

Name and Title

Stanley John Kays
Professor Emeritus, Department of Horticulture
University of Georgia
Athens, GA 30602-7273

Personal Details

Date of Birth: 3 February 1945
Nationality: United States

Education

1968	Oklahoma State University	Horticulture	B.S.
1969	Michigan State University	Horticulture	M.S.
1971	Michigan State University	Hort. (Vegetable Crops)	Ph.D.
1971	Texas A & M University	Biology	Post-doctoral research
1972	University College of North Wales, Bangor, U.K.	Plant Biology	Post-doctoral research
1985	University of Cambridge, Cambridge, England	Applied Biology	Sabbatical research

Honors

Phi Kappa Phi; NSF Traineeship, 1968-1971; Dean's List; Sigma Xi; Alpha Zeta; Phi Beta Delta; Gamma Sigma Delta; Who's Who In Science In America; Danforth Award; Allis-Chalmers Scholarship; Mu Alpha Theta; Visiting Scholar, Wolfson College, University of Cambridge; American Society Hort. Sci. Gourley Research Award; Outstanding Vegetable Crops paper, Fla. St. Hort. Soc.; L.H. Ware Distinguished Research Award, Southern Reg. Amer. Soc. Hort. Sci.; Honorary Scientist, RDA South Korea; Chairperson Root & Tuber Crops Section, Int. Soc. Hort. Sci.; Outstanding Alumni, OSU; Scientific Advisor, RDA, South Korea; Editorial Board, Kasetsart Natural Sci., Thailand.

Major Research Interests

Flavor and insect resistance chemistry, developmental physiology of vegetable crops, postharvest physiology of horticultural products, phytoremediation of interior air.

Professional Experience

1971	Post-doctoral Research, Department of Biology, Texas A & M University, College Station, Texas.
1971-72	Post-doctoral Research, School of Plant Biology, University College of North Wales, U.K.
1973-76	Assistant Professor, Vegetable Crops, The University of Georgia, Coastal Plain Experiment Station, Tifton, Georgia.
1976-77	Associate Professor, Vegetable Crops, University of Arkansas, Dept. of Horticultural Food Science, Fayetteville, Arkansas.
1977-84	Associate Professor, Vegetable Crops and Postharvest Physiology, The University of Georgia, Athens, Georgia
1984-2011	Professor, Vegetable Crops and Postharvest Physiology, UGA.
2011-	Professor Emeritus, The University of Georgia, Athens, GA

Books

- Kays, S.J. 2011. *Cultivated Vegetables of the World: A Multilingual Onomasticon*. Wageningen Academic, Wageningen, The Netherlands, 828p.
- Kays, S.J. and S.F. Nottingham. 2007. *Biology and Chemistry of Jerusalem Artichoke: (Helianthus tuberosus L.)*. Taylor and Francis, Boca Raton, FL, 478p.
- Kays, S.J., and R.E. Paull. 2004. *Postharvest Biology*. Exon Press, Athens, GA, 568p.
- Kays, S.J., and J.C. Silva Dias. 1996. *Cultivated Vegetables of the World: Latin Binomial, Common Name in 15 Languages, Edible Part, and Method of Preparation*. Exon Press, Athens, 170p.
- Kays, S.J. 1991. *Postharvest Physiology of Perishable Plant Products*. Van Nostrand Reinhold, New York, 532p. (second printing 1997).

Books Edited

- Posudin, Y.I. 2004. *Physics with Fundamentals of Biophysics*. Agrarna Nauka, Kiev, Ukraine, 195p.
- Posudin, Y.I. and N.P. Massjuk. 2010. *Photomovement of Dunaliella Teod*. Vieweg+Teubner, Wiesbaden, Germany, 225p.
- Posudin, Y.I. 2015. *Sergei Chakhotin – His Contributions to Social Psychology and Biophysics*. Artmedia, Kiev. 119p.

