

JOSEPH C. GOFFREDA

Associate Professor
Department of Plant Biology and Pathology
School of Environmental and Biological Sciences, Rutgers University
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EDUCATIONAL HISTORY:

- Ph.D. Cornell University, Ithaca, NY, Aug 1988. Dissertation Title: Trichome mediated resistance to the potato aphid *Macrosiphum euphorbiae* Thomas in *Lycopersicon pennellii* (Corr.) D'Arcy and its hybrids with *Lycopersicon esculentum* Mill.
- B.S. Cook College, Rutgers University, New Brunswick, NJ, May 1983
Major: Plant Science. Option: Plant Breeding.

PROFESSIONAL EXPERIENCE:

- 1995- *Associate Research Professor and Director Rutgers Fruit Research and Extension Center, Cream Ridge.* Department of Plant Science, Cook College, Rutgers University, New Brunswick, NJ 08903.
- 1989-95 *Assistant Research Professor.* Department of Horticulture, Cook College, Rutgers University, New Brunswick, NJ 08903.
- 1988-89 *Postdoctoral Research Associate.* Department of Plant Breeding, Cornell University, Ithaca, NY 14850.
- 1983-88 *Graduate Research Assistant.* Department of Plant Breeding, Cornell University, Ithaca, NY 14850.

SCHOLARSHIPS, HONORS AND AWARDS:

- 2016 Edison Patent Award
- 2015 Inventor of the Year, New Jersey Inventors Hall of Fame
- 2011 ASHS, Outstanding Fruit Cultivar Award for 'GoldRush' Apple
- 2001 USDA, Secretary of Agriculture's Honor Award
- 2000 Award for Excellence, Northeastern Regional Association of State Agricultural Experiment Station Directors
- 1999 Cook College Leadership Teaching Excellence Award
- 1989 Henry Rutgers Research Fellow
- 1983 Cook College, Graduated First in Class
- 1983 New York Florist Club Award for Best Scholastic Record in Horticulture
- 1982 Richard E. Walter Scholarship for Leadership in Horticulture

RESEARCH/SCHOLARSHIP:Refereed Journal Publications:

1. Lalancette, N., Ward, D. L., and Goffreda, J. C. 2014. Susceptibility of Peach Cultivars to Rusty Spot and Characterization of Susceptibility Groups. *HortScience*. 49:615-621.
2. Zaurov, D. E., Molnar, T. J., Eisenman, S. W., Ford, T. M., Mavlyanova, R. F., Capik, J. M., and Goffreda, J. C. 2013. Genetic Resources of Apricots (*Prunus armeniaca* L.) in Central Asia. *HortScience*, 48:681-691.
3. Molnar, T. J., J. C. Goffreda, and C. R. Funk. 2010. Survey of *Corylus* resistance to *Anisogramma anomala* from different geographic locations. *HortScience* 45: 832-836.
4. Korban, S.S., J.C. Goffreda, and J. Janick. 2009. ‘Co-op 31’ (WineCrisp™) Apple. *HortScience*. 44:198-199.
5. Molnar, T. J., S. A. Mehlenbacher, D. E. Zaurov, and J. C. Goffreda. 2007. Survey of hazelnut germplasm from Russia and Crimea for response to eastern filbert blight. *HortScience*. 42: 51-56.
6. Janick, J., J. C. Goffreda, and S. S. Korban. 2006. ‘Co-op 39’ (CrimsonCrisp™) apple. *HortScience*. 41:465-466.
7. Molnar, T. J., S. N. Baxer, and J. C. Goffreda. 2005. Accelerated screening of hazelnut seedlings for resistance to eastern filbert blight. *HortScience*. 40:1667-1669.
8. Mavlyanova, R. F., F. K. Abdullaev, P. Khodjiev, D. E. Zaurov, T. J. Molnar, J. C. Goffreda, T. J. Orton, and C. R. Funk. 2005. Plant genetic resources and scientific activities of the Uzbek Research Institute of Plant Industry. *HortScience*. 40:10-14.
9. Yezhov, V. N., A. V. Symykov, V. K. Smykov, S. Y. Khokhlov, D. E. Zaurov, S. A. Mehlenbacher, T. J. Molnar, J. C. Goffreda, and C. R. Funk. 2005. Genetic Resources of Temperate and Subtropical Fruit and Nut Species at the Nikita Botanical Gardens. *HortScience*. 40:5-9.
10. Mirzaev, M. M., U. M. Djavacynce, D. E. Zaurov, J. C. Goffreda, T. J. Orton, E. R. Remmers, and Funk CR. 2004. The Schroeder Institute in Uzbekistan: Breeding and germplasm collections. *HortScience* 39: 917-921.
11. Janick, J., J. C. Goffreda, and S. S. Korban. 2004. ‘Co-op 29’ (Sundance™) apple. *HortScience*. 39 (2): 450-451.
12. Janick, J., J. C. Goffreda, and S. S. Korban. 2004. ‘Co-op 33’ (Pixie Crunch™) apple. *HortScience*. 39 (2): 452-453.

13. Korban, S. S., J. C. Goffreda, and J. Janick. 2003. 'Co-op 43' (Juliet™) Apple. *HortScience*. 38:144-145.
14. Janick, J., J. C. Goffreda, and S. S. Korban. 2000. 'Co-op 25' (Scalet O'Hara™) Apple. *HortScience*. 35:150-151.
15. Granger, R. L., S. Khanizadeh, Y. Groleau, C. N. Fortin, J. Janick, J. C. Goffreda, and S. S. Korban. 1997. 'Primevere' Apple. *HortScience* 32:331-332.
16. Warburton, M. L., V. L. Becerra-Velasquez, J. C. Goffreda, and F.A. Bliss. 1996. Utility of RAPD markers in identifying genetic linkages to genes of economic interest in peach. *Theor. Appl. Genet.* 93:920-925.
17. Janick, J., J. A. Crosby, P. C. Pecknold, J. Goffreda, and S. S. Korban. 1995. 'Co-op 32' (Pristine™) Apple. *HortScience* 30:1312-1313.
18. Goffreda, J. C., A. Voordeckers, and S.A. Mehlenbacher. 1995. 'NJ55' Apple. *HortScience* 30:387-388.
19. Goffreda, J. C., A. Voordeckers, L. Butenis-Vorsa, W. P. Cowgill, Jr., M. H. Maletta, and J. L. Frecon. 1995. 'NJA53' apricot. *HortScience* 30:389-390.
20. Goffreda, J. C., A. Voordeckers, L. Butenis-Vorsa, W. P. Cowgill, Jr., M. H. Maletta, and J. L. Frecon. 1995. 'NJ54' apricot. *HortScience* 30:385-386.
21. Goffreda, J. C., A. L. Scopel, and J. A. Fiola. 1995. Indole butyric acid induces regeneration of phenotypically normal apricot (*Prunus armeniaca* L.) plants from immature embryos. *Plant Growth Regulation* 17:41-46.
22. Chen, Q., G. Jelenkovic, C-K Chin, S. Billings, J. Eberhardt, P. Day, and J. C. Goffreda. 1995. Transfer and transcriptional expression of Coleopteran *cryIIIB* endotoxin gene of *Bacillus thuringiensis* in eggplant (*Solanum melongena* L.). *J. Amer. Soc. Hort. Sci.* 120:921-927.
23. Novy, R. G., C. Kobak, J. Goffreda, and N. Vorsa. 1994. RAPDs identify varietal misclassification and regional divergence in cranberry [*Vaccinium macrocarpon* (Ait.) Pursh]. *Theor. Appl. Genet.* 88:1004-1010.
24. Crosby, J. A., J. Janick, P. C. Pecknold, J. Goffreda, and S. S. Korban. 1994. 'Enterprise' apple. *HortScience* 29:825-826.
25. Crosby, J. A., J. Janick, P. C. Pecknold, J. Goffreda, and S. S. Korban. 1994. 'Gold Rush' apple. *HortScience* 29:827-828.

