

## Chad Elliott Finn

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**Current Title:** USDA-ARS Research Geneticist  
Courtesy appointment with Oregon State University,  
Department of Horticulture

### Education History:

Graduate Ph.D.- Horticulture (minor Plant Breeding), 1989, University of Minnesota. Thesis: Germplasm sources and screening methods to develop higher soil pH tolerance in *Vaccinium*.

M.S.-Horticulture, 1985, University of Minnesota. Thesis: Inheritance of and relationships between bloom date, ripe date, fruit filling period, and fruit size in blueberry progenies.

Undergraduate B.S.- Horticulture Production, 1983, Purdue University.

### Professional Positions:

1993-present **Research Geneticist**, U.S.D.A.-ARS, Northwest Center for Small Fruit Research, Horticultural Crops Research Lab, Corvallis, Ore.  
1989-1993 **Assistant Professor of Horticulture/State Fruit Crop Specialist**, Department of Horticulture, University of Missouri, Columbia, Mo  
1983-1989 **Graduate Research Assistant**, Department of Horticultural Science and Landscape Architecture, University of Minnesota. St. Paul, Minn.  
1988-1989 **Assistant Extension Specialist - Fruit Crops**, Department of Horticultural Science and Landscape Architecture, University of Minnesota, St. Paul, Minn.  
1980-1982 **Research Assistant (summer)**, Small Fruits Lab. U.S.D.A.-ARS, Beltsville, Md.

### Current Research Activities:

Research activities combine applied efforts to develop new small fruit (blackberry, strawberry, raspberry, blueberry) cultivars for the Pacific Northwest commercial industry along with more basic efforts to understand the distribution of genetic diversity in wild relatives of these small fruit crops.

**Cultivars Released:**

'Lewis' (1998; in cooperation with HortResearch Inc. New Zealand)

'Siskiyou' trailing blackberry (1997)

'Firecracker' strawberry (1997)

'Independence' strawberry (1997)

'Black Butte' blackberry (1996)

'Triple Crown' blackberry (1996; in cooperation with USDA-ARS, Beltsville, Maryland)

'Earlysweet' black raspberry (1996; in cooperation with USDA-ARS, Beltsville, Maryland)

'Chandler' blueberry (1994; in cooperation with USDA-ARS, Chatsworth, N.J.)

**Germplasm Collection Experience:**

- 1996 China. Spent one month collecting small fruit germplasm (*primarily: Rubus, Fragaria, Vaccinium, Ribes, and Actinidia*) in northeast China. U.S. participants included M. Thompson and J. Postman (USDA-ARS National Clonal Germplasm Repository). Primary Chinese hosts were Xi Shengke and Zhang Qinghua (Chinese Academy of Forestry) and Wu Xiaochun (Heilongjiang Forest Science Institute). Material collected will be planted in 1997 for evaluation.
- 1996 Ecuador. Three weeks were spent collecting *Fragaria chiloensis* land races, *Rubus* and *Vaccinium* species at high elevation primarily in the regions near Ambato and Quito. U.S. participants included J. Hancock (Michigan State University) and C. Heider (Oregon State University). Material is currently under evaluation.
- 1994 United States. Two weeks were spent collecting *Rubus, Vaccinium* and *Fragaria* in Oregon and Washington. Material is currently under evaluation.
- 1993 United States. Two weeks were spent in Oregon collecting *Rubus* and *Vaccinium*. Material is currently under evaluation.
- 1993 United States. Three weeks were spent in Washington collecting *Rubus, Fragaria, Vaccinium, and Ribes* west of the Cascade Mountains. This trip was conducted cooperatively with the University of Minnesota (Luby, Harrison, Hoover). Portion of seed submitted to U.S.D.A.-ARS National Clonal Germplasm Repository. Material is currently under evaluation.
- 1990-1992 United States. *Vaccinium* was collected throughout Missouri for evaluation at the Univ. of Missouri, North Carolina State Univ., and by the USDA-ARS(Corvallis)

**Teaching Activities:**

- Co-teach 'Fruit Materials' with A. Azarenko, S. Mehlenbacher and B. Strik.  
Taught every two years  
Lecture annually in: Plant Breeding (Mehlenbacher)  
Horticulture Research (Boyer)

**Professional Activities:**

- Technical Advisory Committee, USDA-ARS National Clonal Germplasm Repository, Corvallis, Ore. 1993-present  
USDA Small Fruit Crop Germplasm Committee, 1993-present; Chair 1997-1998  
NCR-22; Small Fruit and Viticulture Committee. Chair 1997-1998.  
North American Bramble Growers Association Annual Meeting Planning Committee, co-Chair, 1995-1996  
North American Bramble Growers Association, western Representative, 1995-present.  
Oregon State University Farm Committee, 1995-present  
American Pomological Society, Advisory Committee, 1996-1998.  
American Pomological Society, co-chair Small Fruit Advisory Committee, 1996-present

American Society of Horticultural Science, Chair History working group, 1996-97  
American Society of Horticultural Science, Chair-elect, Viticulture and Small Fruit working group 1997.  
Oregon Horticulture Society, Co-Chair Berry Program, 1996  
Western Pest Conference, Chair. 1996-1997.  
Northwest Center for Small Fruit Research. Genetics Technical Working Group, Chair, 1994-1995.  
Coordinating editor horticulture portion of annual Midwest Tree Fruit Spray Guide, 1990-1993  
Missouri Small Fruit Conference Planning Committee, co-Chair, 1990-1992  
Missouri State Horticultural Society Annual Meeting Planning Committee, Chair, 1989-1992

