entities are certified for that work, and  
2 it's not a typical type of work that universities are doing,  
3 not the type of university researchers that we typically  
4 work with.

5 Q. They don't have the resources to do it?

6 A. Resources is another issue. It takes a tremendous  
7 amount of resources, as well as training, documentation, and  
8 certification.

9 Q. And why does it -- why does GLP -- what's some of the  
10 reasons GLP requires training and documentation and  
11 certification? Why require all of that?

12 A. Well, obviously -- I shouldn't say "obviously." EPA  
13 is, you know, making critical decisions, and so,  
14 understandably, they're going to demand the highest quality,  
15 you know, highest rigor type of research done in a  
16 consistent manner so that the results can be -- they can be  
17 reliable and they can be confident in those results.

18 Q. Mr. Randles asked you, I think yesterday, about -- you  
19 know, might have been today, I don't remember -- whether you  
20 should try and get bias out of scientific testing. Do you  
21 recall those questions?

22 A. I do.

23 Q. Does GLP have anything to do with trying to remove the  
24 bias?

25 A. Again, I don't know the exact process, but I learned



1 that -- about GLP, that the third-party is not only  
2 collecting the data, conducting the work, but analyzing the  
3 results. So there are parameters or elements that are  
4 designed to take the potential for bias out of that  
5 research.

6 Q. And what about the documentation and having to write  
7 everything down and having it all double checked so that  
8 somebody can look over the shoulder, does that have anything  
9 to do with getting the bias out as well?

10 A. Absolutely. Every -- yes. It's very, very detailed  
11 work.

12 Q. Now, I want to ask you something else that you brought  
13 up in one of your answers there about training and that sort  
14 of thing. You're a weed scientist, correct?

15 A. Yes.

16 Q. Generally speaking, are weed scientists qualified to  
17 test for volatility?

18 A. To my experience, most weed scientists don't do that  
19 type of testing, at least not -- again, GLP type testing  
20 certainly, and really not trained or experienced typically  
21 in doing volatility research.

22 Q. And Mr. Randles pointed out that Monsanto did not have  
23 the academics doing volatility testing in 2015 or '16, but  
24 they allowed them to continue doing what are called efficacy  
25 testing, whether the --

1 A. Yes.

2 Q. -- weed killer would kill the weeds, right?

3 A. Yes.

4 Q. Is that the type of testing that weed scientists are  
5 used to doing day in and day out?

6 A. Very much so, yes.

7 Q. Mr. Randles suggested that after XtendiMax with  
8 VaporGrip was on the shelf in November of 2016 or beginning  
9 of 2017, that, well, at that point the academics didn't need  
10 Monsanto any more because they can just walk into the store,  
11 grab a bottle of XtendiMax, and go do the volatility testing  
12 themselves. Do you recall those questions?

13 A. Yes, I do.

14 Q. Is it your understanding that an academic could have  
15 just walked into the store, grabbed a bottle of XtendiMax,  
16 and gone and done field testing, volatility field testing?

17 A. Well, certainly they could purchase the product and do  
18 testing. The type of testing we're talking about, and  
19 really the type of testing it takes to answer the questions  
20 or the -- in some cases the concerns that the university  
21 researchers had, they would need more specialized equipment  
22 and a lot more than just an efficacy trial.

23 Q. And, in fact, after the EPA approved Xtend with  
24 VaporGrip in November of 2016, Monsanto started sponsoring,  
25 giving money to academics to go do independent research on

1 volatility of XtendiMax, correct?

2 A. That's correct.

3 Q. And you just mentioned something about special  
4 equipment. Did the academics -- did they all have the  
5 special equipment they even needed to do the volatility  
6 testing?

7 A. No. In fact, that academic group designed the  
8 protocols and the research they wanted to do, and we did not  
9 ask them -- we did not direct that research. It was their  
10 protocol, their research to answer the questions they had  
11 concerns about. But when they designed the protocol it  
12 became apparent that they would need more specialized  
13 equipment than they had or had access to, so Monsanto  
14 sponsored the work, even though it was their protocol, but  
15 we also in many cases provided specialized equipment to  
16 enable it.

17 Q. Equipment they didn't otherwise have already?

18 A. That's right.

19 Q. Dr. Carey, I want to go on to another document that  
20 Mr. Randles showed you part of. This is Exhibit 510,  
21 already in evidence. And if we could go, please, to page  
22 of. If you could just -- no. I got the wrong -- that's  
23 five, please. If we could go to the next page, page --  
24 there we go. If you could blow that up, Ms. Bedard. Thank  
25 you.

