

CURRICULUM VITAE

Zhi-Yuan Chen

Assistant Professor

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A. Education

- Ph.D. December, 1996. Plant Physiology, Biochemistry and Molecular Biology, Louisiana State University, Baton Rouge, Louisiana.
- M. S. July, 1991. Plant Physiology, Biochemistry and Molecular Biology, Peking University (Beijing University), Beijing, China.
- B. S. July, 1988. Plant Physiology and Biochemistry, Peking University.

B. Professional Experience

- 11/2005-present: Assistant Professor, Dept of Plant Pathology and Crop Physiology, Louisiana State University Agriculture Center, investigating host-parasite interactions and enhancing disease resistance to corn and soybean.
- 09/2002-10/2005: Assistant Professor, Research, Dept of Plant Pathology and Crop Physiology, Louisiana State University Agriculture Center, investigating possible roles of aflatoxin resistance-associated maize kernel proteins identified through proteomics comparisons in kernel resistance.
- 01/1997-08/2002: Postdoctoral Fellow, Dept of Plant Pathology and Crop Physiology, Louisiana State University Agriculture Center, working on "the mechanisms of host resistance of corn to *Aspergillus flavus* infection and aflatoxin contamination using proteomics" in collaboration with Southern Regional Research Center, USDA-ARS.
- 8/1992-12/1996: Research Assistant (Ph D. Program), Dept of Plant Biology, Louisiana State University. Ph. D. thesis entitled, "Low carbon dioxide inducible genes and proteins in *Chlamydomonas reinhardtii*".
- 8/1991-8/1992: Assistant research scientist, Biotechnology Research Center, Chinese Academy of Agricultural Sciences, Beijing, China. Research project: Extraction and purification of a rice seed sulfur-rich 10 kDa prolamin protein and the cloning of its gene for quality improvement of alfalfa in China.
- 9/1988-7/1991: Research Assistant (M.S. Program), Department of Biology, Peking University. M. S. thesis entitled, "Construction of a chimeric Ti plasmid containing *Rhodospirillum rubrum rbc L* gene and its transformation into tobacco leaf-discs".

C. Teaching Experience

8/1994-12/1995: Teaching Assistant for Plant Physiology 3060 for graduate and undergraduate students majoring in Plant Biology, Plant Pathology, or Horticulture.

1/1993-5/1994: Instructor for Biology 1208, a laboratory course for undergraduates majoring in Science.

1/1990- 9/1990: Teaching assistant for one semester in "Plant Physiology Grand lab course" (for senior undergraduates) and an instructor of a summer class "Basic experimental techniques in molecular biology".

D. Professional Society Memberships

American Society of Plant Biologists

American Phytopathological Society

E. Grants, Honors and Awards

Recipient of 2006 Louisiana Soybean and Grain Research and Promotion Board grant for "Developing a new strategy to control soybean rust disease through a proteomics-based approach" in the amount of \$50,250.

Recipient of 2005 USDA-ARS Aflatoxin Workshop grant titled "Evaluation of changes in aflatoxin resistance and stress tolerance of transgenic corn lacking the expression of GLX I, PR-10, or a newly identified serine/threonine kinase" in the amount of \$30,000.

Recipient of 2004 USDA-ARS Aflatoxin Workshop grant titled "Investigating the role(s) of three resistance-associated proteins in corn host resistance to *Aspergillus flavus* infection/ aflatoxin production using RNAi technology" in the amount of \$30,000.

Recipient of 2003 USDA-ARS Aflatoxin Workshop grant titled "Investigating the role(s) of corn glyoxalase I protein in host resistance to *Aspergillus flavus* infection/ aflatoxin production using RNAi technology" in the amount of \$28,000.

Recipient of 2002 USDA-NRICGP grant (2002-35201-12541) titled "Characterization of proteins associated with resistance in corn against *Aspergillus flavus* infection/ aflatoxin production" (submitted through SRRC) in the amount of \$240,087 for 3 years.

Recipient of C. W. Edgerton award for the outstanding student graduating from Department of Plant Biology, Louisiana State University in 1996.

Invited and granted a fellowship in 1995 to attend the Xth International Photosynthesis Congress held in Montpellier, France.

Institute Chairman Award, 1991-1992, Biotechnology Research Center, Chinese Academy of Agricultural Sciences, Beijing, China.

