Jagger JW Harvey, Ph.D.

Director, Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss Research Professor, Department of Plant Pathology Kansas State University, Manhattan, KS 66506 USA

Email: jjharvey@ksu.edu

Summary:

I am a food systems transformation expert with 26 years of research experience and over 13 years of experience working with national and international partners on food system challenges. My research has spanned agricultural challenges in 20 countries, across Africa, Asia and the Americas. I have led international agricultural research for development projects since 2010, involving teams spanning continents, cultures and disciplines, rallying stakeholders to take action in food system transformation. I am a recent graduate of the Food Systems Leadership Institute, the Land Grant universities' apical leadership program. Given the unfolding food security crisis, I am eager to elevate my impact at scale in improving crop productivity, reducing post-harvest losses and improving food safety across diverse food systems. My ultimate goal is to increase food and nutritional security globally.

Education

Ph.D. in Genetics (2005), Plant Pathology Dept., University of California, Davis

B.Sc. Biology; Natural Sciences & Mathematics (1998) Washington and Lee University, VA

Professional Experience

2016-present	Director, Feed the Future Innovation Lab for the Reduction of Post- Harvest Loss; Research Professor, Department of Plant Pathology
	Kansas State University, USA
2018-present	External Scientific Advisor, Mars Global Food Safety Center, Mars Inc.
2009-2016	Senior Scientist (12/2012-4/2016), Research Scientist (1/2009-12/2012), Biosciences eastern and central Africa Hub, International Livestock Research Institute, Nairobi, Kenya
9/05-12/08	National Science Foundation Postdoctoral Research Fellow: Plant anti- viral RNA silencing
	Professor Sir David Baulcombe laboratory, University of Cambridge/Sainsbury Laboratory, UK
9/98-8/05	PhD research fellow: Mycotoxins and plant Programmed Cell Death. Prof. David Gilchrist, Department of Plant Pathology. NSF Center for Engineering Plants for Resistance Against Pathogens
	University of California, Davis, USA
1996	Undergraduate Researcher
	Dr. John Hartung, USDA Fruit Laboratory, Beltsville, MD, USA

Languages:

English (native speaker); French (second language- very good); Haitian Creole (fair); Kiswahili (basic).

Leadership training

- Harvard Business School, Sustainable Business Strategy online course/certificate
- Food Systems Leadership Institute graduate (<u>www.fsli.org</u>): the flagship leadership training program of the Association of Public Land Grant Universities
- 2013 Bill & Melinda Gates Foundation Leadership & Management Training Workshop

Major Academic & Professional Honors

- 2022 Promoted to full Professor, KSU Department of Plant Pathology
- 2013 Societal Impact Award, The Sainsbury Laboratory 25th Anniversary Symposium, UK.
- 2005 National Science Foundation Minority Postdoctoral Research Fellowship (~\$185,000; award #0512081): Funding for postdoctoral research under Sir Prof. David Baulcombe (UK).
- 2003 Dissertation Year Fellowship, UC Davis Graduate Studies
- 2000 Phi Sigma Biological Sciences Honor Society: UC Davis chapter

Grants and research awards (funded, with a lead or major contributing role in over \$27 million raised)

- USAID one-year program renewal (\$1 million, 2022, for ninth year of Innovation Lab program activities). Role: Director/PI.
- Mars Inc. \$25,000 for 2022 Nepal activities; Mars-led Food Safety Alliance Workstream 4 lead (aflatoxin outreach and extension).
- United States Department of Agriculture Foreign Agriculture Service, McGovern-Dole Food for Education Malawi project (Nascent Solutions lead). Role: PI of research component, \$1 million, 2021-2024.
- USAID three-year program renewal (\$3 million, 2019-2021) for the Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss. Role: Director/PI.
- USAID Nepal Mission Buy-In (\$1.2 million, 2017-2019): Mycotoxin and mycotoxigenic fungi survey, capacity building in Nepal. Role: PI.
- USAID, Honduras Mission Buy-In (\$650,000, 2017- 2020): Mycotoxin survey and capacity building in Honduras. Role: co-PI.
- Program Support to the Biosciences eastern and central Africa-International Livestock Research Institute Hub (core support for the capacity building program). Lead proposal writer. Bill & Melinda Gates Foundation and Department for International Development (DFID) UK; \$12.5 million, 2014-2018.
- "Modelling and manipulation of plant-aphid interactions: A new avenue for sustainable disease management of an important crop in Africa." Funding: Sustainable Crop Production Research for International Development initiative (BBSRC-DFID). PI: John Carr (Cambridge Univ.). Role: Co-PI leading \$730,247 component within the larger grant.