26. Beers, S. C., J. Goffreda, T. D. Phillips, J. P. Murphey, and M. E. Sorrells. 1993. Assessment of genetic variation in *Avena sterilis* using morphological traits, isozymes, and RFLPs. *Crop Sci.* 33:1386-1393.
27. Gussman, C. D., J. C. Goffreda, and T. J. Gianfagna. 1993. Rates of ethylene production and softening in several apple fruit ripening variants. *HortScience* 28:135-137.
28. Goffreda, J. C., W. B. Burnquist, S. Beers, S. D. Tanksley, and M. E. Sorrells. 1992. Application of molecular markers to assess genetic relationships among accessions of wild oat, *Avena sterilis*. *Theor. Appl. Genet.* 85:146-151.
29. Crosby, J. A., J. Janick, S. S. Korban, P. A. O'Connor, S. M. Ries, J. Goffreda, and A. Voordeckers. 1992. Breeding apples for scab resistance:1945-1990. *Fruit Var. J.* 46:145-166.
30. Goffreda, J. C., A. M. Voordeckers, S. A. Mehlenbacher and J. L. Frecon. 1992. 'Jerseypink' ornamental peach. *HortScience* 27:183.
31. Durner, E. F., D. F. Polk, and J. C. Goffreda. 1992. Low input apple production systems: Consumer acceptance of disease resistant cultivars. *HortScience* 2:177-179.
32. Durner, E. F. and J. C. Goffreda. 1992. Rootstock induced differences in flower bud phenology in peach. *J. Amer. Soc. Hort. Sci.* 117:690-697.
33. Goffreda, J. C., A. M. Voordeckers, and J. L. Frecon. 1991. 'Ernie's Choice' peach. *HortScience* 26:1090.
34. Goffreda, J. C., J. M. Armstrong Nick, S. A. Mehlenbacher, and N. Vorsa. 1991. Inheritance of isozymes in peach X *Prunus davidiana* and peach x *P. kansuensis* hybrids. *Euphytica* 54:161-168.
35. Goffreda, J. C., J. C. Steffens, and M. A. Mutschler. 1990. Association of epicuticular sugar esters with aphid resistance in hybrids with wild tomato. *J. Amer. Soc. Hort. Sci.* 115:161-165.
36. Goffreda, J. C., E. J. Szymkowiak, I. M. Sussex, and M. A. Mutschler. 1990. Chimeric tomato plants show that aphid resistance and triacylglucose production are epidermal autonomous characters. *The Plant Cell.* 2:643-649.
37. Goffreda, J. C., M. A. Mutschler, D. A. Ave., W. M. Tingey, and J. C. Steffens. 1989. Aphid deterrence by glucose esters in glandular trichome exudate of the wild tomato, *Lycopersicon pennellii*. *J. Chem. Ecol.* 15:2135-2147.

38. Goffreda, J. C. and M. A. Mutschler. 1989. Inheritance of potato aphid resistance in hybrids between *Lycopersicon esculentum* and *L. pennellii*. *Theor. Appl. Genet.* 78:210-216.
39. Goffreda, J. C., M. A. Mutschler, and W. M. Tingey. 1988. Feeding behavior of potato aphid affected by glandular trichomes of wild tomato. *Entomol. Exp. Appl.* 48:101-107.

Non-refereed Publications:

1. Molnar, T.J., J. M. Capik, and J. C. Goffreda. 2009. Response of hazelnut progenies from know resistant parents to *Anisogramma anomala* in New Jersey, USA. *Acta Horticulturae* 845:73-82.
2. Molnar, T. J., J. C. Goffreda, and C. R. Funk. 2005. Developing hazelnuts for the eastern United States. *Acta Horticulturae* 686:609-617.
3. Goffreda, J. C. 1999. White-fleshed peach and apricot breeding. *Compact Fruit Tree* 32:123-127.
4. Goffreda, J. C. 1998. Is there a white peach in your future? Tri-State Horticultural Meeting, Jan 27 - Jan 29, Hershey, PA. *Pennsylvania Fruit News* 78:43-45.
5. Mignani, I. and J. Goffreda. 1998. Effect of propylene on ripening of different flesh type peaches. *ATTI IV Giornate Scientifiche, Societa Orticola Italiana*, April 1-April 3, Sanremo, Italy. 4: 621-622.
6. Goffreda, J. C. 1995. New stone fruit cultivars from breeding programs. Annual Tri-State Horticultural Meetings and Trade Show, Jan 31 - Feb.2, Hershey, PA. *Pennsylvania Fruit News* 75:64-69.
7. Goffreda, J. C., A. M. Voordeckers, S. S. Korban, S. M. Ries, and J. Janick. 1995. Co-op 39 to 44: Six disease-resistant apple selections released for advanced testing. *New Jersey Agricultural Experiment Station Report Series No. R-12001-2-95*. 10 pp.
8. Maness, N. O., D. Chrz, S. Hegde, and J. C. Goffreda. 1993. Cell wall changes in ripening peach from cultivars differing in softening rate. *Acta Hort.* 343:200-203.
9. Crosby, J. A., J. Janick, P. C. Pecknold, S. S. Korban, S. M. Ries, J. Goffreda, and A. Voordeckers. 1993. Co-op 32 to 38: seven disease-resistant apple selections released for advanced testing. *Purdue Univ. Agri. Expt. Stat. Bull. No. 658*. 14 pp.
10. Crosby, J. A., J. Janick, P.C. Pecknold, S. S. Korban, P. A. O'Connor, S. M. Ries, J. Goffreda, and A. Voordeckers. 1992. Breeding apples for scab resistance:1945-1990. *Acta Hort.* 317:43-70.

11. Polk, D. F., E. F. Durner, J. C. Goffreda, and G. F. Rizio. 1992. Consumer acceptance trials with named and numbered disease resistant cultivars in 1991. Northeast LISA Apple Production Newsletter 3:3-11.
12. Goffreda, J. C. and J. L. Frecon. 1990. Commercially planted varieties developed by/or originating in NJ 1980-1990. The Great Lakes Fruit Growers News. November 1990.
13. Goffreda, J. C. and M. A. Mutschler. 1988. Origin and release of breeding line NY 871095-6 resistant to Fusarium race 3. TGC Report 38:50.

Patents Awarded:

1. Goffreda, J. C, and A. M. Voordeckers. 2016. Apricot tree named 'NJA152'. U.S. Plant Patent No. PP27,166.
2. Goffreda, J. C, and A. M. Voordeckers. 2015. Apricot tree named 'NJA151'. U.S. Plant Patent No. PP25,862.
3. Goffreda, J. C. and A. M. Voordeckers. 2013. Peach tree named 'NJ356'. U.S. Plant Patent No. PP23,884.
4. Goffreda, J. C. and A. M. Voordeckers. 2013. Peach tree named 'NJ355'. U.S. Plant Patent No. PP23,883.
5. Goffreda, J. C. and A. M. Voordeckers. 2013. Nectarine tree named 'NJA101'. U.S. Plant Patent No. PP23,882.
6. Goffreda, J. C. and A. M. Voordeckers. 2013. Peach tree named 'NJ354'. U.S. Plant Patent No. PP23,669.
7. S. S. Korban, J. C. Goffreda and J. Janick, J. 2009. Apple tree named 'Co-op 31' U.S. Plant Patent No. PP20,437.
8. Goffreda, J. C, and A. M. Voordeckers. 2009. Peach tree named 'NJF15'. U.S. Plant Patent No. PP20,128.
9. Goffreda, J. C, and A. M. Voordeckers. 2008. Peach tree named 'NJF17'. U.S. Plant Patent No. PP19,383.
10. Goffreda, J. C, and A. M. Voordeckers. 2008. Peach tree named 'NJ350'. U.S. Plant Patent No. PP19,382.
11. Goffreda, J. C, and A. M. Voordeckers. 2008. Peach tree named 'NJF18'. U.S. Plant Patent No. PP19,273.

