Thirty-six Years of Award-winning Vegetable Publication Excellence in ASHS Journals

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Keywords. award recipients, effective communication, vegetable value

Abstract. **The American Society for Horticultural Science (ASHS) Vegetable Publication Award, established in 1985, recognizes the author(s) of the outstanding paper on vegetable crops each year published in ASHS journals by an ASHS member. The goal is to encourage better quality research and more effective communication through writing and publication. Manuscripts published in any of the three ASHS journals are eligible to receive the award. To date, of the 36 awarded papers, 86.5% of the awarded papers were published in the *Journal of the American Society for Horticultural Science* and 13.5% in *HortScience*, and no publications in *HortTechnology* have received the award. Authors from 25 states have received the Vegetable Publication Award, with Florida having the most recipients (eight), followed by California (four), Wisconsin (four), Michigan (three), and Illinois (three). In addition, the Vegetable Publication Award has been presented to papers with authors from Israel (two), Canada (two), and one each from Belgium, Brazil, China, Italy, Japan, and the Netherlands. There is some association between commodities that were the subject of the awarded papers and the highest value vegetable commodities in the United States. Eight of the awarded papers reported studies on tomato (ranked first for value in the United States), four on lettuce (ranked second), and three each on broccoli, (ranked fifth) and sweet corn (ranked seventh). Most of the awarded papers covered topics related to plant physiology and response to stress (18 papers), followed by breeding and genetic resources (eight papers); nutraceuticals, aroma, and volatiles (five papers); genetics and gene mapping (three papers); postharvest (two papers); and only one winning paper focused on production systems.**

The ASHS Vegetable Publication Award recognizes the author(s) of the outstanding paper on vegetable crops each year published in ASHS journals by an ASHS member. The award was established by the ASHS Board of Directors in 1985, and the first award was presented in 1986. The award was preceded by the Homer C. Thompson award for the most outstanding research paper in vegetable crops published by ASHS. The selection criteria for the Vegetable Publication Award includes originality, accuracy, clarity, and conciseness of the presentation and contribution to the advancement of knowledge of the subject. In addition, at least one author must be an active member of ASHS. Papers must report results of original and substantial research (basic or applied) dealing with or relating to development or improvement of vegetable cultivars or vegetable propagation, cropping practices, quality, harvesting, processing, storage, marketing, or utilization. Work on any vegetable crop is eligible, including watermelon [*Citrullus lanatus* (thunb.) matsum. & nakai], potato (*Solanum tuberosum* L.), and sweet corn (*Zea mays* L.). The Screening Committee to select the awardee consists of five ASHS members, plus at least two alternates, appointed each year by the ASHS president-elect, who designates as chair a person who has had previous experience on a relevant screening committee. The Screening Committee evaluates the publications each year, and the ASHS Awards Committee is responsible for final selection of the winning paper.

Since the establishment of the award, manuscripts published in any of the three ASHS journals are eligible to receive the award. However, 86.5% of the awarded papers were published in the *Journal of American Society for Horticultural Science* and 13.5% in *HortScience*, whereas no publications in *HortTechnology* have received the award (Table 1). The mean number of authors per publication is 3.7, and there is a slight increasing trend with time, although this greatly varies by year. However, overall, there has been considerable collaboration across institutions, states, and countries among the Vegetable Publication Award winning papers (Table 2).