- Cereal Engineering Consortium Workshop 2015 (BMGF convening), first place idea (by participant voting) for a novel synthetic biology project: Visualizing Killer Kernels. \$5,000 plus other partner in-kind contribution as collaborations.
- Capacity and Action for Aflatoxin Reduction in Eastern Africa (CAAREA) Establishing a Regional Mycotoxin Analytical Platform and its Application in Reducing Mycotoxin Contamination of Kenyan & Tanzanian Maize. Role: Project Leader. Budget \$4 million, July 2011-October 2016, Department of Foreign Affairs and Trade/Australian Agency for International Development (AusAid) funding; AusAID-CSIRO-BecA partnership.
- "Durable rice blast resistance through genomic analysis of the host-pathogen interaction." Funding: (BBSRC-DFID), 2012-2016. Principal Investigator: Nick Talbot (University of Exeter). Role: Co-Investigator, leading ~\$100,000 component.
- 2011 Sweden Food Security grant. Developed and wrote one of the four program activity sections (plant tissue culture-based improvement of neglected African crops), which was a \$2,022,628 component of the \$12 million grant proposal.

Other research leadership activities:

implemented.

- 2022 Provided Technical Assistance to senior leadership in USAID's Bureau for Resilience and Food Security, to help inform their efforts to dry, store and export Ukrainian grain
 2020-21 Led the development the "<u>Digital Agriculture and Advanced Analytics</u>" pillar of KSU's Kansas Board of Regents "Economic Development" plan. Role: led the KSU team in stakeholder consultations and proposal writing; plan approved and
- 2021-22 Chair of the Hatch Multi-State mycotoxin project, NC-1183.
- 2018-19 Chair, American Phytopathological Society Mycotoxicology Committee

Teaching Experience (selected)

2019 Fall	Co-developed/taught graduate Plant Pathology Dept. course PLP910A: Molecular Plant-Microbe Interactions, Kansas State University
2009-2016	Leader of BecA-ILRI Hub crop capacity building program (2009-2011); key contributor to the capacity building program thereafter.
2010	Lecturer: Kenya Plant Health Inspectorate Service, Molecular Training Course.
2009	Co-organizer and lecturer: BecA-International Maize and Wheat Improvement Center (CIMMYT)/BIO-EARN Workshop on Molecular Breeding.

Professional Meeting Organization and Facilitation Experience (selected)

Organized and co-led a hybrid (in person-virtual) core stakeholder workshop to develop a national communications plan to address aflatoxin in Nepal, with support from and in collaboration with Mars Inc.