**Professional and Honorary Society Memberships:**

Alpha Zeta  
American Pomological Society  
American Society of Horticultural Science  
Ceres  
Gamma Sigma Delta  
International Society for Horticultural Science  
Lower Mainland Horticultural Improvement Association  
North American Fruit Explorers  
North American Bramble Growers Association  
North American Strawberry Growers Association  
Oregon Horticulture Society  
Western Washington Horticulture Society  
Botanical Society of America (1994-1995)

**Honors and Awards:**

USDA Certificate of Merit. "For sustained performance in maintaining a dynamic and highly productive research program on the genetics and breeding of small fruit crops. September 1997

USDA Certificate of Merit. "For outstanding accomplishments in establishing a dynamic and productive breeding program for small fruit crops in the Pacific Northwest. November 1996

**Current Graduate Students:**

Angela Anderson, M.S., Horticulture. Thesis- Evaluation of variation within *Rubus ursinus* collected from native sites throughout the Pacific Northwest

Rengong Meng, M.S., Horticulture. Thesis- Evaluation of *Rubus* chromosome numbers using flow cytometry.

**Undergraduate Students Advised/Mentored:**

Melanie Ulrich, Horticulture, Texas A&M University  
Grey Horton, BioResource Research, Ore. State University

Chris Heider, BioResource Research, Ore. State University  
Jill Ridout, Horticulture, Ore. State University

**Participation in Major International, National, and Regional Meetings:**

International

International Rubus and Ribes Symposium (Melbourne, Australia, 1998)  
Beltsville Symposium: Germplasm Resources: Collection, Ownership and  
Intellectual Property Rights (Beltsville, MD, 1995)  
International Rubus and Ribes Symposium (Skierniewice, Poland, 1993)  
International Strawberry Symposium (Baltimore, 1992)  
International Vaccinium Symposium (Madison, 1988)

National

American Society for Horticultural Science (1984-1990, 1992, 1994-1997)  
North American Strawberry Research Conference (Orlando, 1995)  
North American Strawberry Growers Association Annual Meeting (Vancouver,  
BC, 1998; Los Angeles, 1996; Orlando, 1995)  
North American Bramble Growers Association (Portland, 1996; Orlando, 1995  
Minneapolis, 1992)  
North American Blueberry Research Workers Conference (Portland, 1989)  
North American Blueberry Council (Portland, 1998)

Regional

Western Washington Horticultural Association (Tacoma, 1993-1997)  
Oregon State Horticultural Society (Portland, 1993-1997)  
North Willamette Valley Horticulture Conference (Portland, 1993-1997)  
Oregon Strawberry Commission Annual Meeting (Aurora, 1993-1997)  
Oregon Caneberry Commission Annual Meeting (Aurora, 1993-1997)  
Lower Mainland Horticultural Improvement Association (Abbotsford, BC 1993-  
1994, 1996)  
Pacific Northwest Biennial Blueberry Conference (Portland, 1994; 1996)  
Western Small Fruit Pest Conference (Various locations, 1993-1997)  
Univ. of California, S. Coast Res. Station, Strawberry Field Day (Los Angeles,  
1993; Watsonville, 1996)

## Research Publications:

### Theses

- Finn, C.E. 1989. Germplasm sources and screening methods to develop higher soil pH tolerance in *Vaccinium*. Ph. D. Diss., University of Minnesota, St. Paul, (Diss. Abstr. 50-09B).
- Finn, C.E. 1985. Inheritance of and relationships between bloom date, ripe date, fruit filling period, and fruit weight in blueberry progenies. M. S. thesis. University of Minnesota, St. Paul, Mn.

### Refereed Publications

- Finn, C.E. and Warmund, M.R. 1998. Fertigation vs. surface application of nitrogen during blueberry plant establishment. *Acta Horticulturae* 446.
- Finn, C., F.J. Lawrence, and B.C. Strik. 1998. Black Butte trailing blackberry. *HortScience* 32:355-357.
- Finn, C.E., Hancock, J.F. and Heider, C. 1998. Notes on the strawberry of Ecuador: Ancient land races, the community of farmers and modern production. *HortScience* 33:583-587.
- Finn, C. E., Wennstrom, K. and Hummer, K. Crossability of Eurasian *Rubus* species with red raspberry and blackberry. *Acta Horticulturae* (Accepted December 1997).
- Meng, R. and Finn, C.E. Use of flow cytometry to determine ploidy level in *Rubus*. *Acta Horticulturae* (Accepted December 1997).
- Hummer, K.E. and Finn, C.. Recent *Rubus* and *Ribes* acquisitions at the USDA ARS National Clonal Germplasm Repository. *Acta Horticulturae* (Accepted December 1997).
- Hummer, K.E. and Finn, C.. Susceptibility of *Ribes* genotypes to white pine blister rust. *Acta Horticulturae* (Accepted December 1997).
- Perkins-Veazie, P., C. Finn, C., Baldwin, E. and Takeda, F.. Volatile profiles of blackberry (*Rubus* sp.) cultivars change with production region in the United States. (Accepted December 1997).
- Galletta, G.J., Maas, J.L, Clark, J.R., and Finn, C.E. 1998. 'Triple Crown' Thornless Blackberry. *Fruit Var. J.* 52:124-127.
- Finn, C., Strik, B.C. and Lawrence, F.J. 1998. The 'Marion' trailing blackberry. P. 183-187. In: (D. Ferree and L. Chandler, eds,) *A History of Fruit Varieties; The American Pomological Society One Hundred Fifty Years 1848-1998*. Good Fruit Grower Magazine, Yakima, Wash. (Book Chapter).
- Finn, C., B.C. Strik and F.J. Lawrence. 1997. Marion trailing blackberry. *Fruit Var. J.* 51: 130-132.
- Hancock, J.F, C.E. Finn and C. Heider. 1997. A farmer based attempt to conserve the historic Andean strawberry. *Chronica Hort.* 37:14-16.
- Galletta G.J., J.L. Maas, C.E. Finn, B.J. Smith, and C.L. Gupton. 1997. The United States Department of Agriculture strawberry breeding program. *Fruit Var. J.* 4:204-210.
- Galletta, G.J., J.L. Maas, C.E. Finn, B. J. Smith, C. L. Gupton, J.J. Luby, and D.K. Wildung. 1997. New strawberries from the USDA cooperative breeding programmes. *Acta Hort.* 439: 227-232.
- Finn, C. 1996. Germplasm resources in strawberry: Resistance traits, p. 103-112,