F. Presentations and Seminars

1. Invited speaker at Department of Plant Pathology and Crop Physiology, Louisiana State University, Oct 20, 2004. The title was: “Understanding the host resistance mechanisms in corn against *Aspergillus flavus* infection and aflatoxin contamination”.
2. Invited speaker at 15th International Plant Protection Congress (IPPC) in Beijing, China. May 11-17, 2004. The titles were: “Identification and characterization of maize kernel proteins associated with resistance against *Aspergillus flavus* infection/aflatoxin production using proteomics” and “Identification of natural resistance to aflatoxin elaboration in maize”.
3. Invited speaker at Department of Plant and Soil Sciences, Southern Illinois University, May, 2003. The seminar title was: “Identification and characterization of protein markers for enhancing resistance in corn against *Aspergillus flavus*”.
4. Invited speaker at 15th Aflatoxin Elimination Workshop meeting, October, 2002. The title was: “Characterization of a PR-10 like protein expressed at higher levels in maize genotypes resistant to *Aspergillus flavus* infection/aflatoxin production”.
5. Oral presentation at APS annual meeting, July, 2002. The title was: “Characterization of an endosperm protein expressed at higher levels in maize genotypes resistant to *Aspergillus flavus* infection/aflatoxin production”.
6. Invited speaker at 14th Aflatoxin Elimination Workshop meeting, October, 2001. The titles were: “The use of proteomics to elucidate factors regulating the corn-*Aspergillus flavus* interaction” and “Characterization of a maize kernel protein associated with resistance against *Aspergillus flavus* infection/aflatoxin production”.
7. Oral presentation at APS annual meeting, August, 2000. The title was: “Proteome comparisons of corn kernels resistant or susceptible to *Aspergillus flavus* infection”.
8. Invited speaker at Department of Plant Pathology and Crop Physiology, Louisiana State University, November, 1999, the seminar titled “Identification and characterization of biochemical markers for resistance in corn against *Aspergillus flavus*”.
9. Aflatoxin Elimination Workshop, October, 1999. Poster presentation titled “Characterization of an alkaline protease excreted by *Aspergillus flavus* in infected corn kernels”.
10. American Phytopathological Society annual meeting, August, 1999. Poster presentation titled “Characterization of an alkaline protease excreted by *Aspergillus flavus* and its function in fungal infection of corn kernels”.
11. Invited speaker at Department of Agronomy, University of Missouri, April 1999, the seminar titled “Identification and characterization of biochemical markers for resistance in corn against *Aspergillus flavus*”.

12. American Phytopathological Society annual meeting, November, 1998. Oral presentation titled "A corn trypsin inhibitor with antifungal activity and associated with host resistance to aflatoxin elaboration inhibits *Aspergillus flavus* alpha-amylase production".
13. Aflatoxin Elimination Workshop, October, 1998. Poster presentation titled "Contribution of maize kernel constitutive and induced proteins to resistance against *Aspergillus flavus* infection".
14. Aflatoxin Elimination Workshop, October, 1997. Poster presentation titled "A maize kernel trypsin inhibitor is associated with resistance to *Aspergillus flavus* infection".
15. American Phytopathological Society annual meeting, August, 1997. Oral presentation titled "Resistance to *Aspergillus flavus* in corn kernels is associated with a 14 kDa protein".
16. American Society of Plant Physiologists annual meeting, July, 1996. Poster presentations titled " A low-CO₂-inducible gene encoding an alanine: α -ketoglutarate aminotransferase in *C. reinhardtii* " and " Characterization of a low CO₂ inducible chloroplast envelope protein LIP-36 in *C. reinhardtii*".
17. Invited speaker at Department of Botany, Duke University, May 1996, the seminar titled " Low CO₂ inducible genes and proteins in *C. reinhardtii*".
18. The Xth International Photosynthesis Congress, France, August, 1995. Poster presentation title:"Characterization of low-CO₂ inducible genes in *Chlamydomonas reinhardtii*"
19. American Society of Plant Physiologist (ASPP) Southern Session Meeting, March, 1994. Oral presentation title: "Cloning, sequencing, and characterization of low-CO₂ inducible genes in *Chlamydomonas reinhardtii*".