12. Goffreda, J. C, and A. M. Voordeckers. 2008. Peach tree named 'NJF16'. U.S. Plant Patent No. PP18,997.
13. Goffreda, J. C, and A. M. Voordeckers. 2008. Apricot tree named 'NJA150'. U.S. Plant Patent No. PP18,639.
14. Goffreda, J. C, and A. M. Voordeckers. 2007. Peach tree named 'NJ351'. U.S. Plant Patent No. PP18,224.
15. Goffreda, J. C, and A. M. Voordeckers. 2007. Nectarine tree named 'NJNI100'. U.S. Plant Patent No. PP18,147.
16. Goffreda, J. C, and A. M. Voordeckers. 2007. Peach tree named 'NJ353'. U.S. Plant Patent No. PP18,134.
17. Goffreda, J. C, and A. M. Voordeckers. 2007. Peach tree named 'NJ352'. U.S. Plant Patent No. PP18,091.
18. Goffreda, J. C, and A. M. Voordeckers. 2006. Peach tree named 'H28-52-96270'. U.S. Plant Patent No. PP16,836.
19. J. Janick, J., E. B. Williams, J. C. Goffreda, and S. S. Korban. 2006. Apple tree named 'Co-op 39'. U.S. Plant Patent No. PP16,622.
20. J. Janick, S. S. Korban, and J. Goffreda. 2002. Apple tree 'Co-op 25'. U.S. Plant Patent No. 12,323.
21. Goffreda, J. C. and A. M. Voordeckers. 2000. Annavordeckers. European Union Decision No.6608.
22. Janick, J., E. B. Williams, J. A. Crosby, P. C. Pecknold, S. S. Korban, and J. Goffreda. 1997. Apple tree 'Co-op 32'. U.S. Plant Patent No. 9,881.
23. Goffreda, J. C. 1996. 'Rutbhart' apricot. European Union Dossier No. EU0463.
24. Crosby, J. A., J. Janick, E. B. Williams, J. Goffreda, D. F. Dayton, P. C. Pecknold, and S. S. Korban. 1995. Apple tree 'GoldRush'. U.S. Plant Patent No. 9,392.
25. Goffreda, J. C. 1995. Apricot tree 'NJA53'. US Plant Patent No. 9,255.
26. Goffreda, J. C. and A. M. Voordeckers. 1994. Apple tree 'NJ109'. US Plant Patent No. 9,123.

27. Goffreda, J. C. 1994. 'Rutbhart' apricotier. French C.O.V. 08198.
28. Goffreda, J. C. 1994. Apricot tree 'NJA54'. US Plant Patent No. 8,674.
29. Goffreda, J. C. and A. M. Voordeckers. 1994. Apple tree 'NJ55'. US Plant Patent No. 8,648.
30. Crosby, J. A., J. Janick, E. B. Williams, S. S. Korban, J. Goffreda, and P. C. Pecknold. 1993. Apple tree 'Enterprise'. US Plant Patent No. 9,193.
31. Mutschler, M. A., J. C. Steffens, J. C. Goffreda, and W. M. Tingey. 1990. 2,3,4,-Triacylhexose insect repellents. US Patent number 4,943,563.

Pending Patent Applications:

1. Goffreda, J. C. 2017. Nectarine tree named 'NJF20'. U.S. Plant Application No. US 2017xxxxxxx.
2. Goffreda, J. C. and A. M. Voordeckers. 2017. Nectarine tree named 'NJN102'. U.S. Plant Application No. US 2017xxxxxxx.
3. Goffreda, J. C. and A. M. Voordeckers. 2017. Nectarine tree named 'NJN103'. U.S. Plant Application No. US 2017xxxxxxx.
4. Goffreda, J. C. and A. M. Voordeckers. 2017. Peach tree named 'NJN357'. U.S. Plant Application No. US 2017xxxxxxx.
5. Goffreda, J. C. and A. M. Voordeckers. 2017. Peach tree named 'NJN358'. U.S. Plant Application No. US 2017xxxxxxx.
6. Goffreda, J. C. and A. M. Voordeckers. 2017. Peach tree named 'NJN359'. U.S. Plant Application No. US 2017xxxxxxx.

Published Proceedings:

1. Goffreda, J. 1992. Development of new apricot cultivars for the Mid-Atlantic region. Proceeding of the 1992 Mid-Atlantic Regional Extension Fruit School, November 4-6, Blackwood, NJ. pp. 35-39.

Published Abstracts from Oral/Posters Presentations:

1. Molnar, T. J., J. M. Capik, E. Orton, and J. C. Goffreda. 2008. Developing new woody ornamental and edible landscape plants at Rutgers. ASHS Northeast Region Annual Meeting, June 1, New Brunswick, NJ. HortScience 43:593.

2. Cowgill, W. P., M. H. Maletta, W. H. Tietjen, J. Compton, D. Polk, and J. C. Goffreda. 1995. Preliminary performance of six scab-resistant apple cultivars in northwestern New Jersey. 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 3, Quebec, Canada. HortScience 30:843.
3. N. O. Maness, D. Chrz, and J. C. Goffreda. 1995. Cell wall changes associated with normal and mealy fruit softening for a novel peach genotype. 92nd Annual Meeting of the American Society for Horticultural Science, July 30- August 3, Quebec, Canada. HortScience 30:817.
4. N. O. Maness, D. Chrz, and J. C. Goffreda. 1995. Induction of mealiness during short-term storage for a novel peach genotype. 92nd Annual Meeting of the American Society for Horticultural Science, July 30- August 3, Quebec, Canada. HortScience 30:434.
5. Goffreda, J. C. and A. Scopel. 1994. Factors affecting regeneration and rooting of apricot shoots derived from immature embryos. 91th Annual Meeting of the American Society for Horticultural Science, August 7- August 10, Corvallis, OR. HortScience 29:514.
6. J. Goffreda, D. F. Polk, G. F. Rizio, C. D. Gussman, T. J. Gianfagna, Crosby, J. A., J. Janick, P. C. Pecknold, S. S. Korban, and S. M. Ries. 1994. Developing scab-resistant cultivars with increased quality and ability to store. Disease resistant apple cultivars: an update on horticulture, pests, and markets, January 24-25, Hershey, PA. Fruit Var. J. 48:45.
7. Crosby, J. A., J. Janick, P. C. Pecknold, S. S. Korban, S. M. Ries, J. Goffreda, and A. Voordeckers. 1994. Seven disease-resistant apple selections released for grower testing. Disease resistant apple cultivars: an update on horticulture, pests, and markets, January 24-25, Hersey, PA. Fruit Var. J. 48:40.
8. Crosby, J. A., J. Janick, P. C. Pecknold, S. S. Korban, S. M. Ries, J. Goffreda, and A. Voordeckers. 1994. 'Enterprise' and 'GoldRush', two new disease-resistant cultivars. Disease resistant apple cultivars: an update on horticulture, pests, and markets, January 24-25, Hersey, PA. Fruit Var. J. 48:43.
9. Maness, N., D. Chrz, and J. Goffreda. 1993. Changes in hemicellulose during softening of peach fruit. 1993 Joint Annual Meeting of the American Society of Plant Physiologists and the Canadian Society of Plant Physiologists, July 31-August 4, Minneapolis, MN. Plant Physiol. 102:92.
10. Goffreda, J. C. 1992. Stony hard gene of peach alter ethylene biosynthesis, respiration, and other ripening-related Characteristics. 89th Annual Meeting of the American Society for Horticultural Science, July 30- August 6, Honolulu, HI. HortScience 27:610.

