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# Curriculum Vitae DEBORAH J. BUSZARD

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# **Academic Leadership Roles:**

Deputy Vice-Chancellor and Principal, University of British Columbia Okanagan campus 2012-2020

Director, Environmental Programs (2007-2009) and coordinator of the Academic Sustainability Initiative, Dalhousie University 2007-2012

Associate Vice-Principal (Macdonald Campus) and Dean of Agricultural and Environmental Sciences, McGill University 1996-2005

Chair of the Board of Governors, Vanier College (CEGEP), Montreal, Quebec 2003-2005

Presiding Dean, McGill School of Environment 2001-2004

Associate Dean (Academic and Student Affairs), McGill University 1991-1996

# **Academic Appointments:**

Professor, Biology, University of British Columbia 2012- (on leave 2021)

Professor, Biology and Environmental Science, Dalhousie University 2006-2012

Visiting Professor, University of British Columbia 2005-2006

Professor, Plant Science, McGill University 1996-2007

Visiting Professor, Universidad Nacional del Comahue, Argentina 1992

Associate Professor, Plant Science, McGill University 1988-1996

Associate Graduate Faculty, University of Guelph 1988-1995

Assistant Professor, Plant Science, McGill University 1980-1988

## **Education:**

Ph.D. Imperial College, University of London, Wye Campus, UK

B.Sc. (Honours) Co-op program, University of Bath, UK

## **Research and Publications:**

My academic discipline is plant science with a focus on fruit crops. Several widely grown strawberry cultivars have been released from the Quebec strawberry breeding program I founded in 1987. Current scholarly interests include agriculture and food innovation, institutional transformation and academic innovation. Publications, patents, conference presentations, and funding are listed on pages 5-15.

# Teaching:

At UBC I have contributed to courses when invited to do so. At Dalhousie University I taught courses on environmental design, plant biology and sustainability. At McGill my teaching was in the areas of plant science and agriculture. Student research and thesis supervision are listed on pages 15-17.

## **Professional development:**

- Political Intelligence for Boardrooms 2020, Institute of Corporate Directors, Vancouver
- Crown Director Effectiveness 2018, Institute of Corporate Directors, Vancouver
- Enterprise Risk Oversight for Directors 2016, Institute of Corporate Directors, Vancouver
- McKay CEO Forum member 2016-2020
- Directors Education Program 2015, Rotman School, University of Toronto and Institute of Corporate Directors, Vancouver, ICD.D awarded 2016
- Professional Program for Presidents of Canadian Universities 2013 and 2015, AUCC, Toronto
- Workshop on Strategic Leadership of Senate 2012, AUCC, Winnipeg

## Honours, Awards and Recognition:

- Dean's Medal of Distinction, Faculty of Applied Science, University of British Columbia 2020
- Honorary Alumnus Award, University of British Columbia 2019
- Educational Leadership Award, Dalhousie University 2010
- Invited participant: World Innovation Summit on Education, Qatar 2009- 2013
- UNESCO "World Best Practices in Education for Sustainability" 2009 (for the College of Sustainability, Dalhousie University)
- Teaching Excellence Award, Environmental Programs, Dalhousie University 2008
- Golden Key International Honour Society Honorary Member 2008
- Fellowship of the Institute of Horticulture, UK 2006
- Rosemary Verey Award for Garden Design (UBC) 2006
- David L Johnston Award of the McGill Alumni Association 2005
- Honorary membership of the Quebec Women's Institutes 2005
- Honorary life membership Macdonald branch of McGill Alumni Association 2004
- NSERC Synergy Award (for Faculty-Industry collaboration) 2001
- Prix d'excellence de l'Ordre des Architectes du Québec 2000 (for Macdonald Eco-residence)
- Honorary life membership of the McGill Alumni Association 1999

## **Board Memberships and Community Service:**

- Council of Canadian Academies, Expert Panel on Plant Health Risks in Canada, Chair 2020-
- Institute of Corporate Directors, BC, Okanagan Chapter Executive 2019-
- Kelowna International Airport Advisory Board 2018-2020
- Canadian Forces Liaison Council, Pacific 2016-, Vice Chair 2017-

- Roundtable on Entrepreneurship, Canadian Chamber of Commerce 2013
- United Way of the Central Okanagan, Campaign Cabinet 2013-2016
- Queen's Jubilee Medal Advisory Committee, Thompson-Cariboo region 2012
- Sierra Club of Canada Foundation, Board member 2010
- Nova Scotia Food Policy Council, Founding Board member 2010-2011
- Environmental Performance Review of Nova Scotia Agriculture Advisory Board 2008-2009
- L'institut bio-alimentaire international (IBI), Montréal, Québec. President 2001-2008
- Louis G. Johnson Foundation, Montreal, Quebec, Board of Trustees 1997-2008
- Foragen Technologies Management Inc., Science Advisory Board 2002-2006
- Vanier College CEGEP, Montreal, Quebec, Board of Governors 1998–2006, Chair 2003-2005
- Bellairs Research Institute, Barbados. Board of Directors 1997-2005
- YWCA Foundation of Montreal, Montreal, Quebec, Board member 1997-1999
- Morgan Arboretum Association, Senneville, Quebec, Board member 1996-2005
- Mont St-Hilaire Nature Conservation Centre, Quebec. Board member 1996-2003
- Royal Agricultural Winter Fair, Toronto, Ontario, Board member 1996-2005
- McGill University Board of Governors and Executive Committee of the Board 1993-1996
- Agricultural Institute of Canada Foundation, Board member 1993 1996
- Analyse générale concernant les professions relatives à l'agronomie. Ministère de la maind'oeuvre de la sécurité de la revenue et de la formation professionnelle, Quebec 1992-1993