2021 Organized and led a session at the Third All-Africa Post-Harvest Congress featuring the work of the Post-Harvest Loss Innovation Lab and five other ILs. 2021 Leading a UN Food Safety Summit event (Food Safety Coalition) workstream, under overall leadership of Mars Inc. Workstream 4: proactive social, education and communications pilot. Will be funded by Mars Inc. 2019 Lead organizer and facilitator of a national stakeholder workshop in Nepal, including over 100 participants from government, private sector, farmer groups, research and development, USAID Nepal Mission leadership: "Building a better response: strategic planning workshop to address mycotoxins in food and feed in Nepal." August 18-21, Dhulikhel, Nepal. 2019 Organized a session entitled "Mycotoxin Mitigation at the front lines - Feed the Future Innovation Labs and global collaborations." World Mycotoxin Forum, October 15, Belfast, Northern Ireland, UK. (talks by PHLIL, Nutrition Innovation Lab, Livestock Systems Innovation Lab, Food Processing Innovation Lab) 2018 Lead co-organizer and facilitator of a national stakeholder workshop at the Nepal Academy of Science and Technology (NAST) entitled "Mycotoxin Mitigation for Health, Nutrition, Agricultural Productivity and Prosperity in South Asia," and official opening of our program's newly established NAST mycotoxin research laboratory. November 30, Lalitpur, Nepal. 2018 Co-organizer and facilitator of a workshop session at the national Nutrition Symposium in Nepal, entitled "Mycotoxins and post-harvest control measures." 2018 Co-organizer (with NSF, UC Davis, Mars Inc.), Moving the Needle on Aflatoxin workshop, Banbury Center, Cold Spring Harbor. 2016-Lead organizer and facilitator for program annual meetings, Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss. 2009-2014 Organizer and facilitator: US-Africa Connections Workshops. BecA Hub workshops bringing African and international scientists together to spark collaboration. Co-organized with the Bill & Melinda Gates Foundation, the US National Science Foundation, the UK Department for International Development, and the UK Biotechnology and Biological Sciences Research Council.

Editorial, peer reviewer and panel membership

2021-	Editorial Board member, Foods (Impact Factor 4.35)
2020-	Member, IL Council Outreach subcommittee, ongoing planning with APLU (eg, success stories for Dear Colleague letters to Congress)
2019-2020	Guest Editor, special issue of Foods journal "Safeguarding the Global Food Supply: Advances in Mycotoxin Prevention, Surveillance and Mitigation"
2019	Feed the Future Innovation Lab Council subcommittee on inter-Lab collaboration

2018-19	Feed the Future Innovation Lab Council subcommittee on broader branding and marketing of the Innovation Labs
2018-19	Advisory Committee member, "World Mycotoxin Forum meets IUPAC" 2019 conference.
2015	Panelist on the Joint FAO/WHO Expert Meeting on Hazards Associated with Animal Feeds, FAO Headquarters, Rome
2015	Stakeholder meeting Expert Panel on aflatoxins, Port-au-Prince, Haiti.
2015	Aflatoxin special issue co-editor, African Journal of Food, Agriculture, Nutrition and Development
2013-14	African Nutrition Science Research Consortium (Columbia University-Columbia Global Center) Steering Committee member
2013-14	African Orphan Crops Consortium Steering Committee member (observing, full acting when BecA Director unable to attend)
2013	Partnership for Aflatoxin Control in Africa, Task Force member for PACA Strategic Plan development
2009-14	Bill & Melinda Gates Foundation-BecA Agricultural Research Connections workshops, selection, organizing and workshop facilitating team
2011	US National Science Foundation research program Advisory Panel member (Basic Research to Enable Agricultural Development)
2010	Australian Development BecA-CSIRO-AusAID Partnership PhD Scholarships, Selection Panel
2008-10	Various National Science Foundation programs including Basic Research to Enable Agricultural Development (BREAD) grant proposal reviewer

Students and researchers advised

Over 80 researchers advised. This included BSc, MSc and PhD students, as well as researchers from a broad range of institutions. *A few examples of where my advisees have moved on to from my group:* Gerardine Mukeshimana appointed Minister of Agriculture and Animal Resources, Rwanda (2014). James Wainaina received one of five AusAID African PhD fellowships, awarded his PhD in 2019, currently a postdoc at the Ohio State University.

Invited talks and seminars

- 09/22 Panelist at the USAID-Innovation Lab Annual Meeting, Food Loss and Waste panel, Washington DC
- 05/22 Led the Food Loss and Waste session at the annual USAID-Innovation Lab partners' meeting, focused on mitigating the food security fallout from the war in Ukraine.