11. Goffreda, J. 1992. Application of molecular markers to assess genetic relations among accessions of wild oat, *Avena sterilis*. Molecular and Mathematical Approaches to Genealogical Analysis and Strain Identification, January 10-11, New Brunswick, NJ.
12. Goffreda, J. C. 1991. Effect of cutting date, shoot position, IBA, and paclobutrazol on rooting of apricot semihardwood cuttings. 88th Annual Meeting of the American Society for Horticultural Science, July 19-25, University Park, PA. HortScience 26:687.
13. Goffreda, J. C. 1987. Potato aphid feeding response to *Lycopersicon pennellii* type IV trichome exudate components. 84th Annual Meeting of the American Society for Horticultural Science, November 6-14, Orlando, FL. HortScience 22:97.

Presentations at National Professional Conferences:

1. Goffreda, J. C. 2003. Peach and apricot varieties for the Eastern US.. International Dwarf Fruit Tree Association, February 15-20, Syracuse, NY.
2. Goffreda, J. C. 1999. Breeding novel stone fruits: White peaches and apricots. International Dwarf Fruit Tree Association, February 20-24, Hamilton, Ontario.
3. Goffreda, J. C. 1999. Peach breeding developments in the east. Ontario Fruit Testing Association, February 25-26, Vineland, Ontario.
4. Goffreda, J. C. 1996. Update on the NJAES stone fruit breeding program. *Prunus* Breeders Conference, Aug 23-24, Benton Harbor, MI.
5. Goffreda, J. C. 1994. New apple cultivars from the NJAES. Annual Pacific Northwest Fruit Testing Association Tour, Aug. 8, Wenatchee, WA.
6. Goffreda, J. C. 1994. Update on the NJAES stone fruit breeding program. *Prunus* Breeders Conference, May 20-21, Gainesville, FL.
7. Goffreda, J. C. 1993. Breeding scab-immune apples with improved storage life. Apple and Pear Breeders Meeting, Oct. 20-21, Kentville, NS, Canada.
8. Goffreda, J. C. A. Scopel and A. M. Voordeckers. 1992. Ripening behavior of the stony hard ripening mutant. *Prunus* Breeders Conference, May, 17-20, Visalia, CA.
9. Goffreda, J. C. and A. Voordeckers. 1991. Rutgers University Report. Apple and Pear Breeders Meeting, Oct. 18, Geneva, NY.

10. Goffreda, J. C. 1990. Rutgers University Report. Meeting of the PRI Cooperative Disease Resistance Breeding Program, Nov. 16, West Lafayette, IN.
11. Goffreda, J. C. 1989. Peach breeding program of New Jersey. *Prunus* Breeders Conference., July 29-30, Tulsa, OK.

Participation at International Professional Forums:

1. Goffreda, J. C. 2006. Managed varieties. International Dwarf Fruit Tree Association, February 25, Hershey, PA.

University Seminars:

1. Goffreda, J. C. 2005. Breeding Horticultural Crops: Creativity Yields Multiple Outcomes. Emma Lausen Horticultural Symposium, April 4, New Brunswick, NJ.
2. Goffreda, J. 1994. Stony hard gene of peach: Does one rotten fruit have to spoil the whole bushel. Fermentation Seminar Series, September 30, New Brunswick, NJ.
3. Goffreda, J. C. 1993. Stony hard gene in peach - A model system the study fruit ripening. AgBiotech Seminar Series, March 3, New Brunswick, NJ.
4. Goffreda, J. C. 1990. Stony hard ripening gene in peach. PAGE retreat in the Pinebarrens, July 19, Chatsworth NJ.
5. Goffreda, J. C. 1990. Aphid resistance in *Lycopersicon pennellii* and its hybrid with tomato, *L. esculentum*. PAGE Seminar, Jan. 25, Center for Theoretical and Applied Genetics, New Brunswick, NJ.
6. Goffreda, J. C. 1989. Aphid defense by triacylglycerols in *Lycopersicon pennellii*. Plant Biology Seminar, Oct. 13, New Brunswick, NJ.

Presentations Regional Fruit Meetings:

1. Goffreda, J. 2015. Promising Peach and Nectarine Selections from Rutgers/NJAES Tree Fruit Breeding Program. Adams County Nursery Open House and Fruit Variety Showcase, August 25, Aspers, PA.
2. Goffreda, J. 2014. Update on the Rutgers/NJAES Tree Fruit Breeding Program. South Jersey Fruit Meeting, February 13, Bridgeton, NJ
3. Goffreda, J. 2012. Advanced Yellow & White Fleshed Selections from Rutgers/NJAES Peach Breeding Program. South Jersey Twilight Meeting, April 3, Clayton, NJ.

4. Goffreda, J. 2011. Advanced Selections from Rutgers/NJAES Peach and Apricot Breeding Programs. South Jersey Twilight Meeting, April 5, Clayton, NJ.
5. Goffreda, J. 2010. NJAES Advanced Peach Selections. South Jersey Twilight Meeting, April 7, Clayton, NJ.
6. Goffreda, J. C.. 2010. New Peach and Apricot Varieties. Mid-Atlantic Fruit and Vegetable Conference, Feb. 1 - Feb.4, Hershey, PA.
7. Goffreda, J. C. and J. Frecon. 2009. Up and Coming Peach and Apricot Cultivars from Rutgers/NJAES. Mid-Atlantic Fruit and Vegetable Conference, Feb. 3 - Feb.5, Hershey, PA.
8. Goffreda, J. 2008. NJAES Advanced Peach Selections. South Jersey Twilight Meeting, April 2, Clayton, NJ.
9. Goffreda, J. C. 2007. Evaluation Protocol: Finding the Winners. Midwest Apple Improvement Association Annual Meeting. Nov. 10, Newark, OH.
10. Goffreda, J. 2007. New peach varieties and selections from NJAES. South Jersey Fruit Variety Showcase, Sept. 5, Clayton,, NJ.
11. Goffreda, J. 2007. NJAES Advanced Peach Selections: Potential for New Late Season Peach Cultivars South Jersey Twilight Meeting, April 4, Clayton,, NJ.
12. Goffreda, J. 2006. New peach varieties that can make a difference in you bottom line. South Jersey Fruit Meeting and Trade Show, March 16, Clayton,, NJ.
13. Goffreda, J. C. 2005. New peach varieties and selections from the NJAES Tree Fruit Breeding Program. IDFTA Summer Tour, June 26, Princeton, NJ.
14. Goffreda, J. C. 2005. New peach varieties from the New Jersey Agricultural Experiment Station Fruit Breeding Program. Mid-Atlantic Fruit and Vegetable Conference, Feb. 1 - Feb.3, Hershey, PA.
15. Goffreda, J. C. 2004. Choosing the best parents: Look to the inner core. Midwest Apple Improvement Association Annual Meeting. Nov. 12, Newark, OH.
16. Goffreda, J. C. 2004. The apple of my eye: Breeding objectives of the NJAES Breeding Program. Midwest Apple Improvement Association Annual Meeting. Nov. 12, Newark, OH.
17. Goffreda, J. 2004. Update on the NJAES Tree Fruit Breeding Program. South Jersey Fruit Variety Showcase, Sept 9, Clayton, NJ.

