

Bhimanagouda (Bhimu) S. Patil

Professor

Department of Horticultural Sciences

Texas A&M University

Director

Vegetable & Fruit Improvement Center

Texas A&M AgriLife Research

Education/Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Agricultural Sciences, India	B.S.	1984	Agriculture
University of Agricultural Sciences, India	M.S.	1986	Horticulture
Texas A&M University, College Station	Ph.D.	1994	Horticulture
Washington State University, Prosser, WA	PDF	1994-95	Horticulture
University of California, Parlier, CA	PDF	1996-97	Horticulture

Professional Experience:

2008 – Present	Professor, Department of Horticultural Sciences, TAMU
2005 – Present	Director, Vegetable & Fruit Improvement Center, Texas AgriLife Research
2005 – 2008	Associate Professor, Dept. of Horticultural Sciences, TAMU
2002 – 2004	Associate Director, Vegetable & Fruit Improvement Center, TAMU
2002 – 2004	Associate Professor, Texas A&M University-Kingsville, TX
1997 – 2002	Assistant Professor, Texas A&M University-Kingsville, TX
1996 – 1997	Faculty (part time), California State University, Fresno, CA
1992 – 1994	Research Assistant/Teaching Assistant, Texas A&M University, TX
1989 – 1991	Assistant Professor, University of Agri., Sciences, Dharwad, India

Awards and Honors:

2013	Distinguished Service Award- Div. Agri. and Food Chem., American Chemical Society
2013	American Society for Horticultural Sci. Outstanding Graduate Education Award
2013	Dean's Outstanding Achievement-Research, Texas A&M University
2010	Vice Chancellor Research Excellence (on campus), Texas AgriLife Research
2009	Fellow, Division of Agri. and Food Chemistry, American Chemical Society
2009	Fellow, American Society for Horticultural Sciences
2009	Fellow, Texas AgriLife, Texas A&M University, College Station, TX
2005	Exceptional Research Productivity Award, Texas A&M University-Kingsville
2005	Karnataka State Rajoythsava Award-Award was given by the Governor of the State
2004	Outstanding Young Scientist Award, Div of Ag & Food Chemistry, Amer Chem Society
2003	Paul Harris Fellow (Rotary Foundation)
2003	Outstanding Young Scientist Award (As. Ag Sci. of Indian Origin, ASA, SSSA, & CSA)
2003	Research and Excellence Award (College of Agriculture & Human Sciences, TAMUK)
2002	Achievement Excellence Award, India Association of the Rio Grande Valley
2001	Outstanding Teacher Award, TAMU-Kingsville, Dept of Agronomy & Resource Sciences

Leadership activities (chair, co-chair for 23 symposiums, colloquia and oral sessions)

- 2011 Vice Chair, Vegetable & Fruit Working Group, ISHS
 2009 Co-convener, Third Int. Symposium on Human Health Effects of FAV, Avignon, France
 2008 Co-chair (goal-3)- National Vegetable Crop Initiative- Provide white paper to SCRI
 2007-08 Chair, Division, Agri. Food Chemistry (Centennial celebration), ACS
 2008 Chair, Int'l Sym. Pre & Post Harvest effects on Bioactive Compounds-AGFD-ACS
 2006-07 Program Chair, Division, Agric Food Chemistry, American Chemical Society
 2007 Chair, Second International Symposium on Human Health Effects of FAV, Houston, TX
 2005 Chair, Colloquia "Role of Hort. in Foods for Health", ASHS
 2005 Co-Chair, Int. Sym. on Human Health Effects of FAV, Quebec City, Quebec, Canada
 2004 Chair, International Sym. "Potential Health Benefits of Citrus"-AGFD-ACS

Teaching and Research Accomplishments:

Publications		Invited speaker (keynote/Plenary)			Student Training	
Refereed	152		Prof**	Learned**		
Book chapters (Books/symposi um series edited)	17 (5)	International	20 (7)	16	Graduate Committee Chair/Co-chair	26
Proceedings	18	National	84	14	Supervised training for: Visiting Scientists / PostDoc Undergraduate Students	11 28
Abstracts	126	Regional	7	40		
Patent	1	Local	5			
**Prof=Professional societies; **Learned= Learned societies and land grant institutions						

Publication List Selected Peer-reviewed Publications (Selected from **152** peer-reviewed publications)