#### **National and Provincial Academic and Research Service:**

- Genome British Columbia, Agriculture and Food Research Steering Committee 2013-17
- Government of Myanmar, taskforce to advise on modernizing universities 2012
- Government of Ontario, Ministry of Research and Innovation, Ontario Research Fund, Research Excellence Peer Review Panel, Bio-economy and Alternative Energy 2011
- Government of Nova Scotia, Offshore Energy Research Management Committee 2009-12
- Government of Ontario, Ontario Research Fund, Research Infrastructure-Bioeconomy, Environment and Clean Technology Panel 2009
- Government of Nova Scotia, Agriculture Technology Development Program 2009-2012
- Agriculture and Agri-food Canada, Plant Research Review Panel, Chair 2007
- Natural Sciences and Engineering Research Council, Strategic Focus Group 2005
- Gouvernement du Québec, Prix du Québec, selection committee 2003-2004
- Canadian Agricultural Research Council 2003
- Canadian Climate Impact and Adaptation Research Network (Water), Chair 2002-2005
- Gouvernement du Québec Atelier des cultivars, 1994-1999.
- Agricultural Institute of Canada, Scientific Societies Coordinating Committee 1993-1995

## **Public Reports and Briefs:**

- UBC Okanagan, Outlook 2040; 20pp. Available at <a href="https://dvc.ok.ubc.ca/initiatives-priorities/strategic-planning/">https://dvc.ok.ubc.ca/initiatives-priorities/strategic-planning/</a>
- Aspire Envisioning the Future of UBC Okanagan campus;17pp. Available at <a href="https://dvc.ok.ubc.ca/initiatives-priorities/strategic-planning/">https://dvc.ok.ubc.ca/initiatives-priorities/strategic-planning/</a>
- Report to the Quebec Parliamentary Commission on Quality, Accessibility and Funding of Universities: John Abbott CEGEP & McGill University 5pp. Buszard, D. and
- K. Henderson 2004
- A Vision for Growth and Development in Applied Biosciences, Technologies and Health: Brief to the City of Montreal Planning Process 4pp. Buszard, D. 2004
- A commentary on CIDA's strategic approach to trade related capacity building (TRCB): A CIDA consultation document 5pp. Dupuis R. and D. Buszard 2003

#### Reviews:

- Dalhousie Senate Review of the Neuroscience Institute, Chair 2008-2009
- Dalhousie Senate Review of the Institute for Research on Materials 2007-2008
- Nova Scotia Agricultural College, Dalhousie Senate Academic Program Review 2006-2007
- University of Hong Kong, School of Biological Sciences 2003
- University of British Columbia, Faculty of Agriculture 2003
- Guelph University, Ontario Agriculture College Strategic Visioning 2002
- Nova Scotia Agricultural College Undergraduate programs 1995

## **Invited Presentations:**

- 2019 Innovation in Post-secondary Education. Keynote address, Western Credit Unions Annual Conference, Kelowna, BC
- 2017 Health Promotion in Universities. Presidents' Forum, the Transformative Power of Universities for Our Future. Hong Kong Polytechnic University
- 2015 Higher Education perspectives: health promotion and sustainability on university campuses. Plenary address to the VII International Congress on Health Promoting Universities and Colleges, Kelowna BC
- 2015 Food Matters-Opportunities for Leadership on Campus. Plenary address to the Canadian College and University Food Service Association Conference, Kelowna BC
- 2013 A Vision for the Future University. Keynote address to the Western Regional Conference of Faculty Associations, Vancouver, BC
- 2012 Innovation in University Program Design, Yangon, Myanmar, University Leaders meeting
- 2010 Sustainability Initiatives at Dalhousie University, University of Alberta, Edmonton, Alberta
- 2010 Transforming the Academy to Deliver Education for Sustainability, Association of Commonwealth Universities Conference of Executive Heads, Cape Town, South Africa
- 2010 What Leaders Need to Know: Environment and Sustainability Knowledge for the Twenty-first Century, Women in Leadership Conference, Halifax, NS
- 2008 Trade, Control & What's In Your Food, IDEALaw Conference, Dalhousie University, NS
- 2008 Teaching and Learning in the Twenty-first Century University, New learning Panel SWAAC Annual Conference Halifax, NS
- 2007 Making Sustainable Choices, Atlantic Sustainable Campuses Conference, Dalhousie University, NS
- 2006 Sir William Macdonald, a Century of Impact, Annual Maysie MacSporran Lecture, McGill Montreal, Quebec
- 2004 Tradition and Innovation, Food For Thought Lecture, McGill University, Montreal, Quebec
- 2003 Women in Agricultural Development, Women of the World Conference, Quebec
- 2003 A Century of Macdonald College. Sir William Macdonald Luncheon, Sainte Anne de Bellevue, Quebec
- 2001 The Evolving Role of the Dean in Advancement. Canadian Council for the Advancement of Education Conference, Montreal, Quebec
- 2001 Graduation Speaker Sacred Heart School of Montreal, Quebec
- 2000 Global food issues The Women's Canadian Club of Montreal, Quebec
- 2000 The Dean's role in advancement. SWAAC Conference, Montreal, Quebec
- 2000 Feeding the World, Royal Montreal Curling Club, Quebec
- 1999 Environmental Change, Vogel Lecture, McGill University, Montreal, Quebec
- 1998 McGill School of Environment, McGill Homecoming, Montreal, Quebec
- 1998 Feeding the World: Food for Thought, Rotary Club of Montreal, Quebec
- 1995 The case for retaining the three separate National Research Councils. CAURA, Ottawa, Ontario.

#### **RESEARCH AND PUBLICATIONS**

## Peer reviewed journal articles and conference proceedings:

Maqbool, R., D.C. Percival, Q. Zaman, T. Astatkie, S. Adl, and D. Buszard, 2017. Leaf nutrient ranges and berry yield optimization in response to soil applied nitrogen, phosphorous, and potassium in wild blueberries (Vaccinium angustifolium Ait.). European Journal of Horticultural Science 82(4): 166-179.