18. Goffreda, J. 2003. New peach selections from NJAES. Snyder Farm Tour, Sept 10, Pittstown, NJ.
19. Goffreda, J. 2003. New peach selections from NJAES. South Jersey Fruit Variety Showcase, Sept 9, Clayton, NJ.
20. Goffreda, J. C. 2002. Early apricot and peach selections from the NJAES Tree Fruit Breeding Program. Rutgers Research and Extension Center, June 26, Upper Deerfield, NJ.
21. Goffreda, J. 2002. New Fruit Cultivars to Exploit Niche Market Opportunities. North Jersey Fruit Meeting, March 5, Pittstown, NJ.
22. Goffreda, J. 2002. Exploit Niche Market Tree Fruit Opportunities. South Jersey Fruit Meeting, Feb 20, Clayton, NJ.
23. Goffreda, J. 2001. New Niche Market Peach, Nectarine and Apricot Varieties to Exploit Niche Market Opportunities. Great Lakes Fruit, Vegetable & Farm Market Expo, December 4-6, Grand Rapids, MI.
24. Goffreda, J. C. 2001. Peach and nectarine selections from the NJAES Tree Fruit Breeding Program. Fruit Variety Showcase, Sept 11, Rutgers Fruit Research and Extension Center Cream Ridge, NJ.
25. Goffreda, J. C. 2001. Early apricot and peach selections from the NJAES Tree Fruit Breeding Program. Rutgers Research and Extension Center, June 26, Upper Deerfield, NJ.
26. Goffreda, J. C. 2000. Early apricot and peach selections from the NJAES Tree Fruit Breeding Program. Rutgers Research and Extension Center, July 12, Upper Deerfield, NJ.
27. Goffreda, J. C. 1999. Peach, nectarine and apple selections from the NJAES Tree Fruit Breeding Program. Fruit Variety Showcase. Rutgers Fruit Research and Extension Center, Sept 9, Cream Ridge, NJ.
28. Goffreda, J. C. 1999. Early apricot and peach selections from the NJAES Tree Fruit Breeding Program. Rutgers Research and Extension Center, July 8, Upper Deerfield, NJ.
29. Goffreda, J. 1998. Promising new tree fruit selections from the NJAES. North Jersey Fruit Meeting, March 6, Pittstown, NJ.
30. Goffreda, J. 1998. New and exciting varieties from the New Jersey Agricultural Experiment Station. South Jersey Fruit Meeting, Feb 18, Glassboro, NJ.

31. Goffreda, J. C. 1998. Is there a white peach in your future? Annual Tri- State Horticultural Meetings and Trade Show, Jan 27 - Jan 29, Hershey, PA.
32. Goffreda, J. C. 1996. New stone fruit cultivars from breeding programs. Annual Tri- State Horticultural Meetings and Trade Show, Jan 31 - Feb.2, Hershey, PA.
33. Goffreda, J. C. 1997. Tree fruit breeding showcase. Annual Cream Ridge Twilight Fruit Meeting, Sept 11, Cream Ridge, NJ.
34. Goffreda, J. C. 1995. New apple cultivars and selections from the New Jersey and PRI breeding programs. Annual Tri- State Horticultural Meetings and Trade Show, Jan 30 - Feb.1, Hershey, PA.
35. Goffreda, J. 1994. Breeding and evaluation of tree fruit cultivars at the NJAES. South Jersey Twilight Fruit Meeting, June 14, Sewell, NJ.
36. Goffreda, J. C. 1994. Apple, peach and apricot breeding projects. Annual Cream Ridge Twilight Fruit Meeting and Strawberry Breeding Showcase, June 1, Cream Ridge, NJ.
37. Goffreda, J. 1994. Promising new tree fruit cultivars from the NJAES. North Jersey Fruit Meeting, March 9, Pittstown, NJ.
38. Goffreda, J. C. 1993. Apple, peach and apricot breeding projects. Annual Cream Ridge Twilight Fruit Meeting and Strawberry Breeding Showcase, June 7, Cream Ridge, NJ.
39. Goffreda, J. 1993. Update on NJAES Tree Fruit Breeding Program. North Jersey Fruit Meeting, March 3, Pittstown, NJ.
40. Goffreda, J. 1993. Update on NJAES Tree Fruit Breeding Program. South Jersey Tree Fruit Meeting, February 25, Berlin, NJ.
41. Goffreda, J. 1992. Apple, peach and apricot breeding projects. Annual Cream Ridge Twilight Fruit Meeting and Strawberry Breeding Showcase, June 3, Cream Ridge, NJ.
42. Goffreda, J. 1992. Tree fruit breeding at the New Jersey Agricultural Experiment Station. North Jersey Fruit Meeting, February 13, Basking Ridge, NJ.
43. Goffreda, J. C. 1991. Apple, peach and apricot breeding projects. Annual Cream Ridge Twilight Fruit Meeting and Strawberry Breeding Showcase, June 6, Cream Ridge, NJ.
44. Goffreda, J. C. 1991. Rutgers peach and apple breeding programs. Warren County Twilight Fruit Meeting, May 16, Belvidere, NJ.
45. Goffreda, J. C. 1991. Progress of the NJAES tree fruit breeding program. 1991. Southern New Jersey Fruit Meeting, Feb. 28, Clementon, NJ.

46. Voordeckers, A. M. and J. C. Goffreda. 1990. Apple, peach and apricot breeding programs. Annual Cream Ridge Twilight Fruit Meeting and Strawberry Breeding Showcase, June 7, Cream Ridge, NJ.
47. Goffreda, J. C. 1990. Status of the NJ peach breeding program. South Jersey Tree Fruit Meeting, Feb. 28, Clementon, NJ.
48. Goffreda, J. C. and A. M. Voordeckers. 1989. Tree fruit breeding research. New Jersey Office of Management and Budget Tour, Aug. 8, Cream Ridge, NJ.

External Research Grants:

US Highbush Blueberry Council. Establish a new phosphorous acid MRL for U.S. blueberry exports to the EU. Sept 2016 - Sept 2018. Project Investigator. Goffreda, J. C. Sub-award from the Regents of the University of California. Award: \$6,000.

Washington Red Raspberry Commission. Potassium phosphite MRL for U.S. caneberry exports to the EU. June 2016 - March 2018. Project Investigator. Goffreda, J. C. Sub-award from the Regents of the University of California. Award: \$6,000.

IR-4 Minor Crop Pest Management Program. August 2013 - August 2016. Project Investigator. Goffreda, J. C. USDA-National Institute of Food and Agriculture. Sub-award from Cornell University. Continuation Award: \$50,000.

IR-4 Minor Crop Pest Management Program. September 2014 - August 2015. Project Investigator. Goffreda, J. C. USDA-National Institute of Food and Agriculture. Award: \$83,500.

IR-4 Minor Crop Management. August 2013 to July 2014. Principal Investigator. Sub-award from Cornell University. Award: \$71,000.

Tree Fruit Cultivar Development. January 2013 to December 2013. Principal Investigator. New Jersey Peach Council. Award: \$ 3,000.

IR-4 Minor Crop Management. August 2012 to July 2013. Principal Investigator. Sub-award from Cornell University. \$80,000.

Tree Fruit Cultivar Development. January 2012 to December 2012. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

IR-4 Minor Crop Management. August 2011 to July 2012. Principal Investigator. Sub-award from Cornell University. \$80,000.

IR-4 Industry Supported Research Food and Environmental Safety. July 2010 to April 2011. Principal Investigator. Sub-award from Cornell University. \$5,000.

IR-4 Minor Crop Management. April 2010 to April 2011. Principal Investigator. Sub-award from Cornell University. \$75,750.

Tree Fruit Cultivar Development. January 2011 to December 2011. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

IR-4 Minor Crop Management. Sept 2009 to June 2010. Principal Investigator. Sub-award from Cornell University. \$47,500.

Tree Fruit Cultivar Development. January 2010 to December 2010. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

Tree Fruit Cultivar Development. January 2009 to December 2009. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

Tree Fruit Cultivar Development. January 2008 to December 2008. Principal Investigator. New Jersey Peach Council. Award: \$ 2,500.

Developing the Potential of Hazelnuts as a Feedstock for Biodiesel and other Oleochemicals in the Northeast. July 2007 to June 2009. Co-Principal Investigator with T. Molnar. Northeast Sun Grant Initiative. Award: \$58,062.