Authors from 25 states have received the Vegetable Publication Award, with Florida (eight awarded papers) having the most recipients, followed by California (four), Wisconsin (four), Michigan (three), and Illinois (three). In addition, the Vegetable Publication Award has been presented to papers with authors from Israel (two awarded papers), Canada (two), and one each from Belgium, Brazil, China, Italy, Japan, and the Netherlands (Table 2). According to the US Department of Agriculture (USDA), the greatest vegetable production value by state is California; Florida is ranked third and Michigan is seventh. Therefore, there was not a strong association between the state of the Vegetable Publication Award recipients and a state's value of vegetable production. However, there was some association between commodities that were the subject of the awarded papers and the highest value vegetable commodities in the United States. Among the 36 winning papers, eight reported studies on tomato (*Solanum lycopersicum* L.), four on lettuce (*Lactuca sativa* L.), and three each on sweet corn, broccoli (*Brassica oleracea* L. var. *italica* Plenck.), and watermelon. According to the USDA National Agriculture Statistics Services (2020), tomato was the highest valued vegetable produced in the United States, followed by leaf lettuce (although romaine lettuce was fourth and leaf lettuce was ninth); broccoli was ranked fifth and sweet corn was rank seventh.

By far, most of the awarded papers covered topics related to plant physiology and response to stress (18 papers), followed by breeding and genetic resources (eight papers); nutraceuticals, aroma, and volatiles (five papers); genetics and gene mapping (three papers); postharvest (two

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25 Years of Publication Excellence Awards for ASHS Journals.

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Table 1. Citation of the ASHS Vegetable Publication Award Recipients, 1986–2022.

Yr	Citation	Cited by (no.)[i]
1986	Kitto SL, Janick J. 1985. Production of synthetic seeds by encapsulating asexual embryos of carrot. J Am Soc Hortic Sci. 110(2):277–282. https://doi.org/10.21273/JASHS.110.2.277	244
1987	Walker DW, Miller JC. 1986. Influence of water stress on nitrogen fixation in cowpea. J Am Soc Hortic Sci. 111(3):451–458. https://doi.org/10.21273/JASHS.111.3.451	18
1988	Shannon MC, Gronwald JW, Tal M. 1987. Effects of salinity on growth and accumulation of organic and inorganic ions in cultivated and wild tomato species. J Am Soc Hortic Sci. 112(3):416–423. https://doi.org/10.21273/JASHS.112.3.416	158
1989	Saltveit ME Jr. 1988. Postharvest glyphosate application reduces toughening, fiber content, and lignification of stored asparagus spears. J Am Soc Hortic Sci. 113(4):569–572. https://doi.org/10.21273/JASHS.113.4.569	30
1990	Ke D, Saltveit ME Jr. 1989. Regulation of russet spotting, phenolic metabolism, and IAA oxidase by low oxygen in iceberg lettuce. J Am Soc Hortic Sci. 114(4):638–642. https://doi.org/10.21273/JASHS.114.4.638	49
1991	La Bonte DR, Juvik JA. 1990. Characterization of sugary-1 (su-1) sugary enhancer (se) kernels in segregating sweet corn populations. J Am Soc Hortic Sci. 115(1):153–157. https://doi.org/10.21273/JASHS.115.1.153	27