Maqbool, R., D. C. Percival, S. Adl, Q. Zaman, D. Buszard 2012. In situ estimation of foliar nitrogen in wild blueberry using reflectance spectra. Canadian Journal of Plant Science 92(6): 1155-1161.

Pellerin, B.P, D. Buszard, A. Georgallas and R.J. Nowakowski, 2012. A novel way to understand the relationship between biennial bearing in apple trees and shoot apical meristem proximity. HortScience 47 (5): 589-592.

Buszard, D., and J. Kolb, 2011. Institutional innovation to deliver post-secondary education for sustainability. Sustainability: The Journal of Record 4(2): 80-84.

Pellerin, B.P., D Buszard, D. Iron, D.S Nichols, C.G. Embree, G. H. Neilsen, D. Neilsen, R. P. Marini, 2011. A theory of blossom thinning to consider maximum annual flower bud numbers on biennial apple trees. HortScience 46(1):40–42.

Khanizadeh, S., O. Carisse, M Deschene, A. Gosselin, J. DeEll, D Buszard, C. Hebert, R. Tsao and R Yang, 2003. "Orleans" Strawberry. Advances in Strawberry Research 21:20-23.

Khanizadeh, S., O. Carisse, and D. Buszard, 2002. "AC Yamaska "and "AC L'Acadie" strawberries. Proceedings of the 5th North American Strawberry Conference. ASHS Press.38-40.

Palonen, P., D. Buszard, D. Donnelly, 2000. Cold hardiness of raspberry cultivars correlated with sucrose to glucose and fructose ratios during *in vitro* cold acclimation. Physiologia Plantarum 110:393-40.

Khanizadeh, S., C. Brodeur, R. Granger and D. Buszard, 2000. Factors associated with winter injury to apple trees. Acta Horticulturae. 514: 179-190.

Khanizadeh, S., B. Thériault, O. Carisse, D.J. Buszard, 1999. 'AC-Yamaska' Strawberry. HortScience 34 (7):1286-1287.

Khanizadeh, S., B. Thériault, O. Carisse, D. Buszard, 1999. 'AC-L' Acadie' Strawberry. HortScience 34(4): 743-744 (Journal cover).

Palonen, P., D. Buszard, D. Donnelly, 1999. Two approaches to *in vitro* screening of raspberry cultivars for cold hardiness. Acta Horticulturae 505: 191-198.

Palonen, P. and D. Buszard, 1998. *In vitro* screening of raspberry cultivars for cold hardiness. Plant Cell, Tissue and Organ Culture. 53: 213-216.

Khanizadeh, S. Buszard, D., Carrise, O, Thibodeau, P., 1997. 'Joliette' Strawberry. Acta Horticulturae 241-244.

Khanizadeh, S. and D. Buszard, 1997. SJ89264-6 and SJ8976-1. Two advanced strawberry

selections with long storage-life. Acta Horticulturae 237-240.

Khanizadeh, S., A. Gruber, O. Carisse, D. J. Buszard and P. Thibodeau, 1997. Red-stele susceptibility of advanced strawberry selections from Quebec. Acta Horticulturae 189-193.

Palonen, P. and D. Buszard, 1997. Current state of cold hardiness research on fruit crops. Canadian Journal of Plant Science 77: 399-420.

Palonen, P., D. Buszard, 1997. Screening strawberry cultivars for cold hardiness *in vitro*. Acta Horticulturae 439:217-220.

Khanizadeh, S., D. Buszard, O. Carrise, P. Thibodeau 1996. 'Joliette' Strawberry. HortScience 31(6):1036-1037.

Walsh, B.D., S. Salmins, D. Buszard, A.F.MacKenzie, 1996. Impact of soil management systems on organic dwarf apple orchards and soil aggregate stability, bulk density, temperature and water content. Canadian Journal of Soil Science 76: 203-209.

Walsh, B.D., A.F. MacKenzie and D. Buszard, 1996. Soil nitrate levels as influenced by apple orchard floor management systems. Canadian Journal of Soil Science 76:343-349.

Buszard, D. and W.W. Schwabe, 1995. Effect of previous crop load on stigmatic morphology of apple flowers. Journal of the American Society for Horticultural Science. 120(4): 566-570.

Khanizadeh, S., C. Hamel, H. Kianmehr, D. Buszard and D.L. Smith, 1995. Effect of three *Vesicular-Arbuscular Mycorrhizae* species and phosphorus on reproductive and vegetative growth of three strawberry cultivars. Journal of Plant Nutrition 18:1073-1079.

Khanizadeh, S., M.J. Lareau and D. Buszard, 1995. Mechanical harvesting and dehulling of six strawberry cultivars in Quebec. HortScience 30(2): 234-235.

Khanizadeh, S. and D. Buszard, 1994. Chambly Strawberry Patent. Plant Varieties Journal 13:45-46.

Khanizadeh, S., D. Buszard and C.G. Zarkadas, 1994. Effect of low temperature on hydrophilic and charged amino acid composition of protein in acclimating apple flower buds; responses and adaptation to freezing stress. Journal of Plant Nutrition 17(11): 2025-2030.

Khanizadeh, S., C. Vigneault and D. Buszard, 1994. An automated system for counting achenes on strawberries. HortScience 29(11):1366.

Buszard, D., 1993. Horticultural education at McGill University. Acta Hort. (350) 291-295.

Deng, R., D.J. Donnelly and D. Buszard, 1993. Comparative field performance of micropropagated and conventionally propagated red raspberry under two cane management systems. Acta Horticulturae 336:185-191.

Khanizadeh, S., M.J. Lareau and D. Buszard, 1993. Effect of flower thinning on strawberry fruit size and its relationship to achene number. Acta Horticulturae 348:351-356.