Publications

215. Starr, C.K., D.D. Wilson and S.J. Kays. 2018. Behavioral repertory of *Cylas formicarius* (Fabr.) (Coleoptera: Brentidae) adults. *Coleopterist Bull.* (in press)
214. Starr, C.K., D.D. Wilson and S.J. Kays. 2016. Composition of the oviposition plug of *Cylas formicarius* (Coleoptera: Curculionidae) in host sweetpotatoes. *J. Entomological Sci.* 51(3): 250-251.
213. Posudin, Y.I., K.H.S. Peiris and S.J. Kays. 2015. Non-destructive detection of food adulteration to guarantee human health and safety. *Ukrainian Food J.* 4(2):207-260, 344, 353.
212. Thomas, C.K., K.J. Kim and S.J. Kays. 2015. Phytoremediation of indoor air. *HortScience* 50(5):765-768.
211. Kim, K.J., H.H. Jung, H.W. Seo, J.A. Lee and S.J. Kays. 2014. Volatile toluene and xylene removal efficiency of foliage plants as affected by top to root zone size. *HortScience* 49:230-234.
210. Cho, Sungeun, Edwin Nuijten, R.L. Shewfelte and S.J. Kays. 2013. Aroma chemistry of African *Oryza glaberrima* and *Oryza sativa* rice and their interspecific hybrids. *J Sci Food Agric.* (wileyonlinelibrary.com) DOI 10.1002/jsfa.6329
209. Cho, Sungeun Stanley J. Kays. 2013. Aroma-active compounds of wild rice (*Zizania palustris* L.). *Food Res. Int.* 54:1463-1470.
208. Zhang, H., S.V. Pennisi, S.J. Kays and M.Y. Habteselassie. 2013. Isolation and identification of volatile organic compounds-metabolizing bacteria from rhizospheres of two indoor plants. *Water Air Soil Pollution* 224:1648, 14p.

207. Kim, Kwang Jin, Eun Ha Yoo, and S.J. Kays. 2012. Decay kinetics of toluene phytoremediation stimulation. *HortScience* 47:1195–1198.
206. Kays, S.J. 2011. Phytoremediation of indoor air – Current state of the art. pp. 3-21, In: *The Value Creation of Plants for Future Urban Agriculture*, J.K. Kim (ed.), Nat. Inst. Hort. Herbal Science, RDA, Suwon, Korea.
205. Kim, K.J., E.H. Yoo, M.I. Jeong, J.S. Song, S.Y. Lee, and S.J. Kays. 2011. Changes in the phytoremediation potential of indoor plants with exposure to toluene. *HortScience* 46: 1646-1649.
204. Chun, S.-C., M.H. Yoo, Y.S. Moon, M.H. Shin, K.-C. Son, I.-M. Chung and S.J. Kays. 2010. Effect of bacterial population from rhizosphere of various foliage plants on removal of indoor volatile organic compounds. *Kor. J. Hort. Sci. Technol.* 28:476-483.
203. Kim, K.J., M.I. Jeong, D.W. Lee, J.S. Song, H.D. Kim, E.H. Yoo, S.J. Jeong, S.Y. Lee, S.J. Kays, Y.W. Lim, and H.H. Kim. 2010. Variation in formaldehyde removal efficiency among indoor plant species. *HortScience* 45:1489-1495.
202. Yang, D.S., K.S. Lee, S.J. Kays. 2010. Characterization and discrimination of premium-quality, waxy, and black-pigmented rice based on odor-active compounds. *J. Sci. Food Agri.* 90:2595-2601.
201. Li, Changying, G.W. Krewer, Pingsheng Ji, H. Schermd, S.J. Kays. 2010. Gas sensor array for blueberry fruit disease detection and classification. *Postharvest Biology Technol.* 55:144-149.
200. Seo, M.W., D.S. Yang, S.J. Kays, J.-H. Kim, J.H. Woo, and K.W. Park. 2009. Effects of nutrient solution electrical conductivity and sulfur, magnesium, and phosphorus concentration on sesquiterpene lactones in hydroponically grown lettuce (*Lactuca sativa* L.). *Scientia Hort.* 122:369-374.
199. Yoon, J.-W., K.C. Son, D.S. Yang and S.J. Kays. 2009. Removal of tobacco smoke under light and dark conditions as affected by foliage plants. *Kor. J. Hort. Sci. Technol.* 27:312-318.
198. Yang, D.S., S.V. Pennisi, K.C. Son, and S.J. Kays. 2009. Screening indoor plants for volatile organic pollutant removal efficiency. *HortScience* 44:1377-1381.
197. Yang, D.S., K.C. Son and S.J. Kays. 2009. Volatile organic compounds emanating from indoor ornamental plants. *HortScience* 44:396-400.
196. Seo, M.W., D.S. Yang, S.J. Kays, G.P. Lee and K.W. Park. 2009. Sesquiterpene lactones and bitterness in Korean leaf lettuce cultivars. *HortScience* 44:1-4.
195. Yang, D.S., C.F. Ruiz, R.T. Toledo, R.R. Balandrán Quintana, and S.J. Kays. 2009. Combined effect of hyperbaric, controlled atmosphere and UV treatments on peach volatiles. *Postharvest Biol. Biotechnol.* 51:334-341.
194. Nelson, S.O., S. Trabelsi and S.J. Kays. 2008. Dielectric spectroscopy of melons for quality sensing. *Amer. Soc. Agri. Biol. Eng.* 51:2209-2214.
193. Yang, D. S., K. S. Lee, and S. J. Kays. 2008. Site of origin of volatile compounds in cooked rice. *Cereal Chem.* 85:591-598.
192. Limpawattana, M., D.S. Yang, S.J. Kays and R.L. Shewfelt. 2008. Relating sensory descriptors to volatile components of speciality rice flavor. *J. Food Sci.* 73:S456-S461.
191. Guo, W.C., S.O. Nelson, S. Trabelis and S.J. Kays. 2008. Radio frequency (RF) dielectric properties of honeydew melon and watermelon juice and correlations with fruit quality.