- Bae, H.; Jayaprakasha, G. K.; Crosby, K.; Yoo, K. S.; Leskovar, D. I.; Jifon, J.; **Patil, B. S.**, Ascorbic acid, capsaicinoid, and flavonoid aglycone concentrations as a function of fruit maturity stage in greenhouse-grown peppers. *J. Food Composition and Analysis*, 2014, 33, 195-202.
- Chaudhary, P. Jayaprakasha, G.K., R. Porat, B.S. Patil. 2014. Low temperature conditioning reduces chilling injury while maintaining quality and certain bioactive compounds of 'Star Ruby' grapefruit. *Food Chemistry*. 163:243-249.
- Patil, B.S. K. Crosby., D. Byrne, and K. Hirschi. 2014. The Intersection of Plant Breeding, Human Health, and Nutritional Security: Lessons Learned and Future Perspectives. *HortScience.*, 49:116-127.
- Foroudi, S.**, A.S. Potter, A. Stamatikos, B.S. Patil, F.Deyhim. 2014. Drinking Orange Juice Increases Total Antioxidant Status and Decreases Lipid Peroxidation in Adults. *J. Medicinal Food*. (In print).
- Vikram, A.; Jayaprakasha, G.K.; Uckoo, R. M. and **Patil, B.S.** Inhibition of *Escherichia coli* O157:H7 motility and biofilm by β -Sitosterol glucoside, *Biochimica et Biophysica Acta*, 2013, 1830, 5219-5228, PMID:24013126.

6. Dow, C.A., Wertheim, B.C., **Patil, B.S.**, C.A.Thomson. 2013. Daily Consumption of Grapefruit for 6 Weeks Reduces Urine F2-Isoprostanes in Overweight Adults with High Baseline Values but Has No Effect on Plasma High-Sensitivity C-Reactive Protein or Soluble Vascular Cellular Adhesion molecule. *J. Nut.* 143:1586-1592.
7. Murthy, K.N.C., Jayaprakasha, G.K. and **Patil, B.S.** Citrus limonoids and curcumin additively inhibit human colon cancer cells, *Food Funct.* 2013, 4, 803-810, PMID: 23584140, PMID: 23584140.
8. Butalla, A.C., Crane, T.E., **Patil, B.S.**, Wertheim, B.C., Thompson, P., C.A.Thomson. (2012) Effects of a carrot juice intervention on plasma carotenoids, oxidative stress, and inflammation in overweight breast cancer survivors. *Nutrition and Cancer*, 64:331-341. PMID: 22292424.
9. Dow, C.A., Going, S.B., Chow, H.S., **Patil, B.S.** and C.A. Thomson. (2012) The effects of daily consumption of grapefruit on body weight, lipids, and blood pressure in healthy, overweight adults. *Metabolism*, 61: 1026–1035. PMID: 22304836.
10. Uckoo, R. M.; Jayaprakasha, G. K., and **Patil, B. S.**, Hyphenated flash chromatographic separation and isolation of coumarins and polymethoxyflavones from byproduct of citrus juice processing industry, *Sep. Sci. Technol.* 2013, 48, 1467-1472.
11. Kim, J.; Jayaprakasha, G. K., and **Patil, B. S.**, Limonoids and their anti-proliferative and anti-aromatase properties in human breast cancer cells. *Food Funct.* 2013, 4, 258-265, PMID: 23117440.
12. Bae, H.; Jayaprakasha, G. K.; Crosby, K.; Jifon, J. L., and **Patil, B. S.**, Simultaneous quantification of capsaicinoids and ascorbic acid from pungent peppers. *J. Chromatogr. Sci.* 2013, 51, 412-418, PMID: 23081967.
13. Vikram, A.; Jayaprakasha, G. K.; Jesudhasan, P. R.; Pillai, S. D., and **Patil, B. S.**, Obacunone represses Salmonella pathogenicity islands 1 and 2 in an envZ-dependent fashion. *Appl. Environ. Microbiol.* 2012, 78, 7012-7022, PMID: 22843534.
14. Murthy, K.N.C., Jayaprakasha, G.K., **Patil, B.S.** (2012) The natural alkaloid berberine targets multiple pathways to induce cell death in cultured human colon cancer cells. *European Journal of Pharmacology* 688:14-21.
15. Bae, H., Jayaprakasha, G.K., Crosby, K., Jifon, J.L., **Patil, B.S.** (2012) Influence of extraction solvents on antioxidant activity and the content of bioactive compounds in non-pungent peppers. *Plant Foods Hum Nutr* 67:120-128.
16. Murthy, K.N.C., Jayaprakasha, G.K., **Patil, B.S.** (2012) The natural alkaloid berberine targets multiple pathways to induce cell death in cultured human colon cancer cells. *European Journal of Pharmacology* 688:14-21.
17. Jayaprakasha, G.K., Murthy, K.N.C., Demarais, R., **Patil, B.S.** (2012) Inhibition of prostate cancer (LNCaP) cell proliferation by volatile components from Nagami kumquats. *Planta Med* 78:974-980.
18. Bae, H., Jayaprakasha, G.K., Crosby, K., Jifon, J.L., **Patil, B.S.** (2012) Influence of extraction solvents on antioxidant activity and the content of bioactive compounds in non-pungent peppers. *Plant Foods Hum Nutr* 67:120-128.
19. Bae, H., Jayaprakasha, G.K., Jifon, J., **Patil, B.S.** (2012) Variation of antioxidant activity and the levels of bioactive compounds in lipophilic and hydrophilic extracts from hot pepper (*Capsicum* spp.) cultivars. *Food Chemistry* 134:1912-1918.

