

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

|                            |   |                      |
|----------------------------|---|----------------------|
| CORTEVA AGRISCIENCE LLC,   | ) |                      |
|                            | ) |                      |
| Plaintiff,                 | ) |                      |
|                            | ) |                      |
| v.                         | ) | C.A. No. 22-1046-GBW |
|                            | ) |                      |
| MONSANTO COMPANY and BAYER | ) |                      |
| CROPSCIENCE LP,            | ) |                      |
|                            | ) |                      |
| Defendants.                | ) |                      |
|                            | ) |                      |

**JOINT CLAIM CONSTRUCTION CHART**

Pursuant to paragraph 8 of the Scheduling Order (D.I. 25) and the Amended Scheduling Order (D.I. 62), Plaintiff Corteva Agriscience LLC (“Corteva”) and Defendants Monsanto Company and Bayer CropScience LP (collectively, “Defendants”) hereby submit this Joint Claim Construction Chart identifying for the court claim terms of U.S. Patent Nos. 10,947,555 (“the ’555 Patent”), 11,149,283 (“the ’283 Patent”), and 11,299,745 (“the ’745 Patent”) for construction, together with the parties’ proposed constructions of the disputed claim language and citations to the supporting intrinsic evidence. The parties reserve their rights to rely on citations listed in the column for the opposing party. The parties further reserve their rights to rely on additional intrinsic evidence to the extent it is necessary to provide additional context or to rebut arguments made by the opposing side during the claim construction briefing. The parties also reserve their rights to rely on extrinsic evidence.

**I. Disputed Claim Terms and Citation of Intrinsic Evidence**

| Claim Terms/Phrases                                                                                                                                                                                                                 | Corteva's Constructions                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Defendants' Constructions                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|                                                                                                                                                                                                                                     | Proposed Construction                                                                                                                                                                                 | Intrinsic Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Proposed Construction                                                                                                                                                                                            | Intrinsic Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b><u>Term 1</u></b></p> <p>"X<sub>112</sub> represents a single amino acid at position 112, relative to the sequence of SEQ ID NO: 9"</p> <p>('555 patent claims 1, 34; '283 patent claims 1, 29; '745 patent claims 1, 29)</p> | <p>X<sub>112</sub> represents a single amino acid that aligns with the amino acid at position 112 of SEQ ID NO: 9 when the amino acid sequence of the AAD-1 protein is aligned with SEQ ID NO: 9.</p> | <p>'555 patent<sup>1</sup> (COR-AAD1-00006461) at claims 1 and 34; 5:30-6:8; 6:11-25; 6:56-63; 17:66-18:7; 37:67-38:3; 44:20-27; 44:36-44; 58:26-37; 58:39-42; Examples 5-9, 11-14, and 17-26; Tables 14-29, 32, and 35-38; Figs. 8A, 8B, 9A-9C, 10-18, 20, and 21; SEQ ID NOs: 9, 10, and 11.</p> <p>'283 Patent (COR-ADD1-00006345) at claims 1 and 29.</p> <p>'745 Patent (COR-AAD1-00006229) at claims 1 and 29.</p> <p>U.S. Pat. App. No. 15/288,406 Prosecution history (COR-AAD1-0000001) at COR-AAD1-</p> | <p>X<sub>112</sub> represents a single amino acid at position 112 in the encoded AAD-1 amino acid sequence, as in the sequence of SEQ ID NO: 9. The single amino acid at position 112 can be any amino acid.</p> | <p><b><u>'555 Patent</u></b></p> <p><u>Specification &amp; Claims</u></p> <ul style="list-style-type: none"> <li>• pp. 1-6</li> <li>• 5:15-6:28</li> <li>• 6:30-7:33</li> <li>• 17:63-18:36</li> <li>• 37:56-38:5</li> <li>• Example 2 (45:49-50:67)</li> <li>• Example 3 (51:31-52:33)</li> <li>• Example 4 (52:35-55:34)</li> <li>• Example 5 (59:55-60:67)</li> <li>• Example 6 (65:18-69:43)</li> <li>• Figs. 1-7, 19-22</li> <li>• SEQ ID NO: 9, 10, 11</li> <li>• Tables 6-9, 15-16</li> <li>• Claims 1-34</li> </ul> <p><u>Prosecution History</u></p> <ul style="list-style-type: none"> <li>• U.S. Pat. App. No. 15/288,406 <ul style="list-style-type: none"> <li>◦ Original Specification, Including Original</li> </ul> </li> </ul> |

<sup>1</sup> Since the three patents in suit share the same specification, Corteva's citations will be provided to the specification of the '555 patent.