Tree Fruit Cultivar Development. January 2007 to December 2007. Principal Investigator. New Jersey Peach Council. Award: \$ 4,000.

Tree Fruit Cultivar Development. January 2006 to December 2006. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

Tree Fruit Cultivar Development. January 2005 to December 2005. Principal Investigator. New Jersey Peach Council. Award: \$ 2,500.

Tree Fruit Cultivar Development. January 2004 to December 2004. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

Tree Fruit Cultivar Development. January 2003 to December 2003. Principal Investigator. New Jersey Peach Council. Award: \$ 2,500.

Virus Indexing of New Jersey Peach and Nectarine Cultivars January 2002 to December 2002. Co-Principal Investigator with J. Frecon. and R. D. Belding. State of New Jersey Department of Agriculture. Award: \$23,750.

Tree Fruit Cultivar Development. January 2002 to December 2002. Principal Investigator. New Jersey Peach Council. Award: \$ 1,000.

Field Testing and Postharvest Evaluation of New Peach Varieties and Selections in South Jersey. January 2002 to December 2002. Principal Investigator with R. D. Belding and J. Frecon. New Jersey Peach Council. Award: \$ 4,500.

Tree Fruit Cultivar Development. January 2001 to December 2001. Principal Investigator. New Jersey Peach Council. Award: \$ 1,000.

Field Testing and Postharvest Evaluation of New Peach Varieties and Selections in South Jersey. January 2001 to December 2001. Co-Principal Investigator with R. D. Belding and J. Frecon. New Jersey Peach Council. Award: \$ 4,500.

Prunus Cultivar Development. January 2000 to December 2000. Principal Investigator. New Jersey Peach Council. Award: \$ 1,500.

Prunus Cultivar Development. January 1999 to December 1999. Principal Investigator. New Jersey Peach Council. Award: \$ 2,000.

Prunus Cultivar Development. January 1998 to December 1998. Principal Investigator. New Jersey Peach Council. Award: \$ 2,300.

Evaluation of secondary selections of the NJAES peach breeding program in South Jersey. 1997. Co-Principal Investigator with R.D. Belding. New Jersey Peach Council. Award: \$ 1,800.

Development of a low-input apple production system for the Northeast. June 1994 - Dec. 1995. Co-Principal Investigator in New Jersey with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, and W. H. Tietjen. United States Department of Agriculture-Sustainable Agriculture Research and Extension Program (USDA-SARE)/Environmental Protection Agency-Agriculture in Concert with the Environment (EPA-ACE). USDA Competitive Grant No. 94-COOP-1-0515. Individual Project No. 88-23. Award: \$ 52,597.

Prunus Cultivar Development. January 1994 to December 1994. Principal Investigator. New Jersey Peach Council. Award: \$ 2,500.

Development of a low-input apple production system for the Northeast. July 1993 - June 1994. Co-Principal Investigator in New Jersey with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, and W. H. Tietjen. USDA-SARE/EPA-ACE Competitive Grant No. 88-COOP-1-3524. Individual Project No. 88-23. Award: \$ 50,400.

Development of a low-input apple production system for the Northeast. July 1992 - June 1993. Co-Principal Investigator in New Jersey with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, J. K. Springer and W. H. Tietjen. USDA-SARE/EPA-ACE Competitive Grant No. 88-COOP-1-3524. Individual Project No. 88-23. Award: \$ 43,659.

Development of a low-input apple production system for the Northeast. July 1991 - June 1992. Co-Principal Investigator in New Jersey with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, J. K. Springer and W. H. Tietjen. USDA/Low Input Sustainable Agriculture Program (LISA). USDA-ARS Competitive Grant No. 88-COOP-1-3524. Individual Project No. 88-23. Award: \$ 49,000.

Breeding peaches with increased shelf life. July 1991 - June 1992. Principal Investigator. New Jersey Peach Council. Award: \$ 2,700.

Genetic approach to decrease peach softening. July 1991 - June 1992. Principal Investigator. Pennsylvania Peach and Nectarine Research Program. Award: \$ 3,700.

Physiological basis for apple ripening mutants. February 1991 - January 1992. Co-Principal Investigator with T. Gianfagna. New Jersey Apple Institute. Award: \$ 1,000.

Prunus Cultivar Development. January 1991 to December 1991. Principal Investigator. New Jersey Peach Council. Award: \$ 2,300.

Development of a low-input apple production system for the Northeast. July 1990 - June 1991. Co-Principal Investigator in New Jersey with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, and W. H. Tietjen. USDA/Low Input Sustainable Agriculture Program (LISA). USDA-ARS Competitive Grant No. 88-COOP-1-3524. Individual Project No. 88-23. Award: \$ 18,000.

TOTAL EXTERNAL RESEARCH GRANTS

1989-2016:

\$ 874,518

Internal Competitive Research Grants:

Ornamentals Integrated Crop Management (ICM) for diseases, insects, nutrition, and cultivar improvement. July 2002-June 2005. Principal Investigator with W. Cowgill, R. Funk, A. Gould, G. Hamilton, J. Johnson, J. Lashomb, R. Obal, N. Polanin, S. Polovarapu, and M. Vodak. Award: \$195,000 over three years.

Trickle Irrigation System at the Rutgers Fruit R&E Center. July 2000-June 2001. Principal Investigator with J.Fiola. Award: \$45,000.

Peach and nectarine evaluation in New Jersey. Principal Investigator with W. P. Cowgill and J. L. Frecon. New Jersey Competitive Tree Fruit Initiative. Award: \$ 7,500.

Rapid assessment of peach rootstock germplasm for scion bloom delaying potential. Principal Investigator with E. F Durner. New Jersey Competitive Tree Fruit Initiative. Award: \$ 4,000.

Evaluation of brown rot resistance and its relation to ethylene in stony hard peaches. Principal Investigator with N. Lalancette. New Jersey Competitive Tree Fruit Initiative. Award: \$ 4,000.

Development of a low-input apple production system for the Northeast. July 1993 - June 1994. Co-Principal Investigator with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, and W. H. Tietjen. Rutgers Sustainable Agriculture Research and Extension Program. Award: \$ 10,000.

Development of a low-input apple production system for the Northeast. July 1992 - June 1993. Co-Principal Investigator with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, and W. H. Tietjen. Rutgers Sustainable Agriculture Research and Extension Program. Award: \$ 10,500.

Development of a low-input apple production system for the Northeast. July 1991 - June 1992. Co-Principal Investigator with W. P. Cowgill, E. F. Durner, J. L. Frecon, D. F. Polk, and W. H. Tietjen. Rutgers Sustainable Agriculture Research and Extension Program. Award: \$ 6,000.

Ripening characteristics of the stony hard mutant in peach. July 1989 - June 1990. Rutgers Research Council. Award: \$ 2,500.

Internal Fellowships:

Henry Rutgers Research Fellowship. 1989-91. Award: \$ 30,000.