- 04/20 Hosted USAID's Agrilinks Theme Month, including a series of blogs that culminate in a final webinar focusing on PHLIL work. It was the third most attended Agrilinks webinar in 2020.
- 01/20 World Mycotoxin Forum Asia "Empowering national systems to mitigate mycotoxins: Post-Harvest Loss Innovation Lab Nepal and Bangladesh Highlights"
- 11/19 Sara Lee Lecture, Michigan State University "Securing the harvest: integrating efforts to safeguard the global harvest against mycotoxins"
- 09/19 "Securing the Harvest: empowering national systems to inclusively and sustainably mitigate post-harvest loss issues." Presentation at the Second All-Africa Post-Harvest Congress. African Union Commission, Addis Ababa, Ethiopia, September 19, 2019.
- 05/19 "Resilience through reduced post-harvest loss." Presentation at the Feed the Future Innovation Labs Regional Partners Meeting. Addis Ababa, Ethiopia, May 20, 2019.
- 2019 Mycotoxin risk communication strategies: empowering national systems to be proactive and responsive. Presentation tailored and delivered at:
 - Mekelle University National Stakeholder Workshop on Grain Mycotoxin Mitigation. Mekelle, Ethiopia, May 24, 2019.
 - Livestock Systems Innovation Lab (LSIL)Workshop on the Prevention and Mitigation of Aflatoxin Contamination of Animal Feed and Animal-Source Foods. Kigali, Rwanda, April 3, 2019.
 - o LSIL Workshop on the Prevention and Mitigation of Aflatoxin Contamination of Animal Feed and Animal-Source Foods. Addis Ababa, Ethiopia, March 26, 2019.
- 10/18 Organized, co-led and spoke at a technical session on Mitigating Post-Harvest Mycotoxin Contamination, at the African Union Commission's Partnership for Aflatoxin Control in Africa Partnership Platform Meeting, Dakar, Senegal.
- 3/18 Global Food Security Act, US Senate expert panel, organized by the Association of Public Land Grant Universities. "Feed the Future Innovation Labs: realizing benefits at home and abroad"
- 12/09 Co-led Bill Gates on a tour of the BecA-ILRI Hub

Peer-Reviewed Publications:

h-index score = 20

- 1. Samuel Alemayehu, Rizana Mahroof, Jagger Harvey, Fetien Abay and Subramanyam Bhadriraju (accepted under revision) Effects of storage duration and structures on sesame seed germination, mold growth and mycotoxin accumulation. *Toxins*
- 2. BA Temba, RE Darnell, A Gichangi, D Lwezaura, PG Pardey, J Harvey, J Karanja, SMS Massomo, N Ota, JM Wainaina, MT Fletcher and DJ Kriticos (2021) The influence of weather on the occurrence of aflatoxin B1 in harvested maize from Kenya and Tanzania. *Foods* 10(2): 216, Featured Article in Special Issue "Safeguarding the global food supply: advances in mycotoxin prevention, surveillance and mitigation."
- 3. S Alemayehu, F Abay, K Meles, D Assefa, A Chala, R Mahroof, J Harvey and S Bhadriraju (2019) Evaluating different hermetic storage technologies to arrest mold