G. Publications

Papers:

1. **Chen, Z. -Y.**, Brown, R. L., Rajasekaran, K., Damann, K. E., and Cleveland, T. E. 2006. Evidence for involvement of a pathogenesis-related protein in maize resistance to *Aspergillus flavus* infection /aflatoxin production. *Phytopathology* 96:87-95.
2. **Chen, Z. -Y.**, Rajasekaran, K., Brown, R. L., Bhatnagar D., and Cleveland, T. E. 2005. Removal of aflatoxin contamination from food and feed crops. *In: Plant Genetic Engineering Vol. 8:Metabolic Engineering and Molecular Farming II* (Eds. Jaiwal P. K. and Singh R. P.). Studium Press, Houston, TX., pp 73-110.
3. Cleveland, T. E., Yu, J., Bhatnagar, D., **Chen, Z. -Y.**, Brown, R. L., Chang, P. K., and Cary, J. W. 2005. Elucidation of the molecular basis of the host *plant-Aspergillus flavus* interaction, a basis for devising strategies to reduce aflatoxin contamination in crops. *In Aflatoxin Prevention Research* (Ed. H. Abbas) (in press)

4. **Chen, Z. -Y.**, Brown, R. L., and Cleveland, T. E. 2004. Evidences of an association between stress tolerance and host resistance in corn against *Aspergillus flavus* infection and aflatoxin contamination. *African J. Biotechnol.* 3:693-699.
5. Brown, R. L., **Chen, Z. -Y.**, Cleveland, T. E., and Bhatnagar, D. 2005. Molecular aspects of corn resistance mechanisms against aflatoxigenic fungi. *In: Genetic Resources and Biotechnology, Vol II* (D. Thangadurai, T. Pullaiah and P. A. Balatti, eds.), Regency Publications, New Delhi, India, pp.281-294.
6. Brown, R. L., Bhatnagar, D., Cleveland, T. E., and **Chen, Z.-Y.** 2004. Molecular biology for control of mycotoxigenic fungi. *Mycology* 21:69-77.
7. Cleveland, T. E., Yu, J., Bhatnagar, D., **Chen, Z. -Y.**, Brown, R. L., Chang, P. K., and Cary, J. W. 2004. Elucidation of the molecular basis of the host *plant-Aspergillus flavus* interaction, a basis for devising strategies to reduce aflatoxin contamination in crops. *J. of Toxicology (review)* 23:345-380.
8. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2004. Identification of a maize kernel stress-related protein and its effect on aflatoxin accumulation. *Phytopathology* 94:938-945.
9. Brown, R. L., **Chen, Z.-Y.**, Bhatnagar, D., and Cleveland, T.E. 2004. Molecular biology for control of mycotoxigenic fungi. *In Fungal Biotechnology in Agricultural, Food, and Environmental Application*, (D. Arora, P. Bridge, and D. Bhatnagar, eds.). Marcel Dekker, Inc. New York, pp 69-77.
10. Brown, R. L., **Chen, Z. -Y.**, Gembeh, S. V., Cleveland, T. E., Bhatnagar, D., and Howard, K. 2004. Identification of natural resistance in corn against mycotoxin-producing fungi (Ramdane Dris, ed.). *Res. Adv. in Food Science*, 4: 85-96.
11. Brown, R. L., **Chen, Z. -Y.**, Menkir, A., and Cleveland, T. E. 2003. Using biotechnology to enhance host resistance to aflatoxin contamination of corn. *African J. Biotechnol.* 2:557-562.
12. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2002. Identification of unique or elevated levels of kernel proteins in aflatoxin-resistant maize genotypes through proteome analysis. *Phytopathology* 92:1084-1094.
13. **Chen, Z. -Y.**, Cleveland, T. E., Brown, R. L., Bhatnagar, D., Cary, J. W., and Rajasekaran, K. 2002. Corn as a source of antifungal genes for genetic engineering of crops for resistance to aflatoxin contamination. *In. Crop Biotechnology* (K. Rajasekaran, J. W. Finley, and T. J. Jacks, eds.), ACS Symposium Series No. 829, American Chemical Society, Washington, DC, pp.131-150.
14. Banks, W. A., Niehoff, M. L., Brown, R. L., **Chen, Z. -Y.**, and Cleveland, T. E. 2002. Transport across the blood-brain barrier of an antifungal trypsin inhibitor isolated from corn. *Antimicrobial Agents and Chemotherapy* 46:2633-2635.
15. Cleveland, T. E., Rajasekaran, K., Cary, J. W., **Chen, Z. -Y.**, Brown, R. L., Bhatnagar, D., and Radin, J. W. 2002. Balancing the possible risks and benefits of using biotechnology to enhance resistance in crops to *Aspergillus flavus* infection and aflatoxin contamination. *In Pathogenic Microorganisms and Their Toxins: A Global Perspective of Their Risk* (S. Yamamoto and W. P. Norred eds.) (Book