TOTAL INTERNAL COMPETITIVE
RESEARCH SUPPORT 1989-2017: \$ 314,500

External Patent Royalty/Licensing Support:

<u>Source</u>	<u>Year</u>	<u>Amount</u>
Adams County Nursery	2016	28,349
Purdue Research Foundation	2016	34,821
Adams County Nursery	2016	24,038
Gardens Alive!	2016	2,363
Cummins Nursery	2016	142
Wafler Nursery	2016	243
Adams County Nursery	2015	51,026
Purdue Research Foundation	2015	46,160
Adams County Nursery	2015	2,982
Gardens Alive!	2015	4,945
Cummins Nursery	2015	183
Wafler Nursery	2015	274
Adams County Nursery	2014	55,187
Adams County Nursery	2014	17,510
Cummins Nursery	2014	301
Stark Brothers Nursery	2014	390

Purdue Research Foundation	2014	40,122
Gardens Alive!	2014	4,319
Wafler Nursery	2014	200
Adams County Nursery & Sub-licensees	2013	53,274
Purdue Research Foundation	2013	43,759
Adams County Nursery	2013	1,188
Gardens Alive!	2013	4,387
Stark Brothers Nursery	2013	694
Cummins Nursery	2013	588
Star Fruits	2012	1,352
Adams County Nursery	2012	250
Stark Brothers Nursery	2012	816
Adams County Nursery	2012	20,415
Cummins Nursery	2012	500
Gardens Alive!	2012	2,952
Gardens Alive!	2012	2,096
Purdue Research Foundation	2012	34,137
Adams County Nursery	2012	473
Adams County Nursery	2012	358
Gardens Alive!	2011	3,000
Purdue Research Foundation	2011	35,007
Adams County Nursery	2011	28,021
Star Fruits	2011	2,452
Adams County Nursery	2011	1,813
Gardens Alive!	2011	4,859
Stark Brothers Nursery	2010	341
Gardens Alive!	2010	2,453
Adams County Nursery	2010	32,891
Purdue Research Foundation	2010	32,130
Adams County Nursery	2010	1,118
Fleming's Nursery	2010	308
Adams County Nursery	2009	1,000
Adams County Nursery	2009	2,500

Star Fruits	2009	3,111
Stark Brothers Nursery	2009	140
Purdue Research Foundation	2009	21,102
Gardens Alive!	2009	1,850
Adams County Nursery	2009	53,076
Adams County Nursery	2009	25
Gardens Alive!	2009	5,409
Gardens Alive!	2008	968
Star Fruits	2008	4,717
Adams County Nursery	2008	31,794
Adams County Nursery	2008	1,273
Purdue Research Foundation	2008	25,970
Stark Brothers Nursery	2007	\$277
Adams County Nursery	2007	12,462
Star Fruits	2007	4,715
Gardens Alive!	2007	1,764
Purdue Research Foundation	2007	19,039
Purdue Research Foundation	2007	460
Star Fruits	2006	13,159
Gardens Alive!	2006	12,384
Purdue Research Foundation	2006	7,014
Adams County Nursery	2006	11,431
Star Fruits	2005	17,184
Adams County Nursery	2005	1,187
Purdue Research Foundation	2005	10,849
Star Fruits	2004	12,410
Adams County Nursery	2004	1,615
Purdue Research Foundation	2004	8,357
Star Fruits	2003	9,134
Adams County Nursery	2003	2,042
Purdue Research Foundation	2003	1,292
Purdue Research Foundation	2003	7,869
Adams County Nursery	2002	1,828

Star Fruits	2002	10,079
Purdue Research Foundation	2002	3,177
Hilltop Nurseries	2002	143
Star Fruits	2001	13,715
Rocky Meadow Nurseries	2001	209
Adam's County Nursery	2001	1,485
Purdue Research Foundation	2001	43,416
Stark Brother's Nurseries	2000	4,708
Adam's County Nursery	2000	910
Hilltop Nurseries	2000	182
Rocky Meadow Nurseries	2000	100
Star Fruits	2000	10,000
Geo Cot International	2000	30,000
Stark Brother's Nurseries	1999	1,251
Purdue Research Foundation	1998	3,327
Stark Brother's Nurseries	1998	542
Star Fruits	1998	24,810
Stark Brother's Nurseries	1998	5,923
Geo Cot International	1997	9,974
Adam's County Nursery	1997	544
Hilltop Nurseries	1997	2,332
Star Fruits	1997	18,487
Purdue Research Foundation	1997	7,981
Stark Brother's Nurseries	1996	2,474
Stark Brother's Nurseries	1996	2,928
Star Fruits	1996	29,248
Stark Brother's Nurseries	1996	1,554
Stark Brother's Nurseries	1996	2,768
Adams County Nursery	1996	779
Hilltop Nurseries	1996	1,309
Geo Cot International	1995	14,920
Star Fruits	1995	40,010
Stark Brother's Nurseries	1995	3,245
Adams County Nursery	1995	389

Hilltop Nurseries	1995	701
Purdue Research Foundation	1994	2,429
Purdue Research Foundation	1994	3,138
Star Fruits	1994	15,120
Stark Brother's Nurseries	1994	4,207
Star Fruits	1993	12,500
Newark Nurseries	1993	500
Stark Brothers	1993	500
Rocky Meadow Nurseries	1993	100
Purdue Research Foundation	1993	2,705
Purdue Research Foundation	1993	2,358
Stark Brother's Nurseries	1993	4,685
Stark Brother's Nurseries	1992	5,643
Purdue Research Foundation	1991	3,190
Stark Brothers Nurseries	1991	12,418
Purdue Research Foundation	1991	122
Total Royalties		\$1,297,829

Gifts from the Nursery Industry:

Adams County Nursery	2016	\$25,000
Adams County Nursery	2015	\$25,000
Adams County Nursery	2013	\$10,000
Star Fruits	2004	2,500
Cadamon	2004	2,500
Star Fruits	2003	2,500
Cadamon	2003	2,500
Star Fruits	2002	2,500
Cadamon	2002	2,500
Star Fruits	2001	2,500
Cadamon	2001	2,500
Star Fruits	2000	2,500
Cadamon	2000	2,500
Total Gifts		\$85,000

Total Research Support Summary (1989-2016):

External Competitive Research Grants	\$ 874,518
Internal Competitive Research Grants	314,500
External Patent Royalty/Licensing Support	1,297,829
Gifts from the Nursery Industry	85,000
TOTAL RESEARCH SUPPORT	\$2,571,847

TEACHING ACTIVITIES:Courses/Lectures Taught:

- Spring 2017 **Middlesex County Master Gardeners Lecture Series** presented two lectures entitled 'Fruit Trees in the Home Garden'.
- Fall 2016 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading
- Fall 2016 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Spring 2016 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Spring 2016 **Entrepreneurial Ag Colloquium** (11:015:442), 3 credits, presented one lecture entitled 'A Plant Breeder's Experience with Intellectual Property Commercialization at Rutgers'
- Spring 2016 **Middlesex County Master Gardeners Lecture Series** presented two lectures entitled 'Fruit Trees in the Home Garden'.
- Fall 2015 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading
- Fall 2015 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Spring 2015 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.

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- Fall 2014 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading
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- Fall 2010 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
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- Fall 2009 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Spring 2009 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Fall 2008 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2008 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led field trip to Rutgers Fruit Research and Extension Center.
- Spring 2008 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Fall 2007 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.

- Fall 2007 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.
- Spring 2007 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Fall 2006 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2006 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.
- Spring 2006 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Fall 2005 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2005 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 2005 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.
- Fall 2005 **Master Gardeners Tour**, presented tour of tree fruit research activities at the Rutgers Fruit Research and Extension Center.
- Spring 2005 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Fall 2004 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 2004 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2004 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.

- Spring 2004 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Spring 2004 **Master's Gardner School**, presented one lecture on tree fruit management for homeowners.
- Fall 2003 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2003 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 2003 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.
- Spring 2003 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Fall 2002 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2002 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 2002 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.
- Fall 2001 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2001 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 2001 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement and led one field trip to Rutgers Fruit Research and Extension Center.
- Fall 2001 **Apples: Edible Ornamental's for the Home Landscape**. One hour presentation to the Fall 2001 Home Gardener's School.

- Fall 2000 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 2000 **Perspectives on Agriculture and the Environment** (11:015:101), 2 credits, required undergraduate issues course. Sole responsibility for section's content and grading.
- Fall 2000 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 2000 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Fall 1999 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 1999 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 1999 **Introduction to Horticulture** (11:776:211), 3 credits, presented two lectures on methods of plant improvement.
- Fall 1998 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 1998 **Perspectives on Agriculture and the Environment** (11:015:101), 2 credits, required undergraduate issues course. Sole responsibility for section's content and grading.
- Fall 1998 **Seminar in Plant Biology** (16:765.609), 3 credits, presented one seminar on tree fruit breeding.
- Fall 1998 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Spring 1998 **Advanced Plant Breeding** (16:765:528), 3 credits, presented one lecture on breeding peaches and apples.
- Spring 1998 **Scholars Program Seminar** (06:090:199), 3 credits, presented one lecture on methods of plant breeding methods.
- Fall 1997 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetic course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.