- growth, prevent mycotoxin accumulation and preserve germination quality of stored chickpea in Ethiopia. *Journal of Stored Product Research* 85:101526.
- 4. JM Mutuku, FO Wamonje, G Mukeshimana, J Njuguna, M Wamalwa, S Choi, T Tungadi, A Djikeng, K Kelly, JD Entfellner, SR Ghimire, HD Mignouna, JP Carr and J Harvey (2019) Metagenomic Analysis of Plant Virus Occurrence in Common Bean (*Phaseolus vulgaris*) in Central Kenya. *Frontiers in Microbiology* 9: Article 2939.
- 5. Joseph Fovo Djeugap, Sita Ghimire, Immaculate Wanjuki, Anne Muiruri and Jagger Harvey (2019) Mycotoxin contamination of edible non-timber forest products in Cameroon. *Toxins* 11: 430; doi:10.3390/toxins11070430
- 6. James Wainaina, Laura Kabatko, Jagger Harvey, Elijah Ateka, Timothy Makori, David Karanja, Laura Boykin and Monica Kehoe (2019) Evolutionary insights of Bean common mosaic necrosis virus and Cowpea aphid-borne mosaic virus. *Peer J* 7:e6297.
- 7. Benigni Temba, Mary Fletcher, Glen Fox, Jagger Harvey, Sheila Okoth and Yasmina Sultanbawa (2019) Photoinactivation of conidia and hyphae of *Aspergillus flavus* using curcumin and its effect on aflatoxin B1 formation in maize kernels. *Food Microbiology* **82:** 82-88.
- 8. Niyibituronsa, M., Onyango, A. N., Gaidashova, S., I Imathiu, S., Uwizerwa, M., Ochieng, E., Nganga, F., Birungi, J., Ghimire, S., and Harvey, J. (2019) The effect of different processing methods on nutrient and isoflavone content of soymilk obtained from six varieties of soybean grown in Rwanda. *Food Science and Nutrition* 7: 457-464.
- 9. Bakelana Zeyimo, Eric Magembe, Laura Boykin, Mercy Macharia, Mahungu Nzola, Tata-Hangy, Lutete Diankenda, Monde Godefroid, Jagger Harvey, Joseph Ndunguru, Charles Kayuki, Gregroire Rwegasira, James Legg, Justin Pita, Lema Munseki and Tshilenge Kanana (2019) Attempts to identify Cassava Brown Streak Virus in western Democratic Republic of Congo. *Journal of Agricultural Science* 11(2): 31-39.
- 10. Ross Darnell, Jagger Harvey, Glen Fox, Mary Fletcher, James Wainaina (2018) NIR calibration of aflatoxin in maize flour. *Australian Journal of Chemistry* **71(11):** 868-873.
- 11. Niyibituronsa, M., Onyango, A., Gaidashova, S., Imathiu, S. M., Uwizerwa, M., Wanjuki, I., Nganga, F., Muhutu, J. C., Birungi, J., Ghimire, S., Raes, K., De Boevre, M., De Saeger, S., and Jagger Harvey (2018) Evaluation of mycotoxin content in soybean (*Glycine max* L.) grown in Rwanda. *African Journal of Food, Agriculture, Nutrition and Development* **18(3)**: 13808-13824.
- 12. Dawit Kidanemariam, M Macharia, Jagger Harvey, Timothy Holton, A Sukal, A James and R Harding (2018) First report of *Dasheen mosaic virus* infecting taro (*Colocasia esculenta*) from Ethiopia. *Plant Disease* 102(7): 1470.
- 13. Sheila Okoth, Marthe De Boevre, Arnau V Corominas, Jose D DiMavungu, Sophie Landschoot, Martina Kyalo, Joyce Njuguna, Jagger Harvey, Sarah DeSaeger (2018) Genetic and toxigenic variability within *Aspergillus flavus* population isolated from maize in two diverse environments in Kenya. *Frontiers in Microbiology* 9:57, doi: 10.3389/fmicb.2018.00057.