- In: M. Pritts, T. Crocker, and C. Chandler (eds.). Proc. IV North American Strawberry Conference.
- Finn, C. and R. Martin. 1996. Distribution of tobacco streak, tomato ringspot and raspberry bushy dwarf virus in *Rubus ursinus* collected from the Pacific Northwest. Plant Dis.80:769-772.
- Finn, C. 1996. Emasculated trailing blackberry (*Rubus* sp.) flowers set drupelets when not protected from cross pollination by bagging. HortScience 31:1035.
- Strik, B.C., J. Mann, and C. Finn. 1996. Percent drupelet set varies among blackberry genotypes. J. Amer. Soc. Hort. Sci. 121:371-373
- Finn, C. 1996. Germplasm resources in strawberry: Resistance traits. Proc. IV North American Strawberry Research Conference. Orlando, Fla.
- Finn, C., G. Koskela, and J. Snead. 1995. Severity of Botrytis blossom blight damage on blueberry cultivars and selections. Biol. & Cult. Tests for Control of Plant Diseases. Vol. 10:53.
- Warmund, M.R., C.J. Starbuck, and C.E. Finn. 1995. Micropropagated 'Redwing' raspberry plants mulched with recycled newspaper produce greater yields than those grown with black polyethylene. J. Small Fruit and Viticulture. 3(1):63-74.
- Warmund, M., C. Finn, and C. Starbuck. 1995. Yield of micropropagated 'Allen' black raspberry plants reduced by bark mulch, shade cloth and folicote treatments. J. of Small Fruit and Viticulture. 3 (1): 15-24.
- Finn, C., M. Warmund, and C. Starbuck. 1994. Vegetative growth and fruit yield of three types of micropropagated 'Redwing' red raspberry nursery stock. HortTechnology 4:359-?
- Finn, C.E., Luby, J.J. Rosen, C.J. and Ascher, P.D. 1993. Blueberry germplasm screening at several soil pH regimes. I. Plant survival and growth. J. Amer. Soc. Hort. Sci. 118:377-382.
- Finn, C.E., C.J. Rosen, J.J. Luby, and P.D. Ascher. 1993. Blueberry germplasm screening at several soil pH regimes. I. Plant nutrient composition. J. Amer. Soc. Hort. Sci. 118:383-387.
- Finn, C.E. and J.J. Luby. 1992. Inheritance of fruit quality traits in blueberry. J. Amer. Soc. Hort. Sci. 117:617-621.
- Finn, C.E., J.J. Luby, C.J. Rosen, and P.D. Ascher. 1991. Evaluation in vitro of blueberry germplasm for higher pH tolerance. J. Amer. Soc. Hort. Sci. 116:312-316.
- Finn, C.E., J.J. Luby, and D.K. Wildung. 1990. Half-high blueberry cultivars. Fruit Var. J. 44:63-68.
- Finn, C.E., C.J. Rosen, and J.J. Luby. 1990. Nitrogen form and solution pH effects on root anatomy of cranberry. HortScience 25:1419-1421.
- Luby, J.J. and C.E. Finn. 1987. Inheritance of ripening uniformity and relationship to crop load in blueberry progenies. J. Amer. Soc. Hort. Sci. 112:167-170.
- Finn, C.E. and J.J. Luby. 1986. Inheritance of fruit development interval and fruit size in blueberry progenies. J. Amer. Soc. Hort. Sci. 111:784-788.
- Luby, J.J. and C.E. Finn. 1986. Quantitative inheritance of plant growth habit in blueberry progenies. J. Amer. Soc. Hort. Sci. 111:609-611.