- Fall 1997 **Perspectives on Agriculture and the Environment** (11:015:101), 2 credits, required undergraduate issues course. Sole responsibility for section's content and grading.
- Fall 1997 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Fall 1996 **Perspectives on Agriculture and the Environment** (11:015:101), 2 credits, required undergraduate issues course. Sole responsibility for section's content and grading.
- Fall 1996 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Spring 1996 **Scholars Program Seminar** (06:090:199), 3 credits, presented one lecture on methods of plant improvement.
- Fall 1995 **Perspectives on Agriculture and the Environment** (11:015:101), 2 credits, required undergraduate issues course. Sole responsibility for section's content and grading.
- Fall 1995 **Introduction to Horticulture** (11:776:211), 3 credits, presented one lecture on methods of plant improvement.
- Fall 1995 **Introduction to Plant Science** (11:776:141), 3 credits, presented one lecture on plant breeding methods.
- Fall 1995 **Plant Genetics** (11:776:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 1994 **Plant Genetics** (11:530:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Spring 1994 **Seminar in Horticulture** (11:530:614), 1 semester, graduate course which focuses on preparing, discussing, and defending scholarly research. Sole responsibility for course's content and grading.
- Fall 1993 **Plant Genetics** (11:530:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 1993 **Introduction to Horticulture** (11:530:211), 3 credits, presented one lecture on methods of plant improvement.

- Fall 1993 **Seminar in Horticulture** (11:530:614), 1 credit, graduate course which focuses on preparing, discussing, and defending scholarly research. Sole responsibility for course's content and grading.
- Spring 1993 **Seminar in Horticulture** (11:530:614), 1 credit, graduate course which focuses on preparing, discussing, and defending scholarly research. Sole responsibility for course's content and grading.
- Fall 1992 **Plant Genetics** (11:530:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Fall 1991 **Seminar in Horticulture** (11:530:614), 1 credit, graduate course which focuses on preparing, discussing, and defending scholarly research. Sole responsibility for course's content and grading.
- Fall 1991 **Plant Genetics** (11:530:305), 4 credits, undergraduate introductory genetics course; including both lecture and laboratory exercises. Sole responsibility for course's content and grading.
- Spring 1991 **Seminar in Horticulture** (11:530:614), 1 credit, graduate course which focuses on preparing, discussing, and defending scholarly research. Sole responsibility for course's content and grading.
- Spring 1991 **Horticultural Topics** (11:530:450), 2 credits, presented two lectures on methods in plant improvement.
- Fall 1989 **Plant Genetics** (11:530:305), 4 credits, undergraduate genetics course; including both lecture and laboratory exercises. Joint responsibility.

Graduate and Undergraduate Research Directed:

- 2001-05 Co-advisor for Tom Molnar, Ph.D. candidate, studying the breeding and inheritance of eastern filbert blight resistance .
- 1997 Primary advisor for Joseph Howard, Research in Biology 01:119:308. Project title: DNA fingerprinting of apple with randomly amplified polymorphic DNA (RAPD) markers.
- 1996-97 Supervised Kathie Crosbie's undergraduate research project on development of a statewide tree fruit evaluation database.
- 1992-96 Primary advisor for Roger Smith, Ph.D. candidate. Studying mRNA accumulation in stony hard peach and its interaction with ethylene.

- 1996 Primary advisor for Joseph Howard, Research in Biology 01:119:307. Project title: Isolation of high quality DNA from mature apple leaves.
- 1996 Primary advisor for Rupan Trikha, Research in Biology 01:119:308. Project title: Polygalacturonase activity and its relation to ethylene exposure in stony hard peach.
- 1993-94 Primary advisor for Anne Gillen, George H. Cook Honors Student. Thesis title: Use of random amplified polymorphic DNA to assess genetic diversity in apricots (*Prunus armeniaca* L.).
- 1991-92 Primary advisor for Mary Ragno, Cook College Cooperative Education Student. Studied fruit respiration and ethylene evolution.
- 1991-92 Primary advisor for John Gaitanis, George H. Cook Honors Student. Thesis title: A comparison of firmness and polygalacturonase activity in freestone and stony hard peach varieties.
- 1990-91 Primary advisor for John Gaitanis, Cook College General Honors Student. Research Topic: Use of RFLP markers in peach varieties for breeding of selected traits and determination of phylogenies.
- 1990-91 Primary advisor for Laurie Citino, M.S. candidate. Studied cell wall hydrolases in stony hard peach.

Graduate Program Memberships:

Plant Biology Program

Graduate Student Committees:

M.S. Degree	Clayton Leadbetter, Plant Biology Program
Ph.D. Degree	Tom Molnar, Plant Biology Program
Ph.D. Degree	David Rotter, Plant Biology Program
Ph.D. Degree	Anne DeMarsay, Plant Biology Program
M.S. Degree	Laura Furman, Plant Biology Program
Ph.D. Degree	Stacy Bonos, Plant Biology Program
M.S. Degree	Josh Gottdenker, Plant Biology Program
M.S. Degree	Russell Blair, Plant Biology Program
Ph.D. Degree	Roger Smith, Plant Science and Technology Program
Ph.D. Degree	John Gill, Plant Science and Technology Program.
M.S. Degree	Christopher Gussman, Plant Science and Technology Program
M.S. Candidate	Laurie Citino, Plant Biology Program (1990-91)
Ph.D. Degree	Fazal Rahimi, Horticulture Program
M.S. Degree	Fadliah Salim, Horticulture Program

Other Educational Activities:

1997-2003	Coordinator, Plant Science and Technology Track, Plant Biology Graduate Program
1994-1998	Undergraduate Advisor, Plant Science Program
1991-95	Coordinated the seminar series for the Plant Science and Technology Graduate Program
1990	Coordinated the seminar series for the Program in Applied Genetics and Evolution (PAGE)

SERVICE:University Service:

2017-present	Member, Hunderton County AgentSearch Committee
1995-present	Director, Rutgers Fruit Research and Extension Center
1989-present	Member, Tree Fruit Working Group
2015-16	Member, Specialty Crop Weed Science Specialist Search Committee
2007	Member, Rules and Procedure Committee
2004-2005	Member, Tree and Small Fruit Specialist Search Committee
1997-03	Track Coordinator, Plant Science and Technology Graduate Program
1996-97	Chairman, Plant Variety Release Committee
1995-98	Member, University Biological Science Area Committee
1995-98	Member, Cook College Planning Committee
1993-95	Member, Plant Science and Technology Graduate Admissions Committee
1991-93	Symposium Committee Member, Molecular Genetics of Plant-Microbe Interactions
1990-93	Member, PAGE Core Curriculum Committee
1990-93	Member, Plant Biology Academic Standards
1991-92	Co-Chairman, Mid-Atlantic Fruit Variety Showcase
1990-91	Member, Horticulture Graduate Admissions Committee
1990-91	Chair, Program in Applied Genetics and Evolution (PAGE) Seminar Committee
1987-88	Co-Chairman, Synapsis Executive Committee, Cornell University
1980-81	Plant Science Representative, Cook College Council

Community/Societal Service:

1993-present	Member, <i>Prunus</i> Crop Advisory Committee
1991-present	Member, Apple Crop Advisory Committee
1989-present	Member, Technical Advisory Committee, Regional Project NE-9, Plant Genetic Resource Conservation and Utilization
2005-2011	Member, Millstone Twp. Shade Tree Commission