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|  |  | 00000003 – 010<br>(2016.10.07 Preliminary<br>Amendment); COR-<br>AAD1-00000036 – 235<br>(2016.10.07 Specification,<br>Including Original<br>Claims); COR-AAD1-<br>00000267 – 278<br>(2018.11.13 Non-Final<br>Rejection); COR-AAD1-<br>00000457 – 474<br>(2019.04.12 First Wright<br>Declaration); COR-AAD1-<br>00000479 – 494<br>(2019.04.12 Amendment<br>and Response);<br>COR-AAD1-00000496 –<br>515 (2019.07.12 Final<br>Rejection); COR-AAD1-<br>00000557 – 589<br>(2020.01.10 Amendment<br>and Response); COR-<br>AAD1-00000590 – 622<br>(2020.01.10 Nair<br>Declaration); COR-AAD1-<br>00000629 – 642<br>(2020.03.10 Non-final<br>Rejection); COR-AAD1-<br>00000655 – 670<br>(2020.09.09 Second<br>Wright Declaration); COR-<br>AAD1-00000676 – 693<br>(2020.09.09 Response). |  | Claims (COR-AADI-<br>00000036-195)<br>○ Preliminary<br>Amendment<br>(COR-AADI-<br>00000003-10)<br>○ Non-Final Rejection<br>(Nov. 13, 2018) (COR-<br>AAD1-00000267-278)<br>○ Examiner Interview<br>Summary & Appendix<br>(Mar. 22, 2019)<br>(COR-AADI-<br>00000451-455)<br>○ Declaration of Dr.<br>Terry R. Wright &<br>Appendices (Apr. 12,<br>2019) (COR-AADI-<br>00000457-474)<br>○ Amendment &<br>Response (Apr. 12,<br>2019) (COR-AADI-<br>00000479-494)<br>○ Final Rejection (July<br>12, 2019) (COR-AADI-<br>00000496-515)<br>○ Request for Continued<br>Examination,<br>Amendment &<br>Response (Jan. 10,<br>2020)<br>(COR-AADI-<br>00000520-522) |
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|  |  | <p>U.S. Pat. App. No. 17/175,966 Prosecution history (COR-AAD1-00005481) at COR-AAD1-00005496 – 5500 (2021.02.15 Claims as-filed); COR-AAD1-00006134 – 142 (2021.04.21 Amendment and Response to Pre-exam Sequence Notice).</p> <p>U.S. Pat. App. No. 17/403,476 Prosecution history (COR-AAD1-00005063) at COR-AAD1-00005260 – 264 (2021.08.16 Claims as-filed); COR-AAD1-00005422 – 437 (2022.01.14 Amendment and Response).</p> |  | <ul style="list-style-type: none"> <li>○ Declaration of Dr. Satish K. Nair &amp; Appendices (Jan. 10, 2020) (COR-AADI-00000590-622)</li> <li>○ Non-Final Rejection (Mar. 10, 2020) (COR-AADI-00000629-642)</li> <li>○ Examiner Interview Summary &amp; Appendix (Aug. 31, 2020) (COR-AADI-00000649-652)</li> <li>○ Declaration of Dr. Terry R. Wright &amp; Appendices (Sept. 9, 2020) (COR-AADI-00000654-670)</li> <li>○ Amendment &amp; Response (Sept. 9, 2020) (COR-AADI-00000676-693)</li> <li>○ Non-Final Rejection (Dec. 8, 2020) (COR-AADI-00003842-3848)</li> <li>○ Amendment &amp; Response (Dec. 16, 2020) (COR-AADI-00003890-3898)</li> <li>○ Notice of Allowance (Jan. 4, 2021) (COR-AADI-00004686-4691)</li> <li>○ U.S. Pat. App. Pub. No. 2016/0108422</li> </ul> |
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|  |  |  |  | <p>(BAYER-0343083-343161)</p> <ul style="list-style-type: none"> <li>• U.S. Pat. No. 7,838,733</li> <li>• U.S. Pat. No. 9,127,289</li> <li>• U.S. Pat. No. 10,174,337</li> </ul> <p><b><u>'283 Patent</u></b></p> <ul style="list-style-type: none"> <li>• Evidence cited for '555 Patent</li> </ul> <p><b><u>Specification &amp; Claims</u></b></p> <ul style="list-style-type: none"> <li>• pp. 1-6</li> <li>• 5:28-6:42</li> <li>• 6:44-7:47</li> <li>• 18:37-19:13</li> <li>• 37:37-53</li> <li>• Example 2 (45:27-50:45)</li> <li>• Example 3 (51:6-52:7)</li> <li>• Example 4(52:9-54-57)</li> <li>• Example 5 (59:9-60:4)</li> <li>• Example 6 (63:43-68:38)</li> <li>• Figs. 1-7, 19-22</li> <li>• SEQ ID NO: 9, 10, 11</li> <li>• Tables 6-9, 15-16</li> <li>• Claims 1-29</li> </ul> <p><b><u>Prosecution History</u></b></p> <ul style="list-style-type: none"> <li>• <u>U.S. Pat. App. No. 17/175,966</u></li> </ul> |
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|  |  |  |  | <ul style="list-style-type: none"><li>○ Original Specification, Including Original Claims (COR-AADI-00005496-5664)</li><li>○ Amendment &amp; Response (Apr. 26, 2021) (COR-00006134-6142)</li></ul> <p><b><u>'745 Patent</u></b></p> <ul style="list-style-type: none"><li>● Evidence Cited for '555 &amp; '283 Patents</li></ul> <p><b><u>Specification &amp; Claims</u></b></p> <ul style="list-style-type: none"><li>● pp. 1-6</li><li>● 5:30-6:45</li><li>● 6:44-8:2</li><li>● 18:39-19:13</li><li>● 37:24-52</li><li>● 37:53-38:2</li><li>● Example 2 (45:35-50:45)</li><li>● Example 3 (51:6-52:6)</li><li>● Example 4 (52:8-54:59)</li><li>● Example 5 (59:11-60:7)</li><li>● Example 6 (63:43-68:14)</li><li>● Figs. 1-7, 19-22</li><li>● SEQ ID NO: 9, 10, 11</li><li>● Tables 6-9, 15-16</li><li>● Claims 1-29</li></ul> <p><b><u>Prosecution History</u></b></p> |
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|                                                                                                                                                                                        |                                                                                                                                                                                                                          |             |                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• <u>U.S. Pat. App. No. 17/403,476</u> <ul style="list-style-type: none"> <li>○ Original Specification, Including Original Claims (COR-AADI-00005082-5265)</li> <li>○ Amendment &amp; Remarks (Jan. 14, 2022)(COR-00005422-5437)</li> </ul> </li> </ul> |
| <p><b><u>Term 2</u></b><br/>“(X)<sub>114-137</sub> represents a sequence of 24 amino acids”</p> <p>(’555 patent claims 1, 34; ’283 patent claims 1, 29; ’745 patent claims 1, 29)</p>  | <p>(X)<sub>114-137</sub> represents a sequence of 24 amino acids that aligns with the sequence of positions 114-137 of SEQ ID NO: 9 when the amino acid sequence of the AAD-1 protein is aligned with SEQ ID NO: 9.</p>  | See Term 1. | <p>(X)<sub>114-137</sub> represents a sequence of 24 consecutive amino acids at positions 114-137 in the encoded AAD-1 amino acid sequence, as in the sequence of SEQ ID NO: 9. Each of the 24 consecutive amino acids can be any amino acid.</p> | Same as for Term 1                                                                                                                                                                                                                                                                             |
| <p><b><u>Term 3</u></b><br/>“(X)<sub>139-269</sub> represents a sequence of 131 amino acids”</p> <p>(’555 patent claims 1, 34; ’283 patent claims 1, 29; ’745 patent claims 1, 29)</p> | <p>(X)<sub>139-269</sub> represents a sequence of 131 amino acids that aligns with the sequence of positions 139-269 of SEQ ID NO: 9 when the amino acid sequence of the AAD-1 protein is aligned with SEQ ID NO: 9.</p> | See Term 1. | <p>(X)<sub>139-269</sub> represents a sequence of 131 consecutive amino acids at positions 139-269 in the encoded AAD-1 amino acid sequence, as in the sequence of SEQ ID NO: 9. Each of the 131</p>                                              | Same as for Term 1                                                                                                                                                                                                                                                                             |