1           Mr. Randles went over part of this page with you. Do  
2 you remember that?

3 A.       Yes.

4 Q.       And there are three categories on this page, correct?

5 A.       There are.

6 Q.       Benefits on the one hand, right?

7 A.       Benefits, risks, and a plan.

8 Q.       Okay. Let's talk about those three. Well, let's talk  
9 about it holistically first. What's going on on this page?  
10 Why are we looking at benefits and risks and plan, and how  
11 do they go together?

12 A.       Well, in the context of the overall presentation, you  
13 know, people within the organization -- and I wasn't  
14 involved in this one --

15 Q.       Right.

16 A.       -- were debating and taking into consideration all of  
17 the things that they felt were critical to consider as to  
18 whether or not they should go forth with the launch of the  
19 XtendFlex cotton in 2015 before we would have had the  
20 registration for the herbicide.

21 Q.       And, so, on the one hand there are benefits to doing  
22 that, correct?

23 A.       Yes.

24 Q.       And then, on the other hand, there are risks to doing  
25 that, correct?

1 A. Yes.

2 Q. And if you want to go forward, you come up with a plan  
3 to try to address at least some of those risks, is that  
4 fair?

5 A. That's correct.

6 Q. And is that what's going on on this slide?

7 A. Yes, that's exactly what this indicates.

8 Q. So let's look at a couple of the benefits. And I want  
9 to start with the top one. I think Mr. Randles highlighted  
10 part of that but I want to highlight the whole thing on the  
11 top bullet. "XtendFlex" -- and that's the name of the Xtend  
12 cottonseed?

13 A. That's the cotton product, yes.

14 Q. It says, "One of the benefits is that growers will  
15 still have the choice and flexibility to use glyphosate and  
16 glufosinate."

17 What are we talking about there?

18 A. So, glyphosate is the common name for Roundup, and  
19 glufosinate the was common name for Liberty herbicide. So,  
20 it's just pointing out that the growers can use both of  
21 those products if they have this XtendFlex cotton, and those  
22 are approved herbicides.

23 Q. It was what we were talking about before, it wasn't  
24 like the cotton was going to go out there with no legal  
25 herbicide to use over it?

1 A. That's correct. Plus -- they have those two, but --  
2 and every other registered herbicide for any other cotton.

3 Q. And, in fact, the next bullet under "Benefits" shows  
4 that over 35 percent of cotton planted the year before, in  
5 fact, contains glufosinate tolerance, but, of course, that  
6 was seed from another company, right?

7 A. I believe that's correct.

8 Q. So, there's already a market out there for cotton with  
9 glufosinate, Liberty, tolerance, right?

10 A. Correct.

11 Q. Now, several other benefits there. I'm not going to  
12 take everybody's time to go through all of those, but let's  
13 go down to the risks, particularly the one that Mr. Randles  
14 pointed out, and that's in the middle. "Growers make  
15 off-label applications of dicamba." You see that one?

16 A. I do.

17 Q. And that was a risk of putting out the seed in 2015  
18 and '16, correct?

19 A. That's correct.

20 Q. If -- what is an off-label? Just so we're clear, in  
21 2015, when there's no dicamba approved for over-the-top use  
22 on Xtend cotton, what does "off-label" mean, "off-label  
23 application of dicamba"?

24 A. So, "off-label" is a common term used in the industry  
25 to say that either there's no label approved for that or

1 it's an application that's inconsistent with a label that  
2 does exist. In this case it's talking about, there would be  
3 no label and it would be an illegal application if it were  
4 made.

5 Q. I'm sorry. It would be an illegal application?

6 A. Illegal. Sorry.

7 Q. And, so, at the bottom is there a plan to try to  
8 respond to that potential risk?

9 A. The plan on this slide suggests that XtendFlex cotton  
10 would be launched, along with a robust communication plan,  
11 that dicamba cannot be used.

12 Q. And Mr. Randles has made numerous references during  
13 his questioning of you as just a pink label?

14 A. Yes.

15 Q. Remember those?

16 A. Yes.

17 Q. Is that all Monsanto did was just a pink label or  
18 another form of a pink label?

19 A. No.

20 Q. Let's go to the very next page and see some of the  
21 things that Monsanto planned to do for the communication to  
22 growers and retailers to tell them, you can't spray this  
23 stuff in 2015 or -- well, this one's 2015.

24 What are we looking at here, Dr. Carey?

25 A. Well, this is, again, a plan for communications to

1 growers and to retail how we would educate them and the  
2 tactics we would take to do that.

