



## CAST Issue Paper 68

### ***Agriculture and the Microbiome***

Released August 24, 2020

Co-Chairs: **Drs. Ignazio Carbone and Megan Andrews**,  
North Carolina State University;  
17-member task force

#### **Release/Rollout**

CAST Issue Paper 68, “Agriculture and the Microbiome,” was released on August 24, 2020. On August 25, Drs. Ignazio Carbone and Megan Andrews presented highlights of the paper in a webinar followed by Q&A with a panel of task force authors—Elizabeth Stulberg, Gregory Maloney, and Carolyn Young. There were 653 registrants for the webinar with 282 attendees.

[Webinar Video](#) – 829 views as of August 11, 2022

[Link to commentary, Ag quickCAST, student study guide, webinar video, and Q&A](#)

**In-kind Contributions:** 270 volunteer hours; \$19,980 monetary value

#### **Press Release (results two weeks after release)**

- Distributed through [Constant Contact](#), [PRWeb](#), and the [CAST website](#).
  - Press release went to 8,544 e-contacts resulting in 3,671 opens
  - 591 views of the press release from the CAST website as of February 24, 2022.
  - The press release through PRWeb resulted in 1,832 views and reached 886 targeted influencers (journalists/bloggers).
- 103 media outlets posted the press release. A sampling of sites where the press release was picked up: AgriTech Tomorrow, RFD-TV, News Break, NAAE Communities of Practice, Journal of Commercial Biotechnology, eGreenews, Biotechblog, One News Page (U.S. and Global Editions), Markets Insider, Ask.com, Scoop.it, Seed Daily, Owler, and many daily news and business journal sites, and regional news channels (ABC, CBS, CW, FOX, NBC)

#### **Follow-On Activities**

**American Society of Agronomy/Soil Science Society of America**, 1 CEU was offered to certified crop advisors for watching the webinar

#### **Email comments received following webinar:**

*Thank you very much for the paper Agriculture and the Microbiome, very important contribution for the comprehension of this area of knowledge for us.*

SEC, Facultad de Ingeniería Agraria, Industrias Alimentarias y Ambiental

*This report last updated 8/11/2022.*

Thank you for your work around the recent microbiome zoom meeting. I hope that it received broad participation, as it seems there is an extraordinary amount of work to do. As a fellow communicator, I am aware that our work is mostly in the background. The session was well orchestrated on your part.

DRM, Outreach Strategist US|Africa|Asia

## Paper Distribution

Paper Distribution (print and online) 2 years after release – 3,113

## Indirect Paper Distribution

**AgriTech Tomorrow** (link to paper)

<https://www.agritechtomorrow.com/whitepapers.php>

## EBSCO

**Phytobiomes Alliance** (link to paper)

<https://phytobiomesalliance.org/all-news/>

<https://phytobiomesalliance.org/people/kellye-eversole/>

**Policy Commons** <https://policycommons.net/artifacts/1693466/publication-impacts-report/2425114/>

## Articles and Web Mentions

**American Society of Agronomy**

<https://www.agronomy.org/science-policy/sspr/2020-08-05/>

**America's Farm Report**

<http://americasfarmreport.com/farm-report/usda-tightens-eligibility-rules-for-farm-subsidies-august-24-2020/>

**North Carolina State University CALS News**

<https://cals.ncsu.edu/event/agriculture-and-the-microbiome-cast-webinar/>

**North Carolina State University CALS News**, *For the Next Agricultural Revolution, Look to the Microbiome*, Dee Shore, August 24, 2020

[https://cals.ncsu.edu/news/for-the-next-agricultural-revolution-look-to-the-microbiome/?utm\\_medium=social&utm\\_source=twitter&utm\\_content=cals&utm\\_campaign=socialhub](https://cals.ncsu.edu/news/for-the-next-agricultural-revolution-look-to-the-microbiome/?utm_medium=social&utm_source=twitter&utm_content=cals&utm_campaign=socialhub)

**The Ohio State University, Center of Microbiome Science**

<https://u.osu.edu/coms/events/>

## Citations

**Fungal Genetics and Biology**, *Genetic map and heritability of Aspergillus flavus*, Richard M. Gell, B.W. Horn, I. Carbone, November 2020,