- Chapter). IXth International Symposium-U.S.-Japan Natural Resources Panel on Toxic Microorganisms (UNJR), pp. 268-301.
16. **Chen, Z. -Y.**, Brown, R. L., Cleveland, T. E., Damann, K. E., and Russin, J. S. 2001. Comparison of constitutive and inducible maize kernel proteins of genotypes resistant or susceptible to aflatoxin production. *J. Food Prot.* 64:1785-1792.
 17. Brown, R. L., **Chen, Z. -Y.**, Cleveland, T. E., Cotty, P. J., and Cary, J. W. 2001. Variation in in vitro α -amylase and protease activity is related to the virulence of *Aspergillus flavus* isolates. *J. Food Prot.* 64:401-404.
 18. Brown, R. L., **Chen, Z. -Y.**, Menkir, A., Cleveland, T. E., Cardwell, K., Kling, J. and White, D. G. 2001. Resistance to aflatoxin accumulation in kernels of maize inbreds selected for ear rot resistance in West and Central Africa. *J. Food Prot.* 64:396-400.
 19. **Chen, Z. -Y.**, Brown, R. L., Lax, A. R., Cleveland, T. E., and Russin, J. S. 1999. Inhibition of plant pathogenic fungi by a corn trypsin inhibitor over-expressed in *Escherichia coli*. *Applied Environ. Microbiol.* 65:1320-1324.
 20. **Chen, Z. -Y.**, Brown, R. L., Russin, J. S., Lax, A. R., and Cleveland, T. E. 1999. A corn trypsin inhibitor with antifungal activity inhibits *Aspergillus flavus* α -amylase. *Phytopathology* 89:902-907.
 21. Brown, R. L., **Chen, Z. -Y.**, Cleveland, T. E., and Russin, J. S.. 1999. Advances in the development of host resistance to aflatoxin contamination by *Aspergillus flavus*. *Phytopathology (review)* 89:113-117.
 22. **Chen, Z. -Y.**, Brown, R. L., Lax, A. R., Guo, B. Z., Cleveland, T. E., and Russin, J. S. 1998. Resistance to *Aspergillus flavus* in corn kernels is associated with a 14 kDa protein. *Phytopathology* 88: 276-281.
 23. Karlsson, J., Clarke, A. K., **Chen, Z. -Y.**, Huggins, S. Y., Park, Y.-II, Husic, H. D., Moroney, J. V., and Samuelsson, G. 1998. A novel α -type carbonic anhydrase associated with the thylakoid membrane in *Chlamydomonas reinhardtii* is required for growth at ambient CO₂. *EMBO.* 17:1208-1216.
 24. Moroney, J. V., and **Chen, Z. -Y.** 1998. The role of the chloroplast in inorganic carbon uptake by eukaryotic algae. *Can. J. Bot. (review)* 76:1025-1034.
 25. Moroney, J. V., Burow, M. D., **Chen, Z. -Y.**, Borkhsenius, O. N., Mason, C. B., and Somanchi, A. 1998. Adaptation of *Chlamydomonas reinhardtii* to limiting CO₂ conditions. *In Photosynthesis: Mechanisms and Effects. Vol V*, Ed. by G. Garab, Kluwer Academic Publishers, Dordrecht, pp. 3443-3446.
 26. **Chen, Z. -Y.**, Lavigne, L. L., Mason, C. B. and Moroney, J. V. 1997. Cloning and overexpression of two cDNAs encoding the low-CO₂-inducible chloroplast envelope protein LIP-36 from *Chlamydomonas reinhardtii*. *Plant Physiol.* 114: 256-273.
 27. Guo, B. Z., **Chen, Z. -Y.**, Brown, R. L., Lax, A. R., Cleveland, T. E., Russin, J. S., Mehta, A. D., Selitrennikoff, C. P., and Widstrom, N. W. 1997. Germination induces accumulation of specific proteins and antifungal activities in corn kernels. *Phytopathology* 87:1174-1178.