#### Non-Refereed Publications

- Finn, C.E. 1998. Cultivars for the West Coast. Proc. 1998 North American

- Farmers' Direct Marketing Conference and North American Strawberry Growers Annual Meeting. Victoria, British Columbia.
- Finn, C.E., F.J. Lawrence, B.C. Strik, B. Yorgey, J. DeFrancesco, G. Koskela, D. Peacock, and K. Wennstrom. Naming and release of trailing blackberry cultivar Siskiyou. USDA-ARS. 1997. (Release Notice)
- Finn, C.E., F.J. Lawrence, B.C. Strik, B. Yorgey, G. Koskela, D. Peacock, and T. Mackey. 1997. Naming and release of strawberry cultivar Firecracker. USDA-ARS. (Release Notice)
- Finn, C.E., F.J. Lawrence, B.C. Strik, B. Yorgey, G. Koskela, D. Peacock, and T. Mackey. 1997. Naming and release of strawberry cultivar Independence. USDA-ARS. (Release Notice)
- Finn, C.E. and D. Peacock. 1998. Blueberry cultivars for the next century. North American Blueberry Council 33<sup>rd</sup> Annual Meeting Proceedings. p. 26-36.
- Thompson, M., J. Postman, and C. Finn. 1997. Exploration for *Rubus*, *Vaccinium*, *Ribes*, and *Fragaria* germplasm in northeast China. USDA-ARS Plant Germplasm Office.
- Finn, C. 1997. Strawberries, pp 507-509. In: (ed.) Sunset National Garden Book. Sunset Books Inc. Menlo Park, Cal. (Book Chapter)
- Finn, C., K. Wennstrom, T. Mackey, D. Peacock, C. Pace, and B. Yorgey. 1997. New blackberry and strawberry cultivars being released from USDA-ARS breeding program. Proc. Ore. Horticultural Society. 88:163-172.
- Finn, C. 1997. Small Fruit Breeding Programs: Will They Save the World. Proc. Missouri Small Fruit Conference. 1-6.
- Finn, C. New blueberry cultivars: What you should be trying. 1997. Proc. Missouri Small Fruit Conference. 45-58.
- Finn, C., K. Wennstrom, T. Mackey, and D. Peacock. 1997. New small fruit cultivars from down south: New USDA releases from Corvallis Proc. Western Washington Horticultural Association, Seatac, Wash. 141-143.
- Finn, C.E., T. Mackey, K. Wennstrom, R. Martin, A. Anderson, R. Meng, and F. J. Lawrence. 1997. USDA-ARS Small Fruit Breeding Program. In: (Finn, ed.) USDA-ARS Northwest Center for Small Fruit Research Report to North Central Regional Committee Small Fruits and Viticulture (NCR-22), Wichita, Kans.
- Finn, C.E., F.J. Lawrence, B.C. Strik and K. Wennstrom. 1996. Naming and release of trailing blackberry cultivar Black Butte. USDA-ARS.(Release Notice)
- Finn, C. 1996. The good, the bad, and the ugly: Results of blueberry cultivar and selection trial at the NWREC, p. 73-85. In: C. Brun (ed.) Proc. of the 6<sup>th</sup> Northwest Biennial Blueberry Growers Meeting.
- Finn, C. 1996. New blackberry, raspberry and strawberry cultivars. Proc. 38<sup>th</sup> Annual Lower Mainland Horticultural Improvement Association Meeting. pp 45-47.
- Finn, C. 1996. Promising strawberry and caneberry cultivars and selections for Oregon. Oregon Horticultural Society.
- Finn, C. 1996. New blueberry cultivars to meet market demands: The good, the bad, and the ugly in selection and cultivar trial at the OSU-North Willamette Research and Extension Center. p. 107-117. In: Proc. 38<sup>th</sup> Annual Lower Mainland Horticultural Improvement Association Meeting.
- Finn, C.E., T. Mackey, K. Wennstrom, R. Martin, A. Anderson, R. Meng, and F. J.



- Lawrence. 1996. USDA-ARS Small Fruit Breeding Program. In: (Finn, ed.) USDA-ARS Northwest Center for Small Fruit Research Report to North Central Regional Committee Small Fruits and Viticulture (NCR-22), Stephens Point, Wisc.
- Finn, C. Small Fruit Breeding: Why bother and what's it all about? (Part II). 1996. In: (P. Byers and G. Moore, eds.) News from the Berry Patch. University Extension, University of Missouri/State Fruit Experiment Station, Southwest Missouri State University, 3 (1):2-3.
- Finn, C. Small Fruit Breeding: Why bother and what's it all about? (Part I). 1995. In: (P. Byers and G. Moore, eds.) News from the Berry Patch. University Extension, University of Missouri/State Fruit Experiment Station, Southwest Missouri State University, 2 (4):2-3.
- Finn C., T. Mackey, and K. Wennstrom. Strawberry, blackberry, red raspberry and blueberry cultivar development for the Pacific Northwest. 1995. Proc. Northwest Center for Small Fruit Research.
- Finn C., K. Wennstrom, T. Mackey, A. Anderson. 1995. Collection, evaluation and incorporation of new *Rubus*, *Vaccinium* and *Fragaria* germplasm into USDA/NCSFR breeding program. Proc. Northwest Center for Small Fruit Research.
- Finn, C. Genetics technical work group summary. 1995. Proc. Northwest Center for Small Fruit Research.
- Finn, C. Strawberry breeding in the Pacific Northwest - Primary goals Northwest. 1995. Proc. 1995 Annual Meeting North American Strawberry Growers Association. 12:16.
- Finn, C. and G. Koskela. 1995. Keeping up with the changing blueberry cultivar picture for the Pacific Northwest. Proc. W. Washington Horticulture Association 85:92-109.
- Finn, C.E., T. Mackey, K. Wennstrom, R. Martin, A. Anderson, R. Meng, and F. J. Lawrence. 1995. USDA-ARS Small Fruit Breeding Program. Report to North Central Regional Committee Small Fruits and Viticulture (NCR-22), Simcoe, Ontario, Canada.
- Finn, C. 1995. Germplasm resources in strawberry: Resistance traits. Proc. IV North American Strawberry Research Conference. In press.
- Finn, C. 1995. New blueberry cultivars for Washington. Proc. W. Washington Horticulture Association.
- Finn, C. 1994. Advanced selections from the USDA strawberry breeding program. Proc. Oregon State Horticultural Society.
- Finn, C. 1994. New blueberry cultivars for the Pacific Northwest and what's up with the U.S.D.A. Proc. Biennial Pacific Northwest Blueberry Conference.
- Finn, C., M. Warmund, and C. Starbuck. 1992. Buying preferred stock for red raspberry plantings. Proc. 1992 Missouri Small Fruit Conference.
- Finn, C.E. 1991. The applicability of organic solid waste for fruit production. Proceedings 1991 Optimum Resource Utilization Workshop, Lexington, Ky.
- Finn, C.E. 1991. Better blueberries for marginal sites. Proc. 1991 Missouri Small Fruit Conference.
- Finn, C.E., M. Warmund, and C. Starbuck. 1991. Cultural practices to enhance survival and growth of late planted micropropagated raspberry plants. Proc.