20. Chebrolu, K.K., Jayaprakasha, G.K., Yoo, K.S., Jifon, J.L., **Patil, B.S.** (2012) An improved sample preparation method of quantification of ascorbic acid and dehydroascorbic acid by HPLC. *LWT-Food Science and Technology* 47:443-449.
21. Vikram, A., Jayaprakasha, G.K., Jesudhasan, P.R., Pillai, S.D., **Patil, B.S.** (2012) Limonin 7-methoxime interferes with *Escherichia coli* biofilm formation and attachment in type 1 pili and antigen 43 dependent manner. *Food Control* 26:427-438.
22. Kim, J., Jayaprakasha, G.K., Uckoo, R.M., **Patil, B.S.** (2012) Evaluation of chemopreventive and cytotoxic effect of lemon seed extracts on human breast cancer (MCF-7) cells. *Food and Chemical Toxicology* 50:423-430.
23. Jayaprakasha, G.K., Murthy, K.N.C., Etlinger, M., Mantur, S.M., **Patil, B.S.** (2012) Radical scavenging capacities and inhibition of human prostate (LNCaP) cell proliferation by *Fortunella margarita*. *Food Chemistry* 131:184-191.
24. Bae, H., Jayaprakasha, G.K., Jifon, J., and **Patil, B.S.** (2012) Extraction efficiency and validation of HPLC method for the flavonoid analysis from peppers, *Food Chemistry*, 130, 751-758.
25. Jayaprakasha, G.K. Murthy, K.N.C., and **Patil, B.S.**, (2011). Rapid HPLC-UV method for the quantification of L-citrulline from watermelon and its effect on smooth muscle relaxation, *Food chemistry*, 127, 240-248.
26. Uckoo, R., Jayaprakasha, G.K. Nelson, S.D., **Patil, B.S.** 2011. Simultaneous quantification of amines and organic acids in citrus using a rapid high-performance liquid chromatography method, *Talanta*, 83:948-954.
27. Jayaprakasha, G.K., Dandekar, D.V., Tichy, S.E., **Patil, B.S.** (2011), Simultaneous separation and identification of limonoids from citrus using Liquid chromatography-Collision induced dissociation mass spectra, *Journal of Separation Science*, 34, 2-10, PMID: 21171170
28. Kim, J., Jayaprakasha, G.K., Muthuchamy, M., and **Patil, B.S.**, (2011), Structure-function relationships of citrus limonoids on p38 MAP kinase activity in human aortic smooth muscle cells, *European J. Pharmacology*, 670, 44-48, PMID: 21924259
29. Chebrolu, K., Jayaprakasha, G.K., Jifon, J. and **Patil, B.S.** (2011). Optimization of flavanone extraction by modulating differential solvent densities and centrifuge temperatures, *Talanta*, 85, 353-362, PMID:21645710.
30. Murthy, K.N.C., Jayaprakasha, G.K. and **Patil, B.S.** (2011). Citrus limonoids obacunone and obuacunone glucoside inhibit SW-480 human colon cancer cells by the induction of apoptosis, *Food and Chemical Toxicology*, 49, 1616-1625, PMID: 21338095
31. Murthy, K.N.C., Jayaprakasha, G.K. and **Patil, B.S.** (2011). Apoptosis mediated cytotoxicity of citrus obacunone in human pancreatic cancer cells, *Toxicology In vitro*, 25, 859-867, PMID: 21333732.
32. Jayaprakasha, G., Jadegoud, Y., Gowda, G., and **Patil, B.S.** 2010. Bioactive compounds from sour orange inhibit colon cancer cell proliferation and induce cell cycle arrest. *J. Agric. Food Chem.* 58:180-186.
33. Leonardi, T., J. Vanamala, S.S. Taddeo, L.A. Davidson, M.E. Murphy, **B.S. Patil**, N. Wang, R.J. Carroll, R.S. Chapkin, J.R. Lupton, N.D. Turner. 2010. Apigenin and naringenin suppress colon carcinogenesis through the aberrant crypt stage in azoxymethane-treated rats. *Experimental Biology and Medicine* 235:710-717.
34. Potter AS, Foroudi S, Stamatikos A, Patil BS, Deyhim F. Drinking carrot juice increases total antioxidant status and decreases lipid peroxidation in adults. *Nutr J.* 2011; 24:1-6.