[https://www.sciencedirect.com/science/article/pii/S1087184520301699?casa\\_token=-QFfQ879g8YAAAAA:krH8fQgvnjF7c1hoa3UwrZ1poGxKGWVEhm1zcD6ISJqpCJ-toX\\_kD9z7JamF2qTXUY3ZFBsHPbnd](https://www.sciencedirect.com/science/article/pii/S1087184520301699?casa_token=-QFfQ879g8YAAAAA:krH8fQgvnjF7c1hoa3UwrZ1poGxKGWVEhm1zcD6ISJqpCJ-toX_kD9z7JamF2qTXUY3ZFBsHPbnd)

**Critical Reviews in Food Science and Nutrition**, *Practical considerations will ensure the continued success of pre-harvest biocontrol using non-aflatoxigenic Aspergillus flavus strains*, Geromy G. Moore, January 28, 2021

<https://www.tandfonline.com/doi/full/10.1080/10408398.2021.1873731>

*This report last updated 8/11/2022.*

**Portland Press, Emerging Topics in Life Sciences**, *Plant growth-promoting microbes — an industry view*, Natalie W. Breakfield, Dayna Collett, Michael E. Frodyma, February 18 2021  
<https://doi.org/10.1042/ETLS20200313>

**Society for Applied Microbiology**, *Can it be all more simple? Manufacturing aflatoxin biocontrol products using dry spores of atoxigenic isolates of Aspergillus flavus as active ingredients*, Alejandro Ortega-Beltran, Lawrence Kaptoge, Amadou L. Senghor, Morounranti O. S. Aikore, Patrick Jarju, Henry Momanyi, Matieyedou Konlambigue, Titilayo D. O. Falade, Ranajit Bandyopadhyay, First published: 23 March 2021  
<https://doi.org/10.1111/1751-7915.13802>

**Creating Prosperity from Chaos: A CAPI presentation at the big solutions forum trusted opinion leaders pre-dialogue**, *The Canadian Agri-Food Policy Institute*, May 22, 2021, <https://capi-icpa.ca/wp-content/uploads/2021/06/C2-2021-05-11-CAPI-BSF-Ted-Bilyea-Presentation-at-Pre-Dialogue-Component-2.pdf>

**The American Phytopathological Society**, *Root-Lesion Nematodes Affecting Dryland Cereals in the Semiarid Pacific Northwest U.S.A.*, Richard W. Smiley, published November 24, 2021,  
<https://apsjournals.apsnet.org/doi/full/10.1094/PDIS-04-21-0883-FE>

**Fungal Biology**, *Development of sexual structures influences metabolomics and transcriptomic profiles in Aspergillus flavus*, Volume 126, Issue 3, March 2022, p. 187-200.  
<https://www.sciencedirect.com/science/article/pii/S1878614622000071>

## Social Media

### Twitter—

**Jennie Schmidt MS RD @FarmGirlJen**, August 4, 2020  
<https://twitter.com/FarmGirlJen/status/1290690470755086336>  
1 retweet, 2 likes

**@CASTagScience**, August 18, 2020  
<https://twitter.com/CASTagScience/status/1295723114991583235>  
1 quote tweet, 1 like

**@CASTagScience**, August 22, 2020  
<https://twitter.com/CASTagScience/status/1297187426398609411>  
1 retweet, 2 likes

**@Ron\_on\_ROM**, August 24, 2020  
[https://twitter.com/Ron\\_on\\_ROM/status/1297934705371697152](https://twitter.com/Ron_on_ROM/status/1297934705371697152)  
1 like

**NABC/K-State @KSU\_NABC**, August 24, 2020  
[https://twitter.com/KSU\\_NABC/status/1297867704624390144](https://twitter.com/KSU_NABC/status/1297867704624390144)  
1 like