- Chinese Soc. Agric. Eng.* 24(5):289-292.
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 176. Lee, S.D., S.J. Kim, S.I. Jung, K.C. Son and S.J. Kays. 2006. Diurnal CO₂ assimilation patterns in nine species of CAM-type succulent plants. *HortScience* 41:1373-1376.
 175. Nelson, S.O., S. Trabelsi and S.J. Kays. 2006. Correlating honeydew melon quality with dielectric properties. *Amer. Soc. Agri. Biol. Eng.* Paper no. 066122:1-9.
 174. Nelson, S.O., S. Trabelsi and S.J. Kays. 2006. Correlating dielectric properties of melons with quality. Pp. 4849-4852, In: *IEEE Antennas and Propagation Society International Symposium*. USNC/URSI and AMERM Meetings, Phoenix, AZ.
 173. Kays, S.J. 2006. Flavor – the key to sweetpotato consumption. *Acta Hort.* 703:97-105.

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171. Kays, S.J. and F. Kultur. 2005. Genetic variation in Jerusalem artichoke (*Helianthus tuberosus* L.) flowering date and duration. *HortScience* 40:1675-1678.
170. Kays, S.J. 2005. Sweetpotato production worldwide: Assessment, trends and the future. *Acta Hort.* 670:19-25.
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167. Kays, S.J. 2003. Postharvest quality – Measurement, factors affecting and the future. *Proc. Australasian Postharvest Horticulture Conference*, pp. 109-119.
166. Afek, U., and S.J. Kays. 2003. Postharvest physiology and storage of widely used root and tuber crops. *Hort. Rev.* 30:253-316.
165. Kays, S.J. 2003. Sweetpotato. In: The commercial storage of fruits, vegetables, and florist and nursery stock. *U.S.D.A. Handbook 66*, Washington, DC. (online).
164. Kays, S.J. 2003. Jerusalem artichoke. In: The commercial storage of fruits, vegetables, and florist and nursery stock. *U.S.D.A. Handbook 66*, Washington, DC. (online).
163. Kays, S.J. 2003. Processing nut crops. Pp. 349-362. In: *Guide to Nut Tree Culture in North America*. Vol. 1, D.W. Fulbright (ed.), Northern Nut Growers Association.
162. Wang, Y. and S.J. Kays. 2003. Analytically directed flavor selection in breeding food crops. *J. Amer. Soc. Hort. Sci.* 128:711-720.
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159. Nottingham, S.F., and S.J. Kays. 2002. Strategies for sweetpotato weevil control. *Acta Hort.* 583:155-161.
158. Posudin, Y.I., G.G. Dull and S.J. Kays. 2002. Blood glucose monitoring in diabetes patients. *J. Endrokrynologia* 7(2):242-256.
157. Wang, Y., and S.J. Kays. 2002. Sweetpotato volatile chemistry in relation of sweetpotato weevil (*Cylas formicarius* Summers) behavior. *J. Amer. Soc. Hort. Sci.* 127:656-662.
156. Mohammed, M., Y. Wang, and S.J. Kays. 2001. Changes in the volatile chemistry of fresh-cut papaya (*Carica papaya* L.) during storage. *Tropical Agric.* 78:268-271.
155. Kays, S.J., W.J. McLaurin, Y. Wang, P.D. Dukes, J.R. Bohac, and D.M. Jackson. 2001. GA90-16 – A nonsweet, staple-type sweetpotato breeding line. *HortScience* 36:175-177.
154. Wang, Y., and S.J. Kays. 2001. Effect of cooking method on the aroma constituents of sweetpotatoes [*Ipomoea batatas* (L.) Lam.]. *J. Food Quality* 24:67-78.
153. Kays, S.J. 2000. On-line near infrared quality assessment of high moisture plant products. Pp. 119-127. In: *Integrated View of Fruit & Vegetable Quality*. W.J. Florkowski, S.E. Prussia, R.L. Shewfelt (eds.), Technomic Pub., Lancaster, PA.
152. Wang, Y., and S.J. Kays. 2000. Contribution of volatile compounds to the characteristic

- aroma of baked 'Jewel' sweetpotatoes [*Ipomoea batatas* (L.) Lam.]. *J. Amer. Soc. Hort. Sci.* 125:638-643.
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