3 Q. Let's take a look at some of these. Mr. Randles asked  
4 you about, *well, did you send -- do you know if you sent*  
5 *emails out to every single person who was buying this stuff?*

6 Let's look at the second one, letter to all growers  
7 who purchase. What's that?

8 A. So, that's referring to -- as was discussed earlier  
9 today, we have record of anyone who would have a license to  
10 use our technologies, so a letter would have been sent to  
11 all of those individuals.

12 Q. Telling them what?

13 A. Well, telling them that they can plant this cotton but  
14 they cannot apply any dicamba over the top of that cotton,  
15 we don't have a registration yet.

16 Q. Is that all that Monsanto did?

17 A. No. There's a long list here.

18 Q. Let's take a look at the next one, letters to all  
19 dealers with inventory. What's that?

20 A. So, the dealers in this case would refer to people who  
21 sell the XtendiMax -- excuse me, in this case it would be  
22 seed. So, our -- Delta Pine would be our brand, but any  
23 dealer who has inventory of the XtendFlex seed, they would  
24 have gotten a letter indicating the same things.

25 Q. That you can't spray dicamba in 2015?



1 A. That's correct.

2 Q. The next one says, "Communication and direction  
3 through SRPs." What's an SRP?

4 A. SRP stands for strategic retail partner. In our  
5 organization, in Monsanto, examples of that would be  
6 Growmark, Winfield United, Nutrien, a lot of the large  
7 distributors who sell, not only crop protection chemicals,  
8 but also seed.

9 Q. Let's jump down a couple corporate messages into,  
10 "Winter grower group training." What are we talking about  
11 there?

12 A. So, within the Bayer -- at this time Monsanto  
13 organization -- we have multiple different seed brands that  
14 we go to market with: Asgrow, Dekalb, Channel, and then a  
15 number of regional brands. All of those -- all of the sales  
16 people, the agronomists that are parts of those brands and  
17 work with farmers and dealers, always have winter trainings,  
18 multiple trainings and meetings all through the winter and  
19 all through the spring in preparation for the upcoming year,  
20 so these messages were included in all of those trainings.

21 Q. Let's go to -- well, let's go to the next one, pallet  
22 and -- is that Bolbox? Bolbox packaging inserts, do you  
23 know what those are?

24 A. Generally, yes. You know, cotton may be packaged in  
25 different ways. Cottonseed that's sold by planting by a

1 farmer may come in bags or units on a pallet or in a Bolbox,  
2 you know, in a larger container that's used for larger  
3 planters.

4 Q. So this is not the pink label on every bag we're  
5 talking about?

6 A. I don't believe this is the pink label.

7 Q. Okay. Then you got a couple more down, "Attachment to  
8 the dealer bill of lading." What's that?

9 A. That one I'm not nearly as familiar with, but clearly,  
10 it's another -- it's another touchpoint with people who are  
11 purchasing the seed.

12 Q. And, again, just skipping another one, going down to  
13 the bottom: "Bulletins and notice through extension and  
14 influential academics." So, you're also going to the  
15 academics to get the word out that you can't use dicamba in  
16 2015?

17 A. Yes, absolutely. We asked for their help and support  
18 in doing that.

19 Q. So, I know I skipped a few on this list. Is the pink  
20 label even mentioned in any of this?

21 A. I don't believe it's on this list.

22 Q. Okay. So if we look at just some of the ones, you're  
23 talking about sending letters to the growers in March,  
24 right?

25 A. Yes.

1 Q. Letters to the dealers in March, right?

2 A. Correct.

3 Q. Communications through SRPs throughout the winter,  
4 right?

5 A. Yes.

6 Q. Messages to winter growing groups from January through  
7 March, right?

8 A. Yes.

9 Q. Packaging inserts when the seed is delivered, correct?

10 A. Yes.

11 Q. Attachments to the bill of lading when they're  
12 delivered, right?

13 A. Yes.

14 Q. And then bullets and notice through extension and  
15 influential academics throughout the spring, correct?

16 A. Yes.

17 Q. And I know I've skipped a few but we'll leave it at  
18 that for now.

19 **MR. MILLER:** Court's indulgence one moment,  
20 Your Honor.

21 **THE COURT:** You can stand up if you want.

22 **MR. MILLER:** I'm not going to be able to finish this  
23 afternoon, Your Honor. However long you'd like me to go.

24 **THE COURT:** As long as it's okay with them.

25 **MR. MILLER:** Let me go through three more exhibits --

1 they're not going to be real long -- and then I think that  
2 would be a good stopping point, Your Honor. If it please  
3 the Court.