28. **Chen, Z. -Y.**, Burow, M. D., Mason, C. B., and Moroney, J. V. 1996. A low CO₂ inducible gene encoding an alanine:alpha-ketoglutarate aminotransferase in *Chlamydomonas reinhardtii*. *Plant Physiol.* 112:677-684.
29. Burow, M. D., **Chen, Z. -Y.**, Mouton, T. M., and Moroney, J. V. 1996. Isolation of cDNA clones of genes induced upon transfer of *Chlamydomonas reinhardtii* cells to low CO₂. *Plant Mol. Biol.* 31:443-448.
30. **Chen, Z. -Y.**, Burow, M. D., and Moroney, J. V. 1995. Characterization of genes induced by low CO₂ in *Chlamydomonas reinhardtii*. *Photosynthesis: from Light to Biosphere*, (P. Mathis ed.), *Kluwer Academic Publishers, Vol. V*: 619-622.
31. **Chen, Z. -Y.**, and Moroney, J. V. 1995. Identification of a *Chlamydomonas reinhardtii* chloroplast gene with significant homology to bacterial genes involved in cytochrome *c* biosynthesis. *Plant Physiol.* 108:843-844.
32. **Chen, Z. -Y.**, Yu, M. M., and Fan, Y. L. 1993. Extraction and purification of a rice seed storage protein. *Science and Technology Bulletin* 5:20-24.

Abstracts:

1. **Chen, Z. -Y.**, Brown, R. L., Menkir, A., Damann, K. E., and Cleveland, T. E. 2005. Proteome analysis of near isogenic maize lines differing in the level of resistance against *Aspergillus flavus* infection/aflatoxin production. *Phytopathology* 95: S19.
2. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2005. Silencing the expression of RAP genes in maize and the effect on host resistance against *Aspergillus flavus* infection and aflatoxin production. Page ** in Proceedings of the USDA-ARS 5th Fungal Genomics, 6th Fumonisin Elimination, and 18th Aflatoxin Elimination Workshops, Raleigh, NC.
3. **Chen, Z. -Y.**, Brown, R. L., Frame, B. R. Wang, K., Cleveland, T. E. and Damann, K. E. 2004. Investigating the role(s) of corn glyoxalase I protein in host resistance to *Aspergillus flavus* infection/aflatoxin production using RNAi technology Page 32 in Proceedings of the USDA-ARS 4th Fungal Genomics, 5th Fumonisin Elimination, and 17th Aflatoxin Elimination Workshops, Sacramento, CA.
4. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2004. Identification and characterization of maize kernel proteins associated with resistance against *Aspergillus flavus* infection/ aflatoxin production using proteomics. Proceedings of the 15th International Plant Protection Congress, p. 367.
5. Brown, R. L., **Chen, Z.-Y.**, Menkir, A., White, D. G., and Cleveland T. E. 2004. Identification of natural resistance to aflatoxin elaboration in maize. Proceedings of the 15th International Plant Protection Congress, p. 367.
6. **Chen, Z. -Y.**, Brown, R. L., Cleveland, T. E., and Damann, K. E. 2004. Investigating the roles of an aflatoxin resistance-associated protein in maize using RNAi. *Phytopathology* 94: S18.