Khanizadeh, S. and D. Buszard, 1992. Caution required in distribution of plants of red stele (*Phytophthora fragariae* Hickman) resistant strawberries. HortScience 27(8):870-871.

Khanizadeh, S., D. Buszard and C.G. Zarkadas, 1992. Comparison of three methods for calculating protein content in developing apple flower buds. Journal of the Association of Official Analytical Chemists 75(4):734-737.

Khanizadeh, S., D. Buszard and C.G. Zarkada, 1992. The effect of crop load on hardiness, protein and amino acid content of apple flower buds at several stages of development. Journal of Plant Nutrition 15(11):2441-2455.

Khanizadeh, S., D. Buszard and D. J. Lareau, 1992. Strawberry cultivar evaluation in Québec. Journal of Small Fruit and Viticulture 1(2):23-36.

Khanizadeh, S., M. Lareau and D. Buszard, 1992. Evaluation of advanced strawberry selections in Québec. Fruit Varieties Journal 46(1):53-57.

Khanizadeh, S., M.J. Lareau, D. Buszard and D. Bagnara, 1992. "Oka" strawberry. HortScience 27(4):374-375. (Journal cover)

Khanizadeh, S., M.J. Lareau, D. Buszard and M. Beauregard, 1992. Resistance of selected strawberry genotypes to the two-spotted spider mite. Journal of Small Fruit and Viticulture 1(3):3-10.

Khanizadeh, S., M. Lareau, M. Lamarre and D. Buszard, 1992. Simulating the effect of spring frost and clipper weevil on yield of strawberry. Journal of Small Fruit and Viticulture 1(1):25-31.

Khanizadeh, S., R. Pelletier, M. Lareau and D. Buszard, 1992. Field evaluation of fourteen strawberry genotypes in Québec and their resistance to ten races of *Phytophthora fragariae*. Journal of Small Fruit and Viticulture 1(3):35-48.

Khanizadeh, S., M. Lareau and D. Buszard, 1991. Pedigree: A program to trace and draw pedigree records. HortScience 26(8):1088.

Khanizadeh, S., D. Buszard, M. Lareau and R. Pelletier, 1991. Evaluation of strawberry cultivars with different degrees of resistance to red stele. Fruit Varieties Journal 45(1):12-17.

Khanizadeh, S., D. Buszard, M. Lareau and D. Bagnara, 1990. "Chambly" June-bearing strawberry. HortScience 25(8):984-985 (Journal cover).

Luffman, M. and D. Buszard, 1990. Susceptibility of raspberry cultivars to late yellow rust infection. Phytoprotection 71:93-95.

Buszard, D. and W.W. Schwabe, 1989. Effect of crop history on response of apple cv. Cox's Orange Pippin to a range of fruit setting treatments. Acta Horticulturae 239:353-356.

Khanizadeh, S., D. Buszard, M. Fanous and C.G. Zarkadas, 1989. Effect of crop load on seasonal variation in chemical composition and spring frost hardiness of apple flower buds. Canadian Journal of Plant Science 69(4):1277-1284.

Khanizadeh, S., D. Buszard and C.G. Zarkadas, 1989. Seasonal variation of protein and amino acids in apple flower buds (*Malus pumila* Mill. McIntosh/M7). J. Agr. and Food Chem. 37:1246-1252.

Luffman, M. and D. Buszard, 1989. Susceptibility of primocanes of six red raspberry cultivars to late yellow rust (*Pucciniastrum americanum* [Farl.] Arth.). Canadian Plant Disease Survey 69(2):117-119.

Jensen, P. and D. Buszard, 1988. The effects of chemical fumigants, nitrogen, plastic mulch and metalaxyl on the establishment of young apple trees in apple replant disease soil. Canadian Journal of Plant Science 68(1):255-260.

Luffman, M. and D. Buszard, 1988. Control of late yellow rust (*Pucciniastrum americanum*) of raspberry. Canadian Journal of Plant Science 68(4):1185-1189.

Rigby, M., C.A. Madramootoo and D. Buszard, 1988. A field scale evaluation of five trickle irrigation emitter models. Proc. Sixth Congress on Water Resources 1987 (International Water Resources Association):263-271.

Khanizadeh, S. and D. Buszard, 1987. Effects of the fungicides Captan and Easout on strawberry fruit development. Advances in Strawberry Production 6:27-31.

Buszard, D., 1986. The effect of management systems on winter survival and yield of raspberries in Québec. Acta Horticulturae 183:175-181.

Buszard, D. and P. Jensen, 1986. Incidence of apple replant disease in Québec orchards. Phytoprotection 67(2):133-135.

# Strawberry cultivars released from the Quebec breeding program:

**Orleans** (2001) - High levels of antioxidants, excellent shelf life and high yields of large, firm fruit Advances in Strawberry Research 21:20-23

**L'Acadie** (1999) - Large, firm fruit, with moderate resistance to leaf diseases and resistance to the eastern races of *Phytophthora fragariae HortScience 34(4): 743-744* 

Yamaska (1999) -Large, dark red, late harvest HortScience 34 (7):1286-1287:

Joliette (1996) - High yielding with resistance to foliar diseases HortScience 31(6):1036-1037

**Oka** (1992) - Very high yield, some disease tolerance, adapted to Québec growing conditions HortScience 27(4):374-375

**Chambly** (1990) - High yield, excellent quality fruit for fresh use and processing, adapted to machine harvesting and processing HortScience 25(8):984-985

Cultivars licensed under Canadian and USA Plant Breeders Rights legislation and marketed internationally, through licensing agreements between McGill University and Agriculture and Agri-food Canada.