1992	Sterrett SB, Lee GS, Henninger MR, Lentner M. 1991. Predictive model for onset and development of internal heat necrosis of 'Atlantic' potato. J Am Soc Hortic Sci. 116(4):701–705. https://doi.org/10.21273/JASHS.116.4.701	13
1993	Grumet R, Barczak M, Tabaka C, Duvall R. 1992. Aboveground screening for genotypic differences in cucumber root growth in the greenhouse and field. J Am Soc Hortic Sci. 117(6):1006–1011. https://doi.org/10.21273/JASHS.117.6.1006	7
1994	Juvik JA, Jangulo MC, Headrick JM, Pataky JK, Tracy WF. 1993. Kernel changes in a shrunken2 maize population associated with selection for increased field emergence. J Am Soc Hortic Sci. 118(1):135–140. https://doi.org/10.21273/JASHS.118.1.135	21
1995	Ozminkowski RH Jr, Jourdan P. 1994. Comparing the resynthesis of *Brassica napus* L. by interspecific somatic and sexual hybridization. I. Producing and identifying hybrids. J Am Soc Hortic Sci. 119(4):808–815. https://doi.org/10.21273/JASHS.119.4.808	22
1996	Rahman ASA, Huber DJ, Brecht JK. 1995. Low-oxygen-induced poststorage suppression of bell pepper fruit respiration and mitochondrial oxidative activity. J Am Soc Hortic Sci. 120(6):1045–1049: https://doi.org/10.21273/JASHS.120.6.1045	11
1997	Parera CA, Cantliffe DJ, McCarty DR, Hannah LC. 1996. Improving vigor in shrunken-2 corn seedlings. J Am Soc Hortic Sci. 121(6):1069–1075. https://doi.org/10.21273/JASHS.121.6.1069	25
1998	Ukoskit K, Thompson PG. 1997. Autopolyploidy vs. allopolyploidy and low-density RAPD linkage maps of sweetpotato. J Am Soc Hortic Sci. 122(6):822–828. https://doi.org/10.21273/JASHS.122.6.822	80
1999	Maul F, Sargent SA, Balaban MO, Baldwin EW, Huber DJ, Sims CA. 1998. Aroma volatile profiles from ripe tomatoes are influenced by physiological maturity at harvest: An application for electronic nose technology. J Am Soc Hortic Sci. 123(6):1094–1101. https://doi.org/10.21273/JASHS.123.6.1094	126
2000	Kerdnaimongkol K, Woodson WR. 1999. Inhibition of catalase by antisense RNA increases susceptibility to oxidative stress and CI in transgenic tomato plants. J Am Soc Hortic Sci. 124(4):330–336. https://doi.org/10.21273/JASHS.124.4.330	87
2001	Farnham MW, Stephenson KK, Fahey JW. 2000. Capacity of broccoli to induce a mammalian chemoprotective enzyme varies among inbred lines. J Am Soc Hortic Sci. 125(4):482–488. https://doi.org/10.21273/JASHS.125.4.482	81
2002	Schmalstig JG, McAuslane HJ. 2001. Developmental anatomy of zucchini leaves with squash silverleaf disorder caused by the silverleaf whitefly. J Am Soc Hortic Sci. 126(5):544–554. https://doi.org/10.21273/JASHS.126.5.544	18
2003	Brown AF, Yousef GG, Jeffery EH, Klein BP, Wallig MA, Kushad MM, Juvik JA. 2002. Glucosinolate profiles in broccoli: Variation in levels and implications in breeding for cancer chemoprotection. J Am Soc Hortic Sci. 127(5):807–813. https://doi.org/10.21273/JASHS.127.5.807	189
2004	Coombs JJ, Douches DS, Li W, Grafius EJ, Pett WL. 2003. Field evaluation of natural, engineered, and combined resistance mechanisms in potato for control of Colorado potato beetle. J Am Soc Hortic Sci. 128(2):219–224. https://doi.org/10.21273/JASHS.128.2.0219	24
2005		115