7. Brown, R. L., **Chen, Z.-Y.**, and Cleveland, T. E. 2004. The role of kernel water relations in resistance to aflatoxin production in corn. *Phytopathology* 94: S11.
8. Stuart, J., **Chen, Z. -Y.**, Ross, J., Bhatnagar, D., Brown, R. L., and Kale, S. P. 2004. Optimization of extraction protocols for two-dimensional electrophoresis of *Aspergillus parasiticus* intracellular proteins using toxigenic and non-toxigenic strains. ASM abstract.
9. Cleveland, T. E., Yu, J., **Chen, Z.-Y.**, Brown, R., and Bhatnagar, D. 2004. Fungal Genomics-An overview. *Mycopathologia* 157: 396.
10. **Chen, Z. -Y.**, Brown, R. L., Cleveland, T. E., and Damann, K. E. 2004. Identification and characterization of potential resistance markers through proteome analysis. *Mycopathologia* 157: 487.
11. **Chen, Z. -Y.**, Brown, R. L., Cleveland, T. E., and Damann, K. E. 2003. Construction of a gene-silencing binary vector for studying the functions of aflatoxin resistance-associated proteins/genes in corn through genetic engineering. Page 109 in Proceedings of the USDA-ARS 3rd Fungal Genomics, 4th Fumonisin Elimination, and 16th Aflatoxin Elimination Workshops, Savannah, GA.
12. Brown, R. L., **Chen, Z. -Y.**, Cleveland, T. E., Gonzalez, P., Jackson, T., Menkir, A., Damann, K. E., and Rajasekaran, K. 2003. Progress in the identification and characterization of maize resistance traits against aflatoxigenic fungi. Page 47 in Proceedings of the USDA-ARS 3rd Fungal Genomics, 4th Fumonisin Elimination, and 16th Aflatoxin Elimination Workshops, Savannah, GA.
13. Brown, R. L., **Chen, Z. -Y.**, Menkir, A., Cleveland, T. E. 2003. Proteins associated with aflatoxin-resistance in maize lines from a West African breeding program. *Phytopathology* 93: S12.
14. **Chen, Z. -Y.**, Brown, R. L., Cleveland, T. E., and Damann, K. E. 2002. Identification and characterization of potential resistance markers through proteome analysis. Page 135 in Proceedings of the USDA-ARS 2nd Fungal Genomics, 3rd Fumonisin Elimination, and 15th Aflatoxin Elimination Workshops, San Antonio, TX.
15. Cleveland, T. E., Yu, J. J., **Chen, Z. -Y.**, Brown, R. L., and Bhatnagar, D. 2002. Fungal genomics—an overview. Page 26 in Proceedings of the USDA-ARS 2nd Fungal Genomics, 3rd Fumonisin Elimination, and 15th Aflatoxin Elimination Workshops, San Antonio, TX.
16. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2002. Characterization of an endosperm protein expressed at higher levels in maize genotypes resistant to *Aspergillus flavus* infection/aflatoxin production. *Phytopathology* 92: S15.
17. **Chen, Z. -Y.**, Brown, R. L., Cleveland, T. E., and Damann, K. E. 2002. The use of proteomics to elucidate factors regulating the *corn-Aspergillus flavus* interaction. *Mycopathologia* 155: 14.

18. Brown, R. L., Cleveland, T. E., **Chen, Z. -Y.**, Gembeh, S. V., Menkir, A. Moore, S., Jeffers, D., Damann, K. E., Bhatnagar, D. 2002. The identification of maize kernel resistance traits through comparative evaluation of aflatoxin-resistant with susceptible germplasm. *Mycopathologia* 155: 77.
19. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2002. Characterization of a maize kernel protein associated with resistance against *Aspergillus flavus* infection/aflatoxin production. *Mycopathologia* 155: 111.
20. Payne, G. A., Bennett, J. W., Bhatnagar, D., Brown, D. W., **Chen, Z.-Y.**, Ehrlich, K. C., Eversole, K., Kistler, H. C., Nierman, W., Rocheford, T., Woloshuk, C., and Yu, J. 2002. Fungal genomics workshop. *Mycopathologia* 155: 19.
21. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2001. Characterization of a corn embryo protein associated with resistance against *Aspergillus flavus* infection/aflatoxin production. *Phytopathology* 91: S16.
22. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2001. The use of proteomics to elucidate factors regulating the corn-*Aspergillus flavus* interaction. Page 43 in Proceedings of the USDA-ARS 1st Fungal Genomics, 2nd Fumonisin Elimination, and 14th Aflatoxin Elimination Workshops, Phoenix, AZ.
23. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2001. Characterization of a maize kernel protein associated with resistance against *Aspergillus flavus* infection/aflatoxin production. Page 156 in Proceedings of the USDA-ARS 1st Fungal Genomics, 2nd Fumonisin Elimination, and 14th Aflatoxin Elimination Workshops, Phoenix, AZ.
24. Brown, R. L., Cleveland, T. E., **Chen, Z. -Y.**, Gembeh, S. V., Menkir, A. Moore, S., Jeffers, D., Damann, K. E., Bhatnagar, D. 2001. The identification of maize kernel resistance traits through comparative evaluation of aflatoxin-resistant with susceptible germplasm. Page 117 in Proceedings of the USDA-ARS 1st Fungal Genomics, 2nd Fumonisin Elimination, and 14th Aflatoxin Elimination Workshops, Phoenix, AZ.
25. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2000. Proteomics analysis of kernel embryo and endosperm proteins of corn genotypes resistant or susceptible to *Aspergillus flavus* infection. Page 88 in Proceedings of the USDA-ARS Aflatoxin Elimination Workshop, Yosemite, CA.
26. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 2000. Proteome comparisons of corn kernels resistant or susceptible to *Aspergillus flavus* infection. *Phytopathology* 90: S14.
27. Brown, R. L., **Chen, Z. -Y.**, Gembeh, S. V., Goh, Y. -K., Damann, K. E., Grimm, C., Yu, J. J., Cleveland, T. E., Bhatnagar, D. 2000. Identification and characterization of new corn kernel traits associated with resistance to *Aspergillus flavus* infection/aflatoxin production. Pages 148-149 in Proceedings of the USDA-ARS Aflatoxin Elimination Workshop, Yosemite, CA.
28. Cleveland, T. E., Brown, R. L., **Chen, Z. -Y.**, Cary, J. W., Rajasekaran, K. 2000. Corn as a source of antifungal genes for genetic engineering of crops for resistance to aflatoxin contamination. American Chemical Society Abstr. #AGFD 105.