## Patents and copyrights:

Buszard, D. and S. Khanizadeh 1998. Joliette Strawberry 1998, U.S. Patent Plant 10,460

Buszard, D. and S. Khanizadeh 1994. June bearing strawberry named Chambly, U.S. Patent Plant 8,853

Khanizadeh, S., D. Buszard and R. Ayotte 1989. Strawberry genealogy. Canadian Copyright. Reg. No. 390362 July 12, 1989

## **Books and Book Chapters:**

Khanizadeh, S., J. Fortin, J. M. Lareau, and D. Buszard 1994. Sensory evaluation of six strawberry cultivars after machine harvest. In: Progress in Temperate Fruit Breeding eds. H. Schmidt and M. Kellerhals. Kluwer Academic Press Netherlands. pp. 249-254.

Paul, C., P-P. Racicot, G. St. Laurent, and D. Buszard, 1993. Analyse générale des occupations reliées à l'agronomie. Gouvernement du Québec.

Buszard, D. and S. Khanizadeh, 1992. The Québec strawberry breeding program. In: The Strawberry in to the 21st Century. Ed. A. Dale and J. Luby. Timber Press. pp.98-99

## Professional and Technical Bulletins, Reports and Articles (without review):

Gupta, A. and D. Buszard, 2015. Health promotion must be a focus for postsecondary institutions. July 2015 http://www.universityaffairs.ca/opinion/in-my-opinion/health-promotion-must-be-a-focus-for-postsecondary-institutions/

Buszard, D. and J. Kolb 2010. Preparing graduates for the sustainability challenge. Genius 2:2-3.

Buszard, D., 2010. Plants in the human landscape: learning by design. Focus 18(1): 4-5

Buszard, D., 2010. Transforming the academy to deliver education for sustainability. Association of Commonwealth Universities Bulletin 169:12-13.

R. Hoffer and D. Buszard, 2010. Food Services and the Dalhousie Community: Sustainability, situation analysis and policy recommendations. 16pp.

Buszard, D., 1997. Portrait d'une chercheure en horticulture. Quatre-Temps 21(1):59.

Buszard, D. J., B. Coulman and D.L. Smith, 1994. The Oasis Research Centre. Strategy and Implementation. CIDA report 10pp.

Salmins, S. and D. Buszard, 1993. Weed control methods and tree growth in orchards: Part 2. Cognition (Journal of the Canadian Organic Growers Association) pp.14-15 Buszard, D. J, 1992. Report on the tree fruit industry of the Rio Negro Valley, Argentina.14 pp.

Mather, D., B. Coulman, K. Stewart and D. J. Buszard, 1991. Review of the current status of Horticultural and field crops in Egypt. Current areas of research and potential training. CIDA Report 43 pp

Buszard, D., A.F. MacKenzie and S. Hill, 1991. Alternatives à l'utilisation d'herbicides dans les vergers. Le Cageot. Bulletin de l'Association des Arboriculteurs Fruitiers du Québec 3(3):4-6.

Buszard, D and H. Gadoury 1989. Rien ne vaut une bonne gestion. Le Bulletin des Agriculteurs 71(9):57-59.

Luffman, M. and D. Buszard, 1989. Anilizine residues on red raspberry fruits. Agriculture Canada 1989 Pesticide Research Report: 290

Buszard, D., 1988. Les framboisiers; trop denses et trop libres. L'Horticulteur 3(9):16-18.

Pommier protection, 1988. Conseil des Productions Végétales du Québec. (Produced by the Comité de pomiculture)

Buszard, D and K. Stewart, 1988. The horticulture research area. Macdonald Journal 49(1):6-7.

Buszard, D and T. Robert, 1987. Maladie de la replantation des pommiers: Le paillis de plastique pourrait être une solution. Le Bulletin des Agriculteurs 70(10):31-33.

Buszard, D., 1986. La régie des vergers affectés par le gel. Le Bulletin des Agriculteurs. Juillet 1986:40.

Buszard, D. and G. O'Shaughnessy, 1985. L'avenir de la pomme au Québec. Le Bulletin des Agriculteurs. August 1985:70-73.

Petits fruits culture, 1985. Conseil des Productions Végétales du Québec. Agdex 230/20 (produced by the Comité des petits fruits). Gouvernement du Quebec

Buszard, D., 1984. Replant disease research. Editorial in The Apple Press. Extension Service, University of Vermont. May 1984 3:5-6.

Pommier protection, 1984. Conseil des Productions Végétales du Québec. Agdex 211/605 (produced by the Comité de la pomiculture). Gouvernement du Quebec

Buszard, D., 1983. Rootstock review. Macdonald Journal 44(1):19-20.

Buszard, D., 1981. Winter injury to apple trees. Macdonald Journal 42(11):9-16.

#### **Editor:**

Editorial Board Member, Acta Horticulturae, 2011 Proceedings of the IXth International Symposium on Modelling in Fruit Research and Orchard Management

Buszard, D. 2009, 2010 and 2011 Campus Green Guide II, Dalhousie University 48pp Associate Editor, Member of Editorial Policy Board, 1989-91 Canadian J. of Plant Science.

Buszard, D., 1985 Proceedings of the Canadian Society for Horticultural Science, Volume 24

### Thesis:

Buszard, D., 1983. Flower quality in relation to apple fruit set promotion by hormone sprays. Ph.D. Thesis, University of London 296pp

## **Invited Scientific and Technical Presentations and Seminars:**

Sustainability Science: a useful concept or a wrong turn? Faculty of Science, Thompson Rivers University 2011

Sustainability and Computer Science—opportunities and challenges. 2008 Computer Science, Dalhousie University, Halifax, NS

Plants in the Human Landscape. 2007 Nova Scotia Agriculture College, Truro, NS

Recherches sur les petits fruits à l'Université McGill. 1994 Ministry of Agriculture Fisheries and

Food, Ste. Foy, Québec

Alternative management systems for orchards.1992 Faculty of Agriculture, Universidad Nacional del Comahue Neuquén, Argentina