4 Q. (By Mr. Miller) Let me go to Exhibit 604, please. And  
5 this is already in evidence. Mr. Randles put this in. If  
6 you could blow that up, please, Ms. Bedard.

7 This was the email about the call with Darren Brown,  
8 correct?

9 A. Yes.

10 Q. I want to point out one thing here because it links  
11 into something you and I talked about probably 45 minutes  
12 ago now. The last sentence of the first paragraph there, he  
13 had a positive experience overall except for a spray tank  
14 contamination that he acknowledged was his fault. To your  
15 understanding, what is that talking about?

16 A. Well, as was discussed earlier today, Darren Brown is  
17 obviously a seed grower for us, so -- obviously, we don't  
18 produce seed in a factory, it's produced in farmers' fields.  
19 This is one of the farmers who was helping grow Roundup  
20 Ready 2Xtend soybeans for us, as well as Bollgard II  
21 XtendFlex, and over those -- so it indicates that for four  
22 years he was evidently doing that.

23 Now, this is all before either -- some of this would  
24 have been either before the seed or the -- certainly before  
25 the herbicides were registered, and so he had to use M1691,

1 which we discussed earlier is a basically a Clarity product  
2 that was never commercialized for commercial applications  
3 but was used before the registration for seed growers.

4 Q. And when we're talking about spray tank contamination,  
5 that's one of the forms of off-target movement that we  
6 talked about?

7 A. Yes.

8 Q. Let me go on to the last two for today. Let's start  
9 with Plaintiffs' 169, please.

10 And this is the compliance advisory from August 2016  
11 that Mr. Randles showed you. Do you recall that?

12 A. Yes.

13 Q. And if we could go down to where he -- the part he  
14 showed you, agricultural concerns, right? Thank you.

15 And, as he noted in there, the EPA says, to date, the  
16 Missouri Department of Agriculture has received  
17 approximately 117 complaints alleging misuse of pesticide  
18 products containing dicamba, correct?

19 A. Correct.

20 Q. Now, was it legal to use any dicamba over Xtend crops,  
21 either cotton or soy, in August of 2016?

22 A. It was not.

23 Q. And does the EPA say here in this paragraph that  
24 they've gone into it at that point and looked and found out  
25 that, in fact, these complaints are dicamba, or is there

1 further investigation as far as you can tell from this?

2 A. This doesn't conclude what the outcome of their  
3 investigations were.

4 Q. Let's look at the next page to see what they can do  
5 depending on the outcome of their investigation. Can we go  
6 to the end of the first full paragraph. Yeah. That one,  
7 please. Thank you.

8 And EPA announces to everybody that, EPA enforcement  
9 actions -- the last sentence -- "may include but are not  
10 limited to assessing civil and criminal penalties." Is that  
11 correct?

12 A. That's what it says, yes.

13 Q. And are you aware that EPA has the authority to do  
14 that?

15 A. That would have been my understanding, yes.

16 Q. If someone is spraying illegally, what other  
17 government organizations that you're aware of are there to  
18 go in and investigate and apply penalties?

19 A. Well, I don't know of all, but I'm certain that the  
20 state departments of agriculture would be the key entities  
21 that would have that ability.

22 Q. As far as you know, does the -- if somebody is alleged  
23 to have sprayed illegally, can Monsanto just go onto that  
24 person's field and start their investigation without their  
25 permission?

1 A. No, that's -- I don't believe that's possible.

2 Q. Could the state and federal government do that?

3 A. I don't know but I assume that they have the authority  
4 to.

5 Q. Let me ask you this: This advisory was sent out in  
6 August of 2016, correct?

7 A. Yes.

8 Q. What happened regarding the EPA's view of XtendiMax  
9 with VaporGrip after August of 2016 when was it approved?

10 A. So, I'm making sure I have my years and months  
11 correct, but from August of 2016 -- as of November of 2016  
12 is when the EPA approved XtendiMax with VaporGrip  
13 technology.

14 Q. So, the three months after this compliance advisory  
15 was sent out -- and presumably investigations are ongoing  
16 during those three months -- three months later the EPA  
17 approves the sale of XtendiMax with VaporGrip for sale to  
18 the public, correct?

19 A. That's correct.

20 Q. Let's go to Exhibit 219, please. This is the other  
21 compliance advisory that Mr. Randles showed you. Do you  
22 recall this?