- 1991 Missouri Small Fruit Conference.
- Finn, C.E. 1990. Raspberry breeding and cultivars: What's ready for trial in Missouri and what may be coming in the future. Proc. 1990 Missouri Small Fruit Conference.
- Finn, C.E. 1990. Before you start a commercial fruit production operation: Some thoughts on marketing and initial costs. Proc. 1990 Missouri Small Fruit Conference.
- Luby, J. and C. Finn. 1984. Inheritance and relationships of bloom date, ripe date, fruit filling period, and fruit weight in blueberry. Proc. of the Fifth North American Blueberry Research Workers Conference.

#### Published Abstracts

- Meng, R., C. Finn, and R.P. Doss. 1997. Determination of nuclear DNA content and ploidy level in *Rubus* by flow cytometry. HortScience 32:514.
- Finn, C., J. Postman, and M. Thompson. 1997. Small fruit germplasm collection in northeast China. HortScience 32: 439.
- Finn, C., K. Wennstrom, and K. Hummer. 1996. Crossability of 14 *Rubus* species with red raspberry and blackberry cultivars. HortScience 31:620.
- Hancock, J.F, C.E. Finn, and C. Heider. 1996 A history of the Ecuadorian strawberry, Huachi (Ambato). HortScience 31:610.
- Anderson, A.K. and C.E. Finn 1996 Geographical influences on morphological variation in *Rubus ursinus* subsp. *macropetalus*. HortScience 31:609.
- Warmund, M.R., C.J. Starbuck, and C.E. Finn. 1995. Recycled newspaper: An effective mulch for micropropagated raspberry transplants. HortScience 30: 844.
- Anderson A.K., and C.E. Finn. 1995. Variation in reproductive traits of western trailing blackberry (*Rubus ursinus*) in the Pacific Northwest. HortScience 30: 833.
- Anderson, A.K. and C.E. Finn. 1995. Morphological variation in western trailing blackberry (*Rubus ursinus*) in the Pacific Northwest. HortScience 30: 767.
- Finn, C. and K. Wennstrom. 1995. Twospotted spider mite presence on forty *Rubus* species. HortScience 30:834.
- Finn, C., G. Koskela, and J. Snead. 1994. Severity of Botrytis blossom blight damage on blueberry cultivars and selections. HortScience 29:506 (Abstr.).
- Finn, C. and R. Martin. 1994. Tobacco streak virus presence in *Rubus ursinus* collected from the Pacific Northwest. HortScience 29:506(Abstr.).
- Finn, C.E., M.R. Warmund, and C.J. Starbuck. 1992. Vegetative growth and reproductive potential of three types of micropropagated red raspberry nursery stocks. HortScience. 27.
- Finn, C.E., J.J. Luby, C.J. Rosen, and P.D. Ascher. 1989. In vitro evaluation of pH tolerance in blueberry (*Vaccinium* spp.) germplasm. HortScience. 24:98.
- Finn, C.E., J.J. Luby, C.J. Rosen, and P.D. Ascher. 1989. Field evaluation of soil pH tolerance in blueberry (*Vaccinium* spp.) germplasm. HortScience. 24:67.
- Finn, C.E., C. Rosen, and J. Luby. 1988. Nitrogen source and solution pH effects on root anatomy of 'Searles' cranberry (*Vaccinium macrocarpon*). HortScience 23:119.
- Luby, J.J., C.E. Finn, N.O. Anderson, and P.D. Ascher. 1987. Incompatibility in

lowbush blueberry (Vaccinium angustifolium). HortScience 22:97.

Finn, C.E., et al. 1987. Screening blueberry genotypes for higher pH tolerance. HortScience 22:97.

Finn, C.E. and J.J. Luby. 1986. Inheritance of fruit color, size and firmness in blueberry progenies. HortScience 21:683.

Finn, C. and J. Luby. 1985. Inheritance of plant size and stature in blueberry (Vaccinium spp.) progenies. HortScience 20:65.

Finn, C. and J. Luby. 1984. Inheritance and relationships of bloom date, ripening date, fruit filling period, and fruit size in blueberry progenies. HortScience 19:114.

#### **Extension Publications:**

Finn, C., B. Barrett, J. Thompson and T. Niblack. 1993. Fruit. 1993 Missouri Plant Pest Management Guide (M-140). University Extension. University of Missouri, Columbia, Mo.

Townsend, H.G., J. Moore, M. Kaps, C. Finn, M. Warmund, and H. Shaffer. 1993. Missouri Commercial Grape Pest Control Guide. Southwest Missouri State University, Mtn. Grove, Mo.

Byers, P., C.E. Finn, et al. 1993. Missouri Small Fruit Pest Management Guide Update (MX-377). Southwest Missouri State University, Mtn. Grove, Mo.

Finn, C.E., B. Barrett, W.H. Shaffer, H. DiCarlo, and M. Warmund. 1993. Missouri Commercial Tree Fruit Spray Guide. University Extension (MP-651), University of Missouri, Columbia, Mo.

Finn, C., P. Byers, and M. Horstmeier. 1993. Commercial strawberry production in Missouri. University of Missouri and Southwest Missouri State University, Columbia, Mo. (In press)

Shaffer, W.H. and C.E. Finn. 1992. Fireblight (G6020). University Extension, University of Missouri, Columbia, Mo.

Finn, C.E. and H.F. DiCarlo. 1992. Home Fruit Production: Grape Training Systems (G6090). University Extension, University of Missouri, Columbia, Mo.