- 14. Grace Gachara, Anthony Nyamache, Jagger Harvey, Gbemenou Gnonlonfin and James Wainaina (2018) Genetic diversity of *Aspergillus flavus* and occurrence of aflatoxin contamination in stored maize across three agro-ecological zones in Kenya. *Agriculture & Food Security* 7:52. https://doi.org/10.1186/s40066-018-0202-4
- 15. Wainaina, JM, Harvey, J, Ateka, E, Makori, T, Karanja, D, Kehoe, MA and Boykin, LM. (2018) Genomic characterization and evolutionary relationships of groundnut rosette virus from the western highlands of Kenya. *Tropical Plant Pathology* https://doi.org/10.1007/s40858-018-0240-2
- 16. Zelalem Fisseha, Martina Kyallo, K Tesfaye, Jagger Harvey, K Dagne, S Opyio and Paul Gepts (2018) Integrating phenotyping evaluations with a molecular diversity assessment of an Ethiopian collection of common bean landraces. *African Crop Science Journal* 26(2): 315-326.
- 17. Samuel Khakata, FN Mbute, GN Ghemining'wa, M Mwimali, J Karanja, J Harvey and JK Mwololo (2018) Post-harvest evaluation of selected inbred lines to maize weevil *Sitophilus zeamais* resistance. *Journal of Plant Breeding and Crop Science* 10(5): 105-114.
- 18. Samuel Khakata, FM Nzuve, GN Cheming'wa, M Mwimali, J Karanja, J Harvey and JK Mwololo. (2018) Post-harvest evaluation of selected hybrids to maize weevil Sitophilus zeamais resistance. *Journal of Stored Products and Postharvest Research* 9(3): 16-26.
- 19. Ashraful Alam, Chayan Saha, Monjurul Alam, Ali Ashraf, Bilash Bala and Jagger Harvey (2018) Neural network modeling of drying of rice in the BAU-STR dryer. *Heat and Mass Transfer*, https://doi.org/10.1007/s00231-018-2368-5.
- 20. Samuel K Mutiga, F Rotich, V Devi Ganeshan, DT Mwongera, EM Mgonja, VM Were, Jagger Harvey, B Zhou, L Wasilwa, F Chunda, I Ouedraogo, GL Wang, TK Mitchell, NJ Talbot and JC Correll (2017) Assessment of the virulence spectrum and its association with genetic diversity in *Magnaporthe oryzae* populations from sub-Saharan Africa. *Phytopathology* 107(7): 852-863.
- 21. Francis O Wamonje, George N Michuki, Luke A Braidwood, Joyce N Njuguna, Josiah M Mutuku, Appolinaire Djikeng, Jagger Harvey and John P Carr (2017) Viral metagenomics of aphids present in bean and maize plots on mixed-use farms in Kenya reveals the presence of three dicistroviruses including a novel Big Sioux River virus-like dicistrovirus. *Virology Journal* 14:188.
- 22. James M Wainaina, P De Barro, L Kubatko, MA Kehoe, Jagger Harvey, D Karanja and Laura M Boykin (2017) Genetic diversity, population structure and species delimitation of *Trialeurodes vaporariorum* (Greenhouse whitefly). *Bulletin of Entomological Research* May 23: 1-9.
- 23. Matthew J Stasiewicz, Titilayo DO Falade, Murithi Mutuma, Samuel K Mutiga, Jagger Harvey, Glen Fox, Tom C Pearson, James W Muthomi and Rebecca J Nelson (2017) Multi-spectral kernel sorting to reduce aflatoxins and fumonisins in Kenyan maize. *Food Control* 78: 203-214.

