

Curriculum Vita

Gregory E. Welbaum

School of Plant and Environmental Science, Virginia Tech, Professor and Plant Biologist,
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<u>Education</u>	<u>Major</u>	<u>Institution</u>	<u>Year</u>
B.S.	Horticulture	The Ohio State University	1974-78
M.S.	Vegetable Crops	University of California, Davis	1978-79
Ph.D.	Plant Physiology	University of California, Davis	1985-88
Postdoc	Plant Mol. Biol.	Hawaiian Sugar Planters' Exp. Station	1989-90

Professional Experience

Instructor, Seed Production Short Course, Seed Biotechnology Center, University of California, Davis, taught annually one week in February (2015 to 2020).

Visiting Professor, Department of Plant and Environmental Sciences. University of California, Davis, Fall semester 2013 through Spring semester 2014.

Visiting Professor, Dept. of Plant and Animal Science Nova Scotia Agricultural College, May to July 2007.

Assistant Department Head, Instruction and International Programs, Dept. of Horticulture Virginia Tech, August 2005-2009.

Recently Appointed Administrators Training Workshop, University of Nebraska Lincoln, NE Completed June 2006.

Adjunct Professor Department of Horticulture and Crop Science, The Ohio State University 2005-2006.

Visiting Professor, Dept. of Plant Industry, National Pingtung University of Science and Technology, Pingtung, Taiwan, February to July 2005.

Project Coordinator, North American Mobility Program for Higher Education, Aquaculture and Agriculture Sustainability, October 2004 to 2009.

Biotechnology Coordinator, S.E. Asia, Integrated Pest Management-Collaborative Research Support Program (USAID), 2002 to 2007.

Professor, Department of Horticulture (now SPES), Virginia Tech, 2002 to present.

Associate Professor, Department of Horticulture, Virginia Tech, 1996 to 2002.

Assistant Professor, Department of Horticulture, Virginia Tech, 1990 to 1996.

Post-Doctoral Research Assistant, Cell and Molecular Biology Research Unit of the Hawaii Agriculture Research Center (formerly HSPA), Aiea, HI 1989-90.

Research and Teaching Assistant, Department of Vegetable Crops, UC, Davis, 1986-88.

Companies Founded and Operated

Thermogradient System LLC. Blacksburg, Virginia founded 2017 (scientific equipment manufacturer)

Business Experience (non-academic)

Managing Partner, Welbaum Farms of Ohio, family partnership, Newton Township, Miami County, Ohio, 2015 to present
Advisory Board Chair, Appalachian Herb Growers' Consortium, Pilot, Virginia 2012-18
Commercial Vegetable and Strawberry Grower, Welbaum Farms, Miami County, Ohio, 1971-78.

Publications Complete list of Citations with Impact Statistics:

<https://scholar.google.com/citations?hl=en&user=P6HggigAAAAJ>

https://www.researchgate.net/profile/Gregory_Welbaum

Books

WELBAUM G. 2021. *Vegetable Seed Production, Physiology, and Technology*. CAB International, Wallingford, Oxfordshire, UK 320 pages (in preparation, September 2021 contracted completion date. 320 pages).

ATEH C., BAYLES M., WELBAUM G., MANNES J. 2016. *Agronomy-Grow With It*. Publisher: American Society of Agronomy. ISBN: 978-0-89118-349-5. 112 pages

WELBAUM G. 2015. *Vegetable Crops: Principles and Practices*. CAB International, Wallingford, Oxfordshire, UK 476 pages.

Book Chapters and Sections (Since 2017)

WELBAUM, G. 2017. Chapter 2. Seed production (pp.546–552.) In: *Encyclopedia of Applied Plant Sciences*, Vol 1, 2nd Ed., Academic Press, Eds: B. Thomas, B. G. Murray and D. J. Murphy. DOI: 10.1016/B978-0-12-394807-6.00213-6

Referred Journal Publications (Since 2019)

LAKOBA, V., GREGORY WELBAUM, G.E., SEILER, J., BARNEY, J.,A 2021. Perennial invader's seed, but not rhizome, emergence traits correlate with climate and land use origin. *NeoBiota* accepted.

AVERITT, B.J., WELBAUM, G.E., LI, X., PRENGER, E., QIN, J. AND ZHANG, B., 2020. Evaluating genotypes and seed treatments to increase field emergence of low phytic acid soybeans. *Agriculture* 10: 516-533; doi:10.3390/agriculture10110516.

ELLIS, M.D., HOAK, J.M., ELLIS, B.W., BROWN, J.A., SIT, T.L., WILKINSON, C.A., REED, T.D. AND WELBAUM, G.E., 2020. Quantitative real-time PCR analysis of individual flue-cured tobacco seeds and seedlings reveals seed transmission of tobacco mosaic virus. *Phytopathology* 110: 194-205.

ACHARYA, T.P., REITER, M.S., WELBAUM, G. AND ARANCIBIA, R.A., 2020. Nitrogen uptake and use efficiency in sweet basil production under low tunnels. *HortScience* 55: 429–435.doi.org/10.21273/HORTSCI14515-19.

SAMARAH, N.H., AL-QURAAN, N.A., MASSAD, R.S. AND WELBAUM, G.E., 2020. Treatment of bell pepper (*Capsicum annuum* L.) seeds with chitosan increases chitinase and glucanase activities and enhances emergence in a standard cold test. *Scientia Horticulturae* 269 doi.org/10.1016/j.scienta.2020.109393.

ACHARYA, T.P., WELBAUM, G.E. AND ARANCIBIA, R.A., 2020. Low tunnels reduce insect populations, insecticide application, and chewing insect damage on Brussels sprouts. *Journal of Economic Entomology* 113: 2553-2557.

ACHARYA, T.P., WELBAUM, G.E. AND ARANCIBIA, R.A. 2019. Low tunnels reduce irrigation water needs and increase growth, yield and water use efficiency in Brussels sprouts. *HortScience* 54: 470-475.

TRAORE, S.M., ECKSHAIN-LEVI, N., MIAO, J., CASTRO SPARKS, A., WANG, Z., WANG, K., LI, Q., BURDMAN, S., WALCOTT, R., WELBAUM, G.E. AND ZHAO, B., 2019. Nicotiana species as surrogate host for studying the pathogenicity of *Acidovorax citrulli*, the causal agent of bacterial fruit blotch of cucurbits. *Molecular Plant Pathology*, 20: 800-814.