Finn, C.E. and H.F. DiCarlo. 1992. Home Fruit Production: Peaches (G6030). University Extension, University of Missouri, Columbia, Mo.

Finn, C.E. 1992. Apple production (G6021). University Extension, University of Missouri, Columbia, Mo.

Finn, C.E. 1992. Apple varieties and their uses (G6022). University Extension, University of Missouri, Columbia, Mo.

Townsend, H.G., J. Moore, M. Kaps, C. Finn, M. Warmund, and H. Shaffer. 1992. Missouri Commercial Grape Pest Control Guide. Southwest Missouri State University, Mtn. Grove, Mo.

Byers, P., C.E. Finn, et al. 1992. Missouri Small Fruit Pest Management Guide Update (MX-377). Southwest Missouri State University, Mtn. Grove, Mo.

Finn, C.E., B. Barrett, W.H. Shaffer, H. DiCarlo, M. Warmund, and E. Palm. 1992. Missouri Commercial Tree Fruit Spray Guide. University Extension (MP-651), University of Missouri, Columbia, Mo.

Finn, C., A. Gaus, and H. DiCarlo. 1991. Home Fruit Production: Strawberries (G6135). University Extension, University of Missouri, Columbia, Mo.

- Finn, C. and H.F. DiCarlo. 1991. Home Fruit Production: Grape Varieties and Culture (G6085). University Extension, University of Missouri, Columbia, Mo.
- Finn, C. and T. Niblack. 1991. Fruit, p. 103-134. In J. Shaner and P. Donald (eds.). 1991 Missouri Plant Disease Management Guide (M-140). University Extension. University of Missouri, Columbia, Mo.
- Finn, C.E. et al. 1991 Missouri Commercial Tree Fruit Spray Guide (MP-651). University Extension (MP-651), University of Missouri, Columbia, Mo.
- Finn, C.E., B. Barrett, and W.H. Shaffer. 1991. Home Fruit Spray Schedules (G6010). University Extension, University of Missouri, Columbia, Mo.
- Byers, P., C.E. Finn, et al. 1991. Missouri Small Fruit Pest Management Guide (MX-376). Southwest Missouri State University, Mtn. Grove, Mo.
- Byers, P., C.E. Finn, et al. 1991. Missouri Small Fruit Pest Management Guide (1991 chemical update) (MX-377). Southwest Missouri State University, Mtn. Grove, Mo.
- Townsend, H.G., J. Moore, M. Kaps, B. Barrett, C. Finn, M. Warmund, and H. Shaffer. 1991. 1991 Missouri Commercial Grape Pest Control Guide. Southwest Missouri State University, Mtn. Grove, Mo.
- Rothenberger, R.R., B. Fick, C. Finn and C. DeCourley. 1991. Garden and Home Grounds Weed Control (G6952). University Extension, University of Missouri, Columbia, Mo.
- Finn, C. 1991. Fruit and nut cultivar nursery sources (G6012). University Extension, University of Missouri, Columbia, Mo.
- Finn, C. 1991. Sources of information for starting a commercial fruit operation. (G6011). University Extension, University of Missouri, Columbia, Mo.
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#### **Popular Articles and Trade Magazines:**

- Finn, C.E. 1988. The Drought's Effects on Fruit Crops. The Farmer, November:("Drought" insert)
- Finn, C.E. 1990. Blueberry pollination. The Minnesota Beekeeper. Winter 1990.
- Finn, C.E. 1990. Live mulch works for strawberries. The Great Lakes Fruit Growers News, 29(4):56.

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Finn, C.E. 1990. Living mulch works for strawberries. Northland Berry News. 4(3):17.

Finn, C.E. 1991. `Redwing' (raspberry) looking good. Northland Berry News. 5(3):10.

**Periodical Publication:**

Finn, C.E. 1990-1992. **Fresh Picks:** News for fruit growers who profit from their pickings. Published 9 times/year.

**Departmental Publication:**

Finn, C.E. 1986. DataBase II, p. 38-42 **In** N. Anderson and C. Wylie (eds.), IBM Personal Computer Manual: Software programs, printers, plotters. University of Minnesota, Department of Horticultural Science and Landscape Architecture, St. Paul, Mn.

**Invited Presentations:**

New blueberry cultivars for western Canada. 1999. Lower Mainland Horticultural Improvement Association. Abbotsford, B.C.

Strawberry, raspberry and blackberry cultivars from the USDA. 1999. Lower Mainland Horticultural Improvement Association. Abbotsford, B.C.

New small fruit cultivars from the USDA. 1999. Western Washington Horticultural Association, Seatac, WA.

Temperate berry crops. 1998. New Crops Symposium. Phoenix, AZ.

Strawberry cultivars for the West Coast. 1998. North American Strawberry Growers Association Annual Meeting. Victoria, B.C.

1998 Rubus-Ribes Symposium. 1998. 1998 Western Small Fruit Pest Conference Skamania, WA

New Berry Fruits. 1998. New Crops Conference, Phoenix, Ariz.

Results of blueberry trials are in! What you should be planting for the next century. 1998. North American Blueberry Council. Portland, Ore.

Fruit Variety Trends: The Impact on Fruit Spreads and Juices. 1997. 1997 Food Industry TechnoForum (International Jelly and Preserve Assoc.). Orlando, Fla.

Small Fruit Breeding Programs: Will they save the world. 1997. Key-note speaker at Missouri Small Fruit Conference. Springfield, Mo.

New Blueberry Cultivars: What you should be trying. 1997. Missouri Small Fruit Conference. Springfield, Mo.

New small fruit cultivars from down south: New USDA releases from Corvallis. 1997. Western Washington Horticultural Association, Seatac, Wash.