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|                                                                                                                                                                                        |                                                                                                                                                                                                                         |                                                                                                                                                                                                       | consecutive amino acids can be any amino acid.                                                                                                                                                                                                    |                           |
| <p><b><u>Term 4</u></b><br/>“(X)<sub>271-280</sub> represents a sequence of 10 amino acids.”</p> <p>(’555 patent claims 1, 34; ’283 patent claims 1, 29; ’745 patent claims 1, 29)</p> | <p>(X)<sub>271-280</sub> represents a sequence of 10 amino acids that aligns with the sequence of positions 271-280 of SEQ ID NO: 9 when the amino acid sequence of the AAD-1 protein is aligned with SEQ ID NO: 9.</p> | <p>See Term 1.</p>                                                                                                                                                                                    | <p>(X)<sub>271-280</sub> represents a sequence of 10 consecutive amino acids at positions 271-280 in the encoded AAD-1 amino acid sequence, as in the sequence of SEQ ID NO: 9. Each of the 10 consecutive amino acids can be any amino acid.</p> | <p>Same as for Term 1</p> |
| <p><b><u>Term 5</u></b><br/>“(X)<sub>282-284</sub> represents a sequence of 3 amino acids”</p> <p>(’555 patent claim 2; ’283 patent claim 2; ’745 patent claim 2)</p>                  | <p>(X)<sub>282-284</sub> represents a sequence of 3 amino acids that aligns with the sequence of positions 282-284 of SEQ ID NO: 9 when the amino acid sequence of the AAD-1 protein is aligned with SEQ ID NO: 9.</p>  | <p>’555 patent (COR-AAD1-00006461) at claims 1 and 2.</p> <p>’283 Patent (COR-ADD1-00006345) at claims 1 and 2.</p> <p>’745 Patent (COR-AAD1-00006229) at claims 1 and 2.</p> <p>See also Term 1.</p> | <p>(X)<sub>282-284</sub> represents a sequence of 3 consecutive amino acids at positions 282-284 in the encoded AAD-1 amino acid sequence, as in the sequence of SEQ ID NO: 9. Each of the 3 consecutive amino acids can be any amino acid.</p>   | <p>Same as for Term 1</p> |