Organic management of pests and diseases in apple production. 1992. Department of Biochemistry, Universidad Nacional del Comahue Neuquén, Argentina

Recherches sur les fruits à l'Université McGill 1992. MAPAQ Advisors Annual Meeting, Ste. Anne de Bellevue, Québec

The challenges facing Canadian horticulture in the 1990s. 1992, Eastern Regional Expert Committee Meeting, Agriculture Canada, St. Johns, New Brunswick

A retrospective of the last 5 years in horticulture at Macdonald College. 1989 Agriculture Canada Research Station, St-Jean-sur-Richelieu, Québec

Intensive dwarf apple orchard establishment, 1987 Agriculture Canada Research Station, Ste-Foy, Québec

Les framboisiers: trop denses et trop libre, 1986. Horticulture Information Day, St Rémi, Québec

Biotechnology in horticulture, 1985. Horticultural Science Department, University of Guelph, Ontario

Update on nematodes and replant problems (D. J. Buszard and P. Jensen), 1992 Information Day for Apply Growers. Mont-St-Gregoire-d'Iberville, Québec

Update on orchard replant work, 1983. Fruit Growers Information Meeting, St-Antoine Abbé, Québec

Orchard replant problems. 1982 Fruit Growers Information Meeting, St-Antoine Abbé, Québec

Researching the apple replant disease problem, 1981 Plant and Soil Science Department, University of Vermont, Burlington, Vermont

Pollination in apple orchards.1981 Fruit Growers Information Meeting, St-Antoine Abbé, Québec

#### Conference Presentations:

Buszard, D., T Humphrey, P. Phillips, and G. Saindon, 2020 Panel presentation on Rethinking the Role of Government in Agri-Food Innovation. Canadian Science Policy Conference 2020, Ottawa, Ontario

Maqbool, R., D. C. Percival, T. Astatkie, Q. Zaman, S. Adl, and D.Buszard, 2013 Leaf nutrient ranges and berry yield optimization in response to soil-applied nitrogen, phosphorus and potassium in wild blueberry. Annual Meeting of the Wild Blueberry Producers Association of Nova Scotia, Truro, Nova Scotia

Maqbool, R., D.C. Percival, Q. Zaman, T. Astatkie, S. Adl and D. Buszard, 2012 Interrelationship of soil fertility and plant nutrition on the growth, development and berry yield of wild blueberries. Annual Meeting of the Wild Blueberry Producers Association of Nova Scotia, Truro, Nova Scotia

Buszard, D. C. Campbell and S. Mannell, 2012 Educating future leaders to think differently: Is

sustainability education the new liberal education. Eighth International Conference on Environmental, Cultural, Economic and Social Sustainability. Vancouver, British Columbia.

Buszard, D., 2011. Teaching sustainability and/in/through history- a scientist's perspective. Panel Discussion, American Society for Environmental History Annual Conference, Phoenix, Arizona

Buszard, D., D Iron and B. Pellerin, 2009. A mathematical model to optimize yearly fruit number and predict crop weight in apple trees. Atlantic Mathematical Biology Workshop, Dalhousie University, Halifax, Nova Scotia.

Buszard, D., T. Wright and J. Kolb, 2009. Creating the College of Sustainability at Dalhousie University, 5<sup>th</sup> World Environmental Education Conference, Montreal, Quebec

Buszard, D. and J Kolb, 2008. An academic sustainability initiative – Dalhousie University College of Sustainability. Conference of the American Society for Sustainability in Higher Education, Raleigh, North Carolina.

Seniuk, N. and D. Buszard, 2007. Designing outdoor play environments for children with autism spectrum disorders. Atlantic Network for Prevention Research Annual Conference, St. John's, Newfoundland.

Buszard, D., 2006. Better living in Canadian cities in the twenty first century? 3rd Annual Environmental Research Symposium, Dalhousie University, Nova Scotia

Buszard, D., K.A. Stewart and D. Donnelly, 2002. Canadian exchange opportunities for European students. 6<sup>th</sup> European Conference on Higher Agricultural Education, Crete.

Palonen, P., D. Buszard, D. Donnelly, 1998. Two approaches to *in vitro* screening of raspberry cultivars for cold hardiness. International Rubus - Ribes Symposium, New Zealand

Palonen, P. and D. Buszard, 1997. Screening raspberry cultivars for cold hardiness *in vitro*. Finnish - Japanese Workshop on molecular and physiological aspects of cold and chilling tolerance of northern crops. Jokioinen, Finland.

Khanizadeh, S. and D. Buszard, 1995. SJ8976-1 and SJ89264-6 two new selections with long shelf life, suitable for fresh market and transportation. North American Strawberry Conference. Orlando, Florida.

Palonen, P. and D. Buszard, 1995. A rapid method for screening for cold hardiness *in vitro*. American Society for Horticultural Science Annual Meeting, Montréal, Québec.

Buszard, D., 1994. New strawberry selections from Québec. Canadian Society for Horticultural Science Annual Meeting, Regina, Saskatchewan.

Paré, M. and D. Buszard, 1994. Effects of soil management on tree growth, fruit set, yield and fruit quality of Spartan apples on M9 rootstock. American Society for Horticultural Science Northeastern Region Annual Meeting, Québec.

Buszard, D., A.F. MacKenzie, S. Hill, S. Salmins and B. Walsh, 1993. An interdisciplinary approach to soil management systems in organic orchards. Symposium on Sustainable Crop Production. Agricultural Institute of Canada Annual Conference, St. John's, Newfoundland.

Walsh, B.D., A.F. MacKenzie, D. Buszard and S. Salmins, 1993. The effects of mulch management in dwarf apple orchards on soil nitrate, water content and temperature.

Symposium on Sustainable Crop Production. Agricultural Institute of Canada Annual Conference, St. John's, Newfoundland.