New blackberry and strawberry cultivars being released from USDA-ARS Breeding Program. 1997. Oregon Horticultural Society. Portland, Ore.

Blueberry cultivars for the 21<sup>st</sup> Century. 1997. Oregon Blueberry Growers Association. Aurora, Ore.

The good, the bad and the ugly; Results of blueberry cultivar and selection trial at the North Willamette Research and Extension Center. 1996. Biennial Pacific Northwest Blueberry Conference. Portland, Ore.

Promising strawberry and caneberry cultivars and selections for Oregon. 1996 Oregon Horticultural Society. Portland, Ore.

New blackberry, raspberry and strawberry cultivars. 1996. Lower Mainland Horticultural Improvement Association. Abbotsford, B.C. Canada.

New blueberry cultivars to meet market demands: The good, the bad, and the ugly in selection and cultivar trial at the OSU-North Willamette Research and Extension Center. 1996. British Columbia Blueberry Growers Association. Abbotsford, B.C. Canada.

USDA-ARS small fruit breeding. 1996. Heilong Jiang Forestry Bureau faculty and students. Huzhong, China.

USDA-ARS Germplasm collection, evaluation and incorporation. 1996. Jilin College of Forestry faculty and students. Jilin, China.

USDA-ARS Small fruit breeding and germplasm enhancement. 1996. Chinese Academy of Sciences faculty and staff. Beijing, China.

The good, the bad and the ugly; Results of blueberry cultivar and selection trial at the North Willamette Research and Extension Center. Jan. 1996. Biennial

Pacific Northwest Blueberry Conference. Portland, OR  
 New strawberry, blackberry and raspberry cultivars and selections for the Pacific Northwest. Jan. 1996. Oregon Horticultural Society. Portland, OR  
 Small fruit selections and cultivars from the USDA-ARS. Feb. 1996. Lower Mainland Horticultural Improvement Association. Abbotsford, B.C. Canada.  
 Blueberry cultivars for the Pacific Northwest. Feb. 1996. British Columbia Blueberry Growers Association. Abbotsford, BC Canada.  
 Germplasm resources in strawberry: Resistance traits. Feb. 1995. IV North American Strawberry Research Conference. Orlando, Fla.  
 New blueberry cultivars for Washington. Jan. 1995. W. Washington Horticulture Association. Tacoma, Wash.  
 Advanced selections from the USDA strawberry breeding program. Jan. 1994. Oregon State Horticultural Society. Portland, Ore.  
 New blueberry cultivars for the Pacific Northwest and what's up with the U.S.D.A. Jan. 1994. Biennial Pacific Northwest Blueberry Conference. Portland, Ore.  
 Overview of fruit production in the Midwest. Jan. 1993. Western Small Fruit Pest Conference. Timberline, Ore.  
 Missouri tree fruit production. Feb. 1992. Southern Illinois Fruit Growers Annual Meeting. Cobden, Ill.  
 Using fruit crops in the landscape. Dec. 1992. St. Louis Master Gardeners. St. Louis, Mo.  
 Getting started in small fruit production. Feb. 1992. Missouri Small Fruit Conference. Springfield, Mo.  
 Buying preferred stock for red raspberry plantings. Feb. 1992. Missouri Small Fruit Conference Springfield, Mo.  
 Getting started in the small fruit business. Nov. 1991. Nebraska Alternative Crop Workshop, Nebraska City, Neb.  
 The applicability of organic solid waste for fruit production. Oct. 1991. Tennessee Valley Association, 1991 Optimum Resource Utilization Workshop, Lexington and Paducah, Ky.  
 Blueberry intolerance of high pH soils. June 1991. University of Maine, Orono, Me.  
 Blueberry pollination. June 1991. Maine Blueberry Growers Assoc., Ellsworth, Me.  
 Fruit research at New Franklin. July 1991. University of Missouri Field Day. New Franklin, Mo.  
 Doing things right in the peach orchard. May 1991. Missouri/Illinois Peach Orchard Tour, Kelso and Malden, Mo.  
 Fruit crop research at the University of Missouri. Apr. 1991. University of Missouri Horticulture Club Tour. New Franklin, Mo.  
 Observations on the 1990 crop and the potential of the 1991 peach crop". Mar. 1991. Missouri Peach Council Annual Meeting, Malden, Mo.  
 Basic cultural practices for small fruit crops. Feb. 1991. Missouri Small Fruit Basics Conference. Springfield Mo.  
 Better blueberries for marginal sites. Feb. 1991. Missouri Small Fruit Conference. Springfield, Mo.  
 Strawberry pest control practices for the present and the future. Feb. 1991. St. Louis Area Vegetable Growers Annual Grower School. St. Louis, Mo.

Pruning central leader trained apple trees. Feb. 1991. Tree Fruit Training Workshop, Mtn. Grove, Mo.

Environmental factors affecting apple coloration. Jan. 1991. Missouri State Horticultural Society. Columbia, Mo.

Post-harvest handling of fruit crops. Nov. 1990 Fruit and Vegetable Production Conference: For established growers. Kansas City, Mo.

Pest control in fruit crops. Nov. 1990. Fruit and Vegetable Production Conference: For people planning a commercial operation. Kansas City, Mo.

Why plants produce honey and why some plants are more attractive to honeybees than others. Oct. 1990. Annual Meeting of Missouri Honey Producers Assoc. Springfield, Mo.

Apple production in Missouri. Aug. 1990. Federal Crop Insurance Training Workshop. Lexington, Mo.

The state of the apple crop and industry in Missouri. June 1990. Missouri/Kansas Apple Growers Annual Field Day. Wathena, Kan. and St. Joseph, Mo.

New research in fruit production. Mar. 1990. Missouri/Illinois Peach Growers Field Day. Cape Girardeau, Mo.