- 24. R Michelmore,... J Harvey et al. (2017) Foundational and translational research opportunities to improve plant health. Molecular Plant-Microbe Interactions 30(7): doi.org/10.1094/MPMI-01-17-0010-CR.
- 25. Fabian S Manoza, Arnold A Mushongi, Jagger Harvey, James Wainaina, Immaculate Wanjuki, Robert Ngeno, Ross Darnell, Benoit GJ Gnonlonfin and Said Massomo (2017) Potential of using host plant resistance, nitrogen and phosphorous fertilizers for reduction of *Aspergillus flavus* colonization and aflatoxin accumulation in maize in Tanzania. *Crop Protection* 93: 98-105.
- 26. Kizito Nishimwe, Immaculate Wanjuki, Charles Karangwa, Ross Darnell and Jagger Harvey (2016) An initial characterization of aflatoxin B1 contamination of maize sold in the principal retail markets of Kigali, Rwanda. *Food Control* 73: 574-580.
- 27. Ben Temba, Y Sultanbawa, D Kriticos, G Fox, J Harvey, M Fletcher (2016) Tools for defusing a major global food and feed safety risk: nonbiological postharvest procedures to decontaminate mycotoxins in foods and Feeds. *Journal of Agricultural and Food Chemistry* 64(47): 8959-8972.
- 28. Titilayo DO Falade, Sharifah HS Mohamdan, Yasmina Sultanbawa, Mary T Fletcher, Jagger Harvey, Mridusmita Chaliha and Glen P Fox (2016) *In vitro* experimental environments lacking or containing soil disparately affect competition experiments of *Aspergillus flavus* and co-occurring fungi in maize grains. *Food Additives & Contaminants: Part A* 33(7): 1241-1253.
- 29. Olutayo M Adedokun, Martina Kyalo, Benoit Gnonlonfin, James Wainaina, Dedan Githae, Rob Skilton and Jagger Harvey (2016) Molecular Characterization of indigenous mushroom species in the Niger Delta region of Nigeria. *European Journal of Horticultural Science*. 81(5): 273-280.
- 30. Elizabeth A. Worrall, Francis O. Wamonje, Gerardine Mukeshimana, Jagger JW Harvey, John P Carr and Neena Mitter (2015) Bean common mosaic virus and Bean common mosaic necrosis virus: Relationships, biology and prospects for control. *Advances in Virus Research* 93:1-46.
- 31. Yashvir Chauhan, Jeff Tatnell, Stephen Krosch, James Karanja, Benoit Gnonlonfin, Immaculate Wanjuki, James Wainaina and Jagger Harvey (2015) An improved simulation model to predict pre-harvest aflatoxin risk in maize. *Field Crops Research* 178: 91-99.
- 32. Samuel K. Mutiga, Vivian Hoffmann, Jagger Harvey, Michael G. Milgroom and Rebecca J. Nelson (2015) Assessment of aflatoxin and fumonisin contamination of maize in western Kenya. *Phytopathology* 105(9): 1250-1261.
- 33. Benigni A. Temba, Mary T. Fletcher, Glen P. Fox, Jagger Harvey and Yasmina Sultanbawa (2015) Inactivation of *Aspergillus flavus* spores by Curcumin-mediated photosensitization. *Food Control* 59:708-713.
- 34. Isaac Macharia, David Backhouse, Rob Skilton, Elijah Ateka, Shu-Biao Wu, Moses Njahira, Solomon Maina and Jagger Harvey (2015). Diversity of thrips species and vectors of Tomato spotted wilt virus in tomato production systems in Kenya. *Journal of Economic Entomology* 108(1):20-28.