Khanizadeh, S. and D. Buszard, 1993. New selections from the Québec strawberry breeding program. Canadian Society for Horticultural Science Annual Meeting, St. John's, Newfoundland.

Khanizadeh, S., J. Fortin, M. Lareau and D. Buszard, 1993. Sensory evaluation of six machine harvested strawberries. Canadian Society for Horticultural Science Annual Meeting, St. John's, Newfoundland.

Buszard, D., 1992. Horticultural education at McGill University. First International Symposium on Horticultural Education, Ayr, Scotland.

Khanizadeh, S., R. Pelletier, M. Lareau and D. Buszard, 1992. Susceptibility of eight North Eastern strawberry cultivars to *Phytophthora fragaria*. Second International Strawberry Symposium. Maryland, U.S.A.

Khanizadeh, S., M. Lareau and D. Buszard, 1992. Effect of flower thinning on strawberry fruit size and its relationship to achene number. Second International Strawberry Symposium. Maryland, U.S.A.

Khanizadeh, S. and D. Buszard, 1992. Red stele resistant strawberries and their role in the epidemiology of *Phytophthora fragaraie*. Maryland, U.S.A.

Khanizadeh, S., M. Lareau and D. Buszard, 1992. Strawberry cultivar evaluation in Québec. American Society for Horticultural Science, NE Regional Meeting, Amherst, Mass. USA.

Buszard, D., 1991. Les framboisiers trop denses et trop libres. Colloque sur les framboises, Drummondville, Québec.

Khanizadeh, S., M. Lareau and D. Buszard, 1991. Oka strawberry. American Society for Horticultural Science, NE Annual Regional Meeting, Burlington, VT.USA.

Buszard, D. and S. Khanizadeh, 1990. The Québec strawberry breeding program. International Strawberry Symposium, Houston, Texas. USA.

Buszard, D. and S. Leibovitch, 1990. Density effects on red raspberry. Canadian Society for Horticultural Science, Penticton, B.C.

Khanizadeh, S. and D. Buszard, 1989. Effect of crop load on hydrophilic, hydrophobic, charged and apolar amino acids and frost hardiness of apple flower buds. Canadian Society for Horticultural Science, Montréal, Québec.

Khanizadeh, S. and D. Buszard, 1989. New strawberries from Québec. Canadian Society for Horticultural Science, Montréal, Québec.

Luffman, M. and D. Buszard, 1989. The life cycle of late yellow rust of raspberry. International Society for Horticulture Science Fifth Rubus-Ribes Symposium, Oregon, U.S.A.

Buszard, D., 1988. Effect of crop history on response of apple cv. Cox's Orange Pippin to a range of fruit setting treatments. International Society for Horticultural Science. Symposium on Growth Regulators in Fruit Production, Penticton, B.C.

Buszard, D., 1988. Effect of shading and defoliation on raspberry fruit yield and primocane growth. 47th Easter School in Agricultural Science, University of Nottingham, England.

Khanizadeh, S. and D. Buszard, 1988. The effect of crop load on carbohydrate and nutrient composition of apple flower buds (*Malus pumila* Mill. McIntosh/M7). American Society for Horticultural Science, Michigan, U.S.A.

Khanizadeh, S., D. Buszard and C.G. Zarkadas, 1988. Seasonal variation of protein and amino acids in apple flower buds (*Malus pumila* Mill. McIntosh/M7). American Society for Horticultural Science, Michigan, U.S.A

Luffman, M. and D. Buszard, 1988. Late yellow rust of red raspberry. American Society for Horticultural Science, Michigan, U.S.A

Rigby, M., C.A. Madramootoo and D. Buszard, 1988. A field scale evaluation of five trickle irrigation emitter models. VI World Water Congress, Toronto, Ontario

Khanizadeh, S., D. Buszard and C.G. Zarkadas, 1987. Quantitative determination of total protein content of apple (*Malus pumila* Mill. cv. McIntosh/M7) flower buds. American Society for Horticultural Science Annual Meeting, Orlando, Florida, U.S.A

Buszard, D., 1986. The effect of management systems on winter survival and yield of raspberries in Québec. Fourth International *Rubus* and Ribes Symposium. Norway.

Leibovitch, S. and D. Buszard, 1986. The effect of raspberry management system and density on yield determinants. American Society for Horticultural Science Annual Meeting. Davis, California.

MacDonald, G. and D. Buszard, 1986. The effect of sterilization and mulching on populations of *Pratylenchus penetrans* in old orchard soil. American Society for Horticultural Science Annual Meeting. Davis, California USA.

Jensen, P. and D. Buszard, 1984. The effects of nitrogen, mono ammonium phosphate, drip irrigation and metalaxyl on apple rootstock growth in untreated or sterilized old orchard soil. American Society for Horticultural Science Annual Meeting. Vancouver, British Columbia.

Buszard, D. and S. Khanizadeh, 1983. The effect of two fungicides on pollen viability and stigma receptivity of three strawberry cultivars. Canadian Society for Horticultural Science Annual Meeting. Truro, Nova Scotia.

Jensen, P. and D. Buszard, 1983. Potential controls of apple replant disease. Canadian Society for Horticultural Science Annual Meeting. Truro, Nova Scotia.

#### Research Funding:

2012 Shastri- CIDA Pro-Development Initiative Grant. Empowering youth to take action for sustainable development and food security. \$17,500 **D.Buszard** 

2009 MITACS Accelerate Grant. Mathematical approaches to apple tree growth and productivity \$15,000 **D. Buszard** 

2006 Research Grant Dalhousie University \$10,000 D. Buszard

1994-1999 MAPAQ research contract \$26,000. Evaluation of apple cultivars and rootstocks. **D. Buszard** 

1994-1995 Agriculture Canada-Quebec Apple Growers Federation grant \$37,000. Apple tree

mortality and winter injury in Quebec. S. Khanizadeh and D. Buszard

1993-1996 CORPAQ operating grant \$81,000. Breeding strawberries with resistance to Red Stele (*Phytophthora fragariae* Ait.) **D. Buszard** and S. Khanizadeh.