Winter damage in peaches. Feb. 1990. Missouri Peach Council Annual Meeting, Malden, Mo.

New production techniques for small fruit production. Feb 1990. St. Louis Area Vegetable Growers School, St. Louis, Mo.

Raspberry breeding and cultivars: What's ready for trial in Missouri and what may be coming in the future. Feb. 1990. Missouri Small Fruit Conference. Springfield, Mo.

Before you start a commercial fruit production operation: Some thoughts on marketing and initial costs. Feb. 1990. Missouri Small Fruit Conference. Springfield, Mo.

Missouri Tree Fruit Spray Guide; a new cooperative venture in the Midwest. Jan. 1990. Missouri State Horticultural Society Meeting, Columbia, Mo.

Pruning blueberries. Oct. 1989. Missouri Blueberry Council Fall Field Day, Springfield, Mo.

Growing blueberries on marginal sites in Missouri. Oct. 1989. University Extension In-Service Training. Columbia, Mo.

Breeding blueberries for higher pH tolerance. Oct. 1989. University of Kentucky, Lexington, Ky.

Half-high (Vaccinium angustifolium/V. corymbosum derivatives) Blueberries. Aug. 1989. American Society for Horticultural Science Annual Meeting, Tulsa Okla.



**Funded Grant Proposals:**

- Finn, C.E. Identification of late season ripening and small fruited blueberry genotypes, and determination of genotype x environment interaction of blueberry populations planted in Oregon and Michigan. Northwest Center for Small Fruit Research. \$8,214. 1998.
- Finn, C. and B. Strik. USDA/OSU Replicated Blueberry Trial. Special fund generated from donations by individual growers, packers, processors and suppliers. Approximately \$9,000 will be used annually to support the USDA/OSU blueberry genotype replicated trial. Initiated in 1997.
- Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Strawberries. Oregon Strawberry Commission. ~ \$20,000.went to support the breeding portion of the cooperative program. 1997.
- Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Raspberries and Blackberries. Oregon Raspberry and Blackberry Commission.~ \$9,000.went to support the breeding portion of the cooperative program. 1997.
- Finn, C. and C. Kempler. Identifying winter tolerant blackberry selections and cultivars. Oregon Raspberry and Blackberry Commission. \$5,575. 1997.
- Barney, D. and C. Finn. Domestication of Western Huckleberries. Northwest Center for Small Fruit Research. \$6,155. 1997.
- Wrolstad, R., H.J. Fan-Chiang, B. Yorgey, and C. Finn. Color and appearance quality of blackberry juice concentrate. Northwest Center for Small Fruit Research. \$6,577. 1997.
- Yorgey, B., D. Farkas, and C. Finn. Evaluation and processing quality of advanced caneberry breeding selections. Oregon Raspberry and Blackberry Commission \$4,875. 1997.
- Yorgey, B., D. Farkas, and C. Finn. Evaluation and processing quality of advanced strawberry breeding selections. Oregon Strawberry Commission \$7,710. 1997.
- Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Strawberries. Oregon Strawberry Commission.~ \$20,000. went to support the breeding portion of the cooperative program. 1996.
- Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Raspberries and Blackberries. Oregon Raspberry and Blackberry Commission. ~ \$9,000. went to support the breeding portion of the cooperative program. 1996.
- Yorgey, B., D. Farkas, and C. Finn. Evaluation and processing quality of advanced caneberry breeding selections. Oregon Raspberry and Blackberry Commission \$4,875. 1996.
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- Finn, C. and C. Kempler. Identifying winter tolerant blackberry selections and cultivars. Oregon Raspberry and Blackberry Commission. \$5,575. 1996.
- Barney, D. and C. Finn. Domestication of Western Huckleberries. Northwest

Center for Small Fruit Research. \$8,200. 1996.

Wrolstad, R., H.J. Fan-Chiang, B. Yorgey, and C. Finn. Color and appearance quality of blackberry juice concentrate. Northwest Center for Small Fruit Research. \$7,000. 1996.

Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Strawberries. Oregon Strawberry Commission. ~ \$20,000. went to support the breeding portion of the cooperative program. 1995.

Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Raspberries and Blackberries. Oregon Raspberry and Blackberry Commission.~ \$9,000. went to support the breeding portion of the cooperative program. 1995.

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Finn, C.E. Construction of walk-in heat chamber for small fruit thermotherapy. Jointly funded by the Oregon Caneberry Commission, Oregon Strawberry Commission, Washington Red Raspberry Commission and Washington Strawberry Commission. \$12,500. 1994.

Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Strawberries. Oregon Strawberry Commission.~ \$20,000. went to support the breeding portion of the cooperative program. 1994.

Strik, B.C. and C.E. Finn. Production System/Physiology Research and Cooperative Breeding Program- Raspberries and Blackberries. Oregon Raspberry and Blackberry Commission.~ \$9,000. went to support the breeding portion of the cooperative program. 1994.

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- Finn, C.E., E.E. Hoover, B. Kidd, and J. Jacobson. Minnesota Integrated Pest Management Apple Project. Funding from the Minnesota Department of Agriculture, Sustainable Agriculture Demonstration Grant Project. \$22,600. 1989.
- Hoover, E.E., C.E. Finn, and S. Blue. Minnesota Integrated Apple Pest Management. Funding from The Greater Minnesota Corporation, Agriculture Energy Savings Program. \$57,400. 1989.
- Finn, C. E., J.J. Luby, and C.J. Rosen. Evaluation of *Vaccinium angustifolium* and *V. angustifolium*/ *V. corymbosum* derivatives for higher pH soils. Funding from the USDA-ARS Small Fruits Crop Advisory Committee. \$3,000. 1987