- 35. Isaac Macharia, David Backhouse, Elijah Ateka, Shu-Biao Wu, Jagger Harvey, Moses Njahira and Rob Skilton (2015). Distribution and genetic diversity of Tomato spotted wilt virus following an incursion into Kenya. *Annals of Applied Biology* 166(3): 520-529.
- 36. Ojwang D. Otieno, Calvin Onyango, Justus Mungare, Lexa G. Matasyoh, Bramwel W. Wanjala, Mark Wamalwa and Jagger Harvey (2014) Genetic diversity of Kenyan native oyster mushroom (Pleurotus). *Mycologia* 107(1):32-38.
- 37. Samuel K. Mutiga, Vincent Were, Vivian Hoffmann, Jagger Harvey, Michael G. Milgroom and Rebecca J. Nelson (2014) Extent and drivers of mycotoxin contamination: Inferences from a survey of Kenyan maize mills. *Phytopathology* 104(11): 1221-1231.
- 38. Laban F. Turyagyenda, Elizabeth B. Kizito, Morag Ferguson, Yona Baguma, Morris Agaba, Jagger Harvey* and David S.O. Osiru* (2013) Physiological and molecular characterization of drought responses and identification of candidate tolerance genes in cassava. *AoB Plants* 5: plt007; doi: 10.1093/aobpla/plt007. *co-corresponding authors
- 39. Bramwel W. Wanjala, Meshack Obonyo, Francis N. Wachira, Alice Muchugi, Margaret Mulaa, Jagger Harvey, Robert A. Skilton, Janice Proud and Jean Hanson (2013) Genetic diversity in Napier grass (*Pennisetum purpureum*) cultivars: Implications for breeding and conservation. *AoB Plants* 5:plt022; doi:10.1093/aobpla/plt022.
- 40. Anthony Pariyo, P. Tukamuhabwa, Y. Baguma, R.S. Kawuki, T. Alicai, P. Gibson, E. Kanju, B.W. Wanjala, J. Harvey, I. Nzuki, I.Y. Rabbi and M. Ferguson (2013) Simple sequence repeats (SSR) diversity of cassava in South, East and Central Africa in relation to resistance to cassava brown streak disease. *African Journal of Biotechnology* 12(28): 4453-4464.
- 41. Jean R. Kana, Benoit G.J. Gnonlonfin, Jagger Harvey, James Wainaina, Immaculate Wanjuki, Robert A. Skilton and Alexis Teguia (2013) Assessment of aflatoxin contamination of maize, peanut meal and poultry feed mixtures from different agroecological zones in Cameroon. *Toxins* 5(5): 884-894.
- 42. Williams Esuma, Patrick Rubaihayo, Anthony Pariyo, Robert Kawuki, Bramwel Wanjala, Inosters Nzuki, Jagger Harvey and Yona Baguma (2012) Genetic Diversity of Provitamin A Cassava in Uganda. *Journal of Plant Studies* 1:60-71.
- 43. Laban F. Turyagyenda, Elizabeth B. Kizito, Morag E. Ferguson, Yona Baguma, Jagger Harvey, Paul Gibson, Bramwel W. Wanjala and David S.O. Osiru (2012) Genetic diversity among farmer-preferred cassava landraces in Uganda. *African Crop Science Journal* 20(s1): 15-30.
- 44. Jagger Harvey, Mathew G. Lewsey, Kanu Patel, Jack Westwood, Susanne Heimstädt, John P. Carr and David C. Baulcombe (2011) An antiviral defense role of AGO2 in plants. *PLoS ONE* 6(1): e14639. (245 citations, PlosONE, as of November 2021)
- 45. Jagger Harvey, James Lincoln and David Gilchrist (2008) Programmed cell death suppression in transformed plant tissue by tomato cDNAs identified from an *Agrobacterium rhizogenes*-based functional screen. *Molecular Genetics and Genomics* 279:509-521.

Book Chapters and Meeting Reports

- 1. Jagger Harvey, Monika Macdevette, Samuel Mutiga, Josiah Mutuku, Tilly Eldridge, Peter Emmrich, Delia Grace, Senait Senay, Alemu Abate, Ross Darnell and Appolinaire Djikeng (2016) Poisoned Chalice: crop toxicity in the era of climate change. United Nations Environment Program Yearbook, United Nations Environment Assembly.
- 2. Segenet Kelemu, Brhane Gebrekidan and Jagger Harvey (2012) Bringing the Benefits of Sorghum Genomics to Africa. In: Andrew Paterson (Ed.), *Genomics of the Saccharinae* (pp. 519-540). New York: Springer.
- 3. Jagger Harvey and Steven H. Strauss (2009) Towards physiological sculpture of plants. *New Phytologist* 181: 8–12.

Other publications and written materials

USAID Project Reports: all annual and semi-annual Post-Harvest Loss Innovation Lab reports submitted to USAID, as well as the Nepal Buy-In final report. Previously prepared reports to a range of donors, listed under the resource mobilization section.

Participant at the Jamboree Workshop as a contributing scientist: Science breakthroughs to advance food and agricultural research by 2030 (2018) The National Academies Press, http://nap.edu/25059.

Panel member/contributor: Technical brief from the Joint FAO/WHO Expert Meeting on Hazards Associated with Animal Feed. http://www.fao.org/3/a-az851e.pdf

Policy Brief: Jagger Harvey, Benoit Gnonlonfin, Mary Fletcher, Glen Fox, Stephen Trowell, Amalia Berna, Rebecca Nelson and Ross Darnell (2013) Improving diagnostics for aflatoxin detection. In: Laurian Unnevehr and Delia Grace (Ed.), 2020 Focus "Aflatoxins: finding solutions for improved food safety" (Focus 20, Brief 19). Washington, DC: International Food Policy Research Institute.