29. Cleveland, T. E., Brown, R. L., **Chen, Z. -Y.**, Cary, J. W., Rajasekaran, K., Jacks, T. J., and Bhatnagar, D. 2000. Identification of antifungal genes from corn and other sources for enhancement of host plant resistance to invasion by mycotoxin-producing fungi. Proceedings of the Fumonisin Risk Assessment Workshop.
30. Cleveland, T. E., Brown, R. L., **Chen, Z. -Y.**, Cary, J. W., Rajasekaran, K., Bhatnagar, D. 2000. Corn as a source of antifungal genes for enhancement of resistance in crops to aflatoxin contamination. Proceedings of the 35th annual meeting UJNR (United States-Japan cooperative program on development and utilization of natural resources)-joint panel on toxic microorganism. Nov 5-11, Wash., DC.
31. **Chen, Z. -Y.**, Brown, R. L., Damann, K. E., and Cleveland, T. E. 1999. Characterization of an alkaline protease excreted by *Aspergillus flavus* and its function in fungal infection of corn kernels. *Phytopathology* 89: S15.
32. **Chen, Z. -Y.**, Cary, J. W., Brown, R. L., Damann, K. E., and Cleveland, T. E. 1999. Characterization of an alkaline protease excreted by *Aspergillus flavus* in infected corn kernels. Page 75 in Proceedings of the USDA-ARS Aflatoxin Elimination Workshop, Atlanta, GA.
33. Brown, R. L., **Chen, Z. -Y.**, and Cleveland, T. E. 1999. Biochemical characterization of corn kernels resistant to infection by *Aspergillus flavus* and *Fusarium moniliforme*. *Phytopathology* 89: S9.
34. Brown, R. L., **Chen, Z. -Y.**, Cleveland, T. E., Menkir, A., Cardwell, K., Kling, J., and White, D. G. 1999. Resistance to aflatoxin accumulation in maize inbreds selected for ear rot resistance in West and Central Africa. Page 11 in Proceedings of the USDA-ARS Aflatoxin Elimination Workshop, Atlanta, GA.
35. **Chen, Z. -Y.**, Brown, R. L., Russin, J. S., Lax, A. R., and Cleveland, T. E. 1998. Contribution of maize kernel constitutive and induced proteins to resistance against *Aspergillus flavus* infection. Page 41 in Proceedings of the USDA-ARS Aflatoxin Elimination Workshop, St. Louis, MO.
36. **Chen, Z. -Y.**, Brown, R. L., Russin, J. S., Lax, A. R., and Cleveland, T. E. 1998. A corn trypsin inhibitor with antifungal activity and associated with host resistance to aflatoxin elaboration inhibits *Aspergillus flavus* alpha-amylase production. *Phytopathology* 88: S16.
37. **Chen, Z. -Y.**, Brown, R. L., Lax, A. R., Cleveland, T. E., and Russin, J. S. 1998. Growth inhibition of various fungi by a corn trypsin inhibitor over expressed in *E. coli*. *Plant Physiol.* S149.
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