**David Gogerty @docgoges**, August 31, 2020  
<https://twitter.com/docgoges/status/1300424598521962496>  
2 likes

**Phytobiomes @PhytoBiomes**, August 4, 2020

*This report last updated 8/11/2022.*

<https://twitter.com/PhytoBiomes/status/1290754171969445890>

1 retweet, 2 likes

**AgriTechTmrw @AgriTechTmrw**, August 24, 2020

<https://twitter.com/AgriTechTmrw/status/1297946233596764161>

1 like

**@CASTagScience**, August 24, 2020

<https://twitter.com/CASTagScience/status/1297889067225550850>

6 retweets, 4 likes

**@CASTagScience**, August 25, 2020

<https://twitter.com/CASTagScience/status/1298251494341447681>

1 retweet, 1 quote tweet, 1 like

**Phytobiomes @PhytoBiomes**, August 26, 2020

<https://twitter.com/PhytoBiomes/status/1298693299457257472>

3 retweets, 4 likes

**@CASTagScience**, August 26, 2020

<https://twitter.com/CASTagScience/status/1298625032260853761>

3 retweets, 2 quote tweets, 2 likes

**Novozymes N. America @NovozymesNA**, August 28, 2020

<https://twitter.com/NovozymesNA/status/1299370541846089728>

1 like

**@CASTagScience**, August 29, 2020

<https://twitter.com/CASTagScience/status/1299715964414689283>

1 like

**Lucas Palmeira @LuPa1386**, August 31, 2020

<https://twitter.com/LuPa1386/status/1300461650860883970>

**@CASTagScience**, August 31, 2020

<https://twitter.com/CASTagScience/status/1300434123635462145>

2 likes

**Debbie Yaver @DYaver**, September 11, 2020

<https://twitter.com/DYaver/status/1304524375685836800>

**@CASTagScience**, December 15, 2020

<https://twitter.com/CASTagScience/status/1338858884321034245>

2 retweets, 3 likes

**Facebook—**

**Council for Agricultural Science and Technology (CAST)**, June 18, 2020

<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3091225140972261>

3 likes, 1 share

*This report last updated 8/11/2022.*

**Council for Agricultural Science and Technology (CAST), July 7, 2020**

<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3142690249159083>

2 likes, 1 share

**Council for Agricultural Science and Technology (CAST), August 6, 2020**

<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3226535217441252>

2 likes, 1 share

**Council for Agricultural Science and Technology (CAST), August 13, 2020**

<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3246630672098373>

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<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3261212807306826>

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1 comment, 1 share

**Council for Agricultural Science and Technology (CAST), August 26, 2020**

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**Council for Agricultural Science and Technology (CAST), August 29, 2020**

<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3294684700626303>

**Council for Agricultural Science and Technology (CAST), August 31, 2020**

<https://www.facebook.com/CASTagScience/photos/a.477568575671277/3300626793365427>

**Council for Agricultural Science and Technology (CAST), December 15, 2020**

<https://www.facebook.com/CASTagScience/posts/3624170384344398>

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**LinkedIn—**

**CAST (Council for Agricultural Science and Technology), August 3, 2020**

<https://www.linkedin.com/feed/update/urn:li:activity:6696049532670615552>

**CAST (Council for Agricultural Science and Technology), August 6, 2020**

<https://www.linkedin.com/feed/update/urn:li:activity:6697136684477255680>

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1 like

**CAST (Council for Agricultural Science and Technology)**, August 12, 2020

<https://www.linkedin.com/feed/update/urn:li:activity:6699311021804285952>

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<https://www.linkedin.com/feed/update/urn:li:activity:6699676438351634432>

**CAST (Council for Agricultural Science and Technology)**, August 18, 2020

<https://www.linkedin.com/feed/update/urn:li:activity:6701488277578387457>

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4 likes

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<https://www.linkedin.com/feed/update/urn:li:activity:6703654870433439744>

3 likes

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<https://www.linkedin.com/feed/update/urn:li:activity:6704017344722685952>

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<https://www.linkedin.com/feed/update/urn:li:activity:6704390813624893440>

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<https://www.linkedin.com/feed/update/urn:li:activity:6705481748173598720>

2 likes

**CAST (Council for Agricultural Science and Technology)**, August 31, 2020

<https://www.linkedin.com/feed/update/urn:li:activity:6706199367029690369>

2 likes

**CAST (Council for Agricultural Science and Technology)**, December 15, 2020

<https://www.linkedin.com/feed/update/urn:li:activity:6744624556901711872>

1 like

**Blog—**

**“Agriculture and the Microbiome” Blog**, August 27, 2020

<https://www.cast-science.org/agriculture-and-the-microbiome-blog/>

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