23 A. I do now.

24 Q. And this one's 11 months later, July of 2017, correct?

25 A. Yes.

1 Q. Now, this is after XtendiMax with VaporGrip is on the  
2 market, right?

3 A. That's correct.

4 Q. It's the first growing season, in fact, that it was  
5 available, and Engenia, too, was available to be used?

6 A. Yes, that's correct.

7 Q. All right. And if you could go down, please, to the  
8 paragraph under -- yeah, agricultural concerns. And, again,  
9 this is something talking about potential off-target  
10 movement complaints that have come in, right?

11 A. Yes.

12 Q. And the last two sentences of that paragraph say,  
13 "Both physical drift and volatilization of dicamba from the  
14 target application site have been reported," right?

15 A. That's correct.

16 Q. But then it goes on to say, "The underlying causes of  
17 the various damage reports are still being investigated," is  
18 that right?

19 A. That's correct.

20 Q. So, no conclusion in here about whether these reports  
21 are or are not, in fact, dicamba, right?

22 A. There's -- I don't see a conclusion here, no.

23 Q. And, again, they're talking about both drift and  
24 volatilization, is that right?

25 A. They mention both, yes.



1 Q. Is the incidence or is the tendency to drift, physical  
2 drift, where the person's spraying it and the wind's blowing  
3 it, is that any greater for XtendiMax than it is for any  
4 other herbicide on the market?

5 A. No.

6 Q. So, whatever number of complaints dealing with  
7 physical drift would have nothing to do with volatility of  
8 the chemical properties of XtendiMax with VaporGrip,  
9 correct?

10 A. That's correct.

11 Q. Let's go to the next page. And if you could go to the  
12 second paragraph, please, Ms. Bedard. Yeah, that one.

13 And the EPA tells people, "If you suspect crop damage  
14 has been caused by the off-target movement of dicamba" --  
15 and, by the way, the off-target movement, the most common  
16 form is what?

17 A. Physical drift.

18 Q. Second is what?

19 A. Tank contamination.

20 Q. And third is volatilization?

21 A. Yes.

22 Q. So, if you believe any of that happened, they're  
23 directing people to call your state department of  
24 agriculture and your state pesticide regulatory agency, is  
25 that correct?

1 A. That's what it says.

2 Q. And it goes on to tell everybody that the EPA is  
3 working directly with state lead agencies and is interested  
4 in reviewing any information obtained from investigations of  
5 possible crop damage related to the use of dicamba, correct?

6 A. Correct.

7 Q. And this came out in July of 2017, is that right?

8 A. That's correct.

9 Q. And a little over one year later, what decision, if  
10 any, did the EPA make after they looked at all of these  
11 investigations about XtendiMax with VaporGrip? Did they say  
12 no more or did they give it another approval to continue to  
13 be sold?

14 A. The EPA issued another approval for another two years.

15 **MR. MILLER:** Probably a good stopping point,  
16 Your Honor, if it please the Court.

17 **THE COURT:** All right. Remember the admonitions I've  
18 given to you. But more than that, again, because your  
19 family, your spouses, your children, your friends, they're  
20 all going to want to know what you're doing here, remember,  
21 tell them you're under oath not to discuss the case; not  
22 only not to just the case, but also you shouldn't listen to  
23 any reports, anything in the media. You should not do any  
24 research. You know all of the admonitions.

25 So, I want to thank you for being so attentive. I

1 noticed that not a single one of you nodded off at all.  
2 You're really paying close attention to this complicated  
3 case, and I know all the parties really appreciate that, as  
4 I do.

5 So, with that, the Court Security Officers will help  
6 you to your vehicles. We'll start again at 9:00 tomorrow  
7 then.

8 *(Jury out)*

9 **THE COURT:** So we have time to do any work. This is  
10 off the record.

11 *(Off the record)*

12 **THE COURT:** We'll be adjourned until tomorrow at 9:00.

13 *(Proceedings adjourned at 5:03 p.m.)*

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**REPORTER'S CERTIFICATE**

I, Laura A. Esposito, Registered Professional Reporter and Certified Realtime Reporter, hereby certify that I am a duly appointed Official Court Reporter for the United States District Court for the Eastern District of Missouri.

I further certify that the foregoing is a true and accurate transcript of the proceedings held in the above-entitled case, that said transcript contains pages 1 through 131, inclusive, and was delivered electronically. This reporter takes no responsibility for missing or damaged pages of this transcript when same transcript is copied by any party other than this reporter.

Dated at St. Louis, Missouri, this 30th day of January 2020.

*Laura A. Esposito*  
\_\_\_\_\_  
Laura A. Esposito, RPR, CRR, CRC  
Official Court Reporter