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/s/ Chad S.C. Stover

Chad S.C. Stover (No. 4919)  
BARNES & THORNBURG, LLP  
222 Delaware Ave., Suite 1200  
Wilmington, DE 19801-1054  
Tel: (302) 300-3474  
chad.stover@btlaw.com

OF COUNSEL:

Michael J. Flibbert  
Pier D. DeRoo  
Kassandra M. Officer  
Rachael P. Dippold  
Meredith H. Boerschlein  
FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, LLP  
901 New York Avenue, NW  
Washington, DC 20001-4413  
Tel: (202) 408-4000

*Attorneys for Plaintiff Corteva  
Agriscience LLC*

/s/ Derek J. Fahnestock

Jack B. Blumenfeld (No. 1014)  
Rodger D. Smith II (No. 3778)  
Derek J. Fahnestock (No. 4705)  
MORRIS, NICHOLS, ARSHT & TUNNELL LLP  
1201 North Market  
P.O. Box 1347  
Wilmington, DE 19899  
Tel: (302) 658-9200  
jblumenfeld@mnat.com  
rsmith@morrisnichols.com  
dfahnestock@mnat.com

OF COUNSEL:

Dov P. Grossman  
Alexander S. Zolan  
Stephen Wohlgemuth  
Jessica Palmer Ryen  
Ben Picozzi  
Min Kyung Jeon  
Joseph G. Catalanotto  
WILLIAMS & CONNOLLY LLP  
680 Maine Avenue, S.W.  
Washington, DC 20024  
Tel: (202) 343-50000

*Attorneys for Defendants Monsanto  
Company and Bayer CropScience LP*