1993 NSERC Major Installation grant \$476,741.Research greenhouse **D. Smith** and 20 coapplicants.

1991-1994 CORPAQ operating grant \$96,000. Soil management strategies for organic orchards. **D. Buszard** and S. Hill.

1990-1992 Agriculture Canada research contract \$96,000. Development of strawberry germplasm. **D. Buszard**.

1989-1991 Agriculture Canada research contract \$56,000. Conversion of horticultural production to organic techniques. **D. Buszard**, K. A. Stewart and S. Hill.

1987-1990 Agriculture Canada research contract \$225,000. Breeding strawberries for mechanical harvesting. **D. Buszard** 

1985-1988 CRSAQ operating grant \$46,000. Raspberry management. **D. Buszard**.

1984-1990 CPVQ operating grant \$65,000. Ornamental crops field evaluations. **D Buszard**.

1984-1987 CRSAQ operating grant \$80,000. Long term effects of soil treatments on apple tree growth. **D. Buszard.** 

1981-1984 CRSAQ operating grant \$38,000. Apple replant disease and potential controls. **D. Buszard.** 

1981-1983 Agriculture Canada operating grant \$15,000. Impact of fungicides on strawberry fruit quality. **D. Buszard**.

## **Research Supervision**

#### **Honours Students:**

Emma Norton, 2012. Agriculture and food in the elementary school science curriculum. Dalhousie University

Megan Tardif-Woolgar, 2011. Potential impacts of climate change on agricultural productivity in Nova Scotia in 2050. Dalhousie University

Alexander Brandt, 2010. Urban gardens matter: an economic analysis. Dalhousie University

Brian Pellerin, 2009. New mathematical approaches to modeling fruit tree growth and productivity. Dalhousie University

Kyle Galvin, 2009. Armdale Roundabout design proposal. Dalhousie University

Amanda Klarer, 2009. Is Malawian urban agriculture a sustainable system? Dalhousie University

Anna Sarah Erlich, 2009. Input analysis of the Nova Scotia blueberry industry. Dalhousie University

Rachel Derrah, 2008. Sustainable community development: An approach. Dalhousie University

Kira Lise Leung, 2008. Designing therapeutic landscapes with schizophrenia in mind. Dalhousie University

Jennifer Kay, 2007. Identifying suitable areas for sustainable hemp (*Cannabis sativa L.*) production in New Brunswick. Dalhousie University

Alexandra Liston, 2007. Conserving the shade coffee niche in rural Haiti. Dalhousie University

Natalie Seniuk, 2007. Design of public play areas to accommodate children with Autism Spectrum Disorders. Dalhousie University

Jessica Wagner, 2007. Design proposal for the Halifax Urban Greenway. Dalhousie University

Daniel Locke, 2007. Accessible design for Cornwallis Park. Dalhousie University

## **Graduate Students:**

Rizwan Maqbool, 2014. Nitrogen cycling, optimization of plant nutrition and remote sensing of leaf nutrients in wild blueberries (vaccinium angustifolium ait.). Co-supervisor, Ph.D. Dalhousie University

Mathew Omina, 2011. Exploring social and cultural linkages in environmental sustainability concerns among university students in Kenya. Masters in Resource and Environmental Management. Dalhousie University

Brian Pellerin, 2011. Mathematical approaches to apple tree growth and productivity. M.Sc. Dalhousie University

Palonen, Pauliina, 1999. Winter hardiness studies of Raspberry. Co-supervisor PhD. University of Helsinki.

Kiuru, Paul, 1994. Citrus greening in Kenya. M.Sc. McGill University

Salmins, Sandra, 1993. Alternative management systems for apple orchards. M.Sc. McGill University

Deng, Ribo 1992. Field performance of micropropagated red raspberry. Co-supervisor Ph.D. McGill University

Zatylny, Annette, 1992. Rubus breeding and winter hardiness. M.Sc. Co-supervisor University

Khanizadeh, Shahrokh, 1989. Protein, nucleic acid and carbohydrate metabolism of apple flowers in relation to winter hardiness. Ph.D. McGill University

Luffman, Margie, 1989. A study of *Puccinium americanum* on *Rubus spp.* M.Sc. McGill University

Leibovitch, Stewart, 1988. Management systems for R. idaeus Québec. M.Sc. McGill University

Macdonald, Gerald, 1988. Long-term effects of pre-planting treatments in apple tree growth and populations of *Pratylenchus spp.* and *Pythium spp.* in old orchards. M.Sc. McGill

Ingratta, W 1986. Effects of pre-plant herbicides on the establishment of low bush blueberries (Vaccinium angustifolium Ait.). M.Sc. McGill

Jensen, Paul, 1985. Apple replant disease and potential controls. M.Sc. McGill University

Khanizadeh, Shahrokh, 1983. Effect of fungicides on strawberry fruit quality. M.Sc. McGill University

## **Postdoctoral Research Associates:**

Khianmehr Hormozdyar 1992-1993, McGill University

Shahrokh Khanizadeh 1990-1995, McGill University

Renald Ayotte, 1987-1989, McGill University

#### Journals:

Reviewer for the Canadian Journal of Plant Science, Ecology of Food and Nutrition, HortScience, Journal of the American Society for Horticultural Science, Journal of Horticultural Science and Plant Nutrition, and Sustainability, the Journal of Record.

#### **Professional Offices:**

Agricultural Institute of Canada, Member of National Council 1993–1996 Canadian Society for Horticultural Science, President 1988-89

#### **Professional Associations:**

Institute of Corporate Directors
Senior Women Academic Administrators of Canada