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Table 1. (*Continued*)

Yr	Citation	Cited by (no.)[i]
	Frantz JM, Ritchie G, Cometti NN, Robinson J, Bugbee B. 2004. Exploring the limits of crop productivity: Beyond the limits of tipburn in lettuce. J Am Soc Hortic Sci. 129(3):331–338. https://doi.org/10.21273/JASHS.129.3.0331	
2006	Musgrave ME, Kuang A, Tuominen LK, Levine LH, Morrow RC. 2005. Seed storage reserves and glucosinolates in *Brassica rapa* L. grown on the International Space Station. J Am Soc Hortic Sci. 130(6):848–856. https://doi.org/10.21273/JASHS.130.6.848	41
2007	Westerveld SM, McKeown AW, McDonald MR. 2006. Seasonal nitrogen partitioning and nitrogen uptake of carrots as affected by nitrogen application in a mineral and an organic soil. HortScience. 41(5):1332–1338. https://doi.org/10.21273/HORTSCI.41.5.1332	31
2008	Xiao Q, Loy JB. 2007. Inheritance and characterization of a glabrous trait in summer squash. J Am Soc Hortic Sci. 132(3):327–333. https://doi.org/10.21273/JASHS.132.3.327	9
2009	Smith SM, Scott JW, Bartz JA, Sargent SA. 2008. Diallel analysis of fruit water absorption in tomato, a contributing factor in postharvest decays. J Am Soc Hortic Sci. 133(1):55–60. https://doi.org/10.21273/JASHS.133.1.55	12
2010	Higashide T, Heuvelink E. 2009. Physiological and morphological changes over the past 50 years in yield components in tomato. J Am Soc Hortic Sci. 134(4):460–465. https://doi.org/10.21273/JASHS.134.4.460	154
2011	Vinson EL III, Woods FM, Kemble JM, Perkins-Veazie P, Davis A, Kessler JR. 2010. Use of external indicators to predict maturity of mini-watermelon fruit. HortScience. 45(7):1034–1037. https://doi.org/10.21273/HORTSCI.45.7.1034	33
2012	Zhou S, Sauvé RJ, Liu Z, Reddy S, Bhatti S, Hucko SD, Fish T, Thannhauser TW. 2011. Identification of salt-induced changes in leaf and root proteomes of the wild tomato, *Solanum chilense*. J Am Soc Hortic Sci. 36(4):288–302. https://doi.org/10.21273/JASHS.136.4.288	49
2013	Villordon A, LaBonte D, Solis J, Firon N. 2012. Characterization of lateral root development at the onset of storage root initiation in 'Beauregard' sweetpotato adventitious roots. HortScience. 47(7):961–968. https://doi.org/10.21273/HORTSCI.47.7.961	85
2014	Di Gioia F, Signore A, Serio F, Santamaria F. 2013. Grafting improves tomato salinity tolerance through sodium partitioning within the shoot. HortScience. 48(7):855–862. https://doi.org/10.21273/HORTSCI.48.7.855	55
2015	Hayes RJ, Galeano CH, Luo Y, Antonise R, Simko I. 2014. Inheritance of decay of fresh-cut lettuce in a recombinant inbred line population from 'Salinas 88' × 'La Brillante'. J Am Soc Hortic Sci. 139(4):388–398. https://doi.org/10.21273/JASHS.139.4.388	29
2016	Shen J, Dirks R, Havey MJ. 2015. Diallel crossing among doubled haploids of cucumber reveals significant reciprocal-cross differences. J Am Soc Hortic Sci. 140(2):178–182. https://doi.org/10.21273/JASHS.140.2.178	19
2017	Kleintop AE, Myers JR, Echeverria D, Thompson HJ, Brick MA. 2016. total phenolic content and associated phenotypic traits in a diverse collection of snap bean cultivars. J Am Soc Hortic Sci. 141(1):3–11. https://doi.org/10.21273/JASHS.141.1.3	12
2018	Levi A, Simmons AM, Massey L, Coffey J, Wechter WP, Jarret RL, Tadmor Y, Nimmakayala P, Reddy UK. 2017. Genetic diversity in the desert watermelon *Citrullus colocynthis* and its relationship with *Citrullus* species as determined by high-frequency oligonucleotides-targeting active gene markers. J Am Soc Hortic Sci. 142(1):47–56. https://doi.org/10.21273/JASHS03834-16	15
2019	D'Angelo CJ, Goldman IL. 2018. Temporal aspects of vernalization and flowering in long-day storage onion. J Am Soc Hortic Sci. 143(6):446–453. https://doi.org/10.21273/JASHS04495-18	13
2020	Stone S, Boyhan G, McGregor C. 2019. Inter and intracultivar variation of heirloom and open-pollinated watermelon cultivars. HortScience. 54(2):212–220. https://doi.org/10.21273/HORTSCI13638-18	9
2021	Meng Q, Boldt J, Runkle ES. 2020. Blue radiation interacts with green radiation to influence growth and predominantly controls quality attributes of lettuce. J Am Soc Hortic Sci. 145(2):75–87. https://doi.org/10.21273/JASHS04759-19	50
2022	Cirak M, Myers JR. 2021. Cosmetic stay-green trait in snap bean and the event cascade that reduces seed germination and emergence. J Am Soc Hortic Sci. 146(5):329–338. https://doi.org/10.21273/JASHS05038-20	5

[i] Number of citations were collected from Google Scholar. Data retrieved on 12 Jan 2024.

Table 2. State or country and university or institution of residence for ASHS Vegetable Publication Award recipients, 1986–2022.

US state or country of the first author	First author institution	Yr(s)[i]	US state(s) or country of coauthors if different from first author[ii]
Alabama	Auburn University, Auburn	2011	Oklahoma and North Carolina
California	University of California Davis, Davis	1989, 1990	
Washington DC	United State Department of Agriculture (USDA), Washington DC	1988, 2015	Minnesota and Israel, Maryland and the Netherlands
Colorado	Colorado State University, Ft. Collins	2017	Oregon
Connecticut	University of Connecticut, Storrs	2006	Texas, Wisconsin, and Florida
Florida	University of Florida, Gainesville	1996, 1997, 1999, 2002, 2009	
Georgia	University of Georgia, Athens	2020	
Illinois	University of Illinois, Champaign	1991, 1994, 2003	Wisconsin
Indiana	Purdue University, West Lafayette	1986, 2000	
Louisiana	Louisiana State University, Baton Rouge	2013	Israel
Michigan	Michigan State University, East Lansing	1993, 2004, 2021	Canada, Ohio
Mississippi	Mississippi State University, Starkville	1998	
Ohio	The Ohio State University, Columbus	1995	
Oregon	Oregon State University, Corvallis	2022	
South Carolina	USDA	2001, 2018	Maryland, Georgia, Israel, West Virginia
Tennessee	Tennessee State University, Nashville	2012	New York
Texas	Texas A&M University, College Station	1987	
Utah	Utah State University, Logan	2005	Brazil
Virginia	Virginia Polytechnic Institute and State University, Blacksburg	1992	Arkansas, NJ
Wisconsin	University of Wisconsin Madison, Madison	2016, 2019	China, Belgium
Canada	University of Guelph, Guelph	2007	
Italy	Universita' degli Studi di Bari, Bari, Apulia	2014	
Japan	Tokyo University of Agriculture and Technology, Tokyo, Fuchu, Harumicho	2008	New Hampshire
Netherlands	Wageningen University and Research, Wageningen	2010	

[i] Years underlined correspond to state or country of residence of coauthors.
[ii] Underlined country or state of residence of coauthors corresponds to underlined year.

papers); and only one winning paper focused on production systems.

As might be expected, most authors received the Vegetable Publication Award only once. However, several authors have received the award two or three times. Dr. Jack Juvik, Professor at the University of Illinois, Urbana-Champaign, Champaign, IL, USA, has received the award three times (1991, 1994, and 2003) and also won the Homer C. Thompson Award for the most outstanding research paper in vegetable crops published by ASHS in 1983. Four people have received the award twice: Dr. Donald J. Huber (1996, 1999), Professor at the University of Florida, Gainesville, FL, USA; Dr. Jim Myers (2017, 2022), Baggett-Frazier Endowed Professor of Vegetable Breeding and Genetics at Oregon State University,

Corvallis, OR, USA; Dr. Mikal Saltveit, Jr (1989, 1990), Professor at the University of California Davis, Davis, CA, USA (1999, 2009); and Dr. Steven Sargent, Professor and Associate Chair at the University of Florida.

The ASHS has a strong history of both publications and acknowledging the significant contributions of its membership. The outstanding Vegetable Publication Award recognizes significant accomplishments of researchers working in a diverse array of topics around vegetables. At the same time, the award encourages better quality research and more effective communication through writing and publication. In the pursuit of the ASHS Vegetable Publication Award, authors are not only challenged to cultivate groundbreaking research but also to sow the seeds of knowledge with eloquence and precision, ensuring that their work contributes to meaningful discovery and exceptional writing.

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