

Rebecca Harbut

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EDUCATION

Ph.D. (To be completed May 2009)

Cornell University

Advisor: Dr. Marvin Pritts

Thesis: *'The development of the modern strawberry (Fragaria x ananassa): physiology, biochemistry and morphology of progenitor species (F. virginiana and F. chiloensis) and resulting cultivars.'*

M.Sc. (2004)

University of Guelph

Advisor: Dr. J.A. Sullivan

Thesis: *'Photoassimilation and partitioning of lower-ploidy Fragaria (Strawberry) species and derived germplasm'*

B.Sc.Agr. (Hon) (2002)

University of Guelph

TEACHING

Teaching Assistant:

Berry Crops (2006, 2008), Cornell University

Hands on Horticulture (2005,2007), Cornell University

Greenhouse Production (2005), University of Guelph

Fruit Production (2004), University of Guelph

RESEARCH INTERESTS AND SKILLS

Research Interests:

- 1) Integrative whole plant physiology and biochemistry related to carbon assimilation and allocation in berry crops. Approaches include; nutrient response, evaluation of wild germplasm with unique carbon assimilation characteristics and analysis of cultivar development over the past century.
- 2) Effects on berry composition of breeding selections focused on yield, texture and disease resistance.
- 3) Understanding the dissemination and utilization of information among researchers and growers in the small fruit industry.

Analytical Skills:

Gas exchange, chlorophyll fluorescence, HPLC, GC-MS, Spectrophotometry

**RELATED
WORK
EXPERIENCE**

Research Assistant, Data collection, field work and data analysis for small fruits research program. 2000-2002

Research Assistant, Maintenance of barley microspore cultures and general lab duties. 2000-2002 (Sept-May)

**AWARDS,
SCHOLARSHIPS
AND GRANTS**

AWARDS AND SCHOLARSHIPS

ASHS Travel Award, American Society of Hort Science 2007, 2008

NSERC PGSD Canadian National Award 2006

Homan Award, Cornell University 2006, 2008

Outstanding Teaching Assistant Award, College of Ag and Life Science, Cornell 2006

H.L. Hutt Memorial Scholarship, University of Guelph 2004

Natural Sciences and Engineering Research Council of Canada (NSERC) National Award (declined to attend Cornell University) 2004

OAC Centennial Scholarship, University of Guelph 2003

Fred Ball Scholarship, Hort. Dept., University of Guelph 2003

Ontario Graduate Scholarship, Provincial Award, Ontario 2003

Soden Memorial Scholarship, Hort. Dept., University of Guelph 2003

Journal of American Pomological Society U.P. Hedrick Award (Graduate student paper competition) 2004

University of Guelph Graduate Scholarship 2002 and 2003

GRANTS

North American Berry Growers Association 2008

Cornell Graduate Conference Grant 2007, 2008

**PUBLICATIONS
AND
PRESENTATIONS**

Peer Reviewed:

Harbut, R.M., Pritts, M.P. and Alba, R. (2007). A Century of Strawberry Breeding: A Photosynthetic Evaluation. *Proceedings of the 2007 North American Strawberry Symposium* (eds. F.Takeda, D.T. Handley and E.B. Poling). Pp 18-22.

Harbut, R.M. and J.A. Sullivan (2004). Breeding Potential of Lower Ploidy *Fragaria* Species. *Journal of the American Pomological Society* 58(1):37-41. (Hedrick Student Award Recipient)

Conference Presentations:

Harbut, R.M., M.P. Pritts, A. Wilson (2008). Communication and Relations Between Berry Growers and Researchers in New York State. Oral Presentation. *ASHS, Orlando Fl.* July 21-24.

Harbut, R.M., M.P. Pritts and L.Cheng (2008). Northeastern Strawberry Cultivars: 100 Years of Breeding. Poster Presentation. *ASHS Orlando Fl, July 21-24.*

Harbut, R.M., M.P. Pritts, L. Cheng (2007). A Century of Strawberry Breeding in the Northeastern U.S. Oral Presentation. *ASHS, Scottsdale, AZ* July 16-19.

Harbut, R.M., M.P. Pritts, L. Cheng (2007). Effects of N Limitation on Growth, Yield and Photosynthetic Characteristics of *Fragaria x ananassa* cv. 'Jewel'. Poster Presentation. *ASHS, Scottsdale, AZ* July 16-19.

Harbut, R.M. and J.A. Sullivan (2004). The effect of temperature on net carbon exchange rates of lower-ploidy *Fragaria* species and species hybrids. Poster Presentation. *Proceedings of Canadian Society of Plant Physiologists* 74:92 (Abstr.)

Harbut, R.M., J.A. Sullivan, J.T.A. Proctor and H.J. Swartz (2003). Carbon Exchange Rates of Lower Ploidy *Fragaria* Species. Poster Presentation. ASHS, Providence RI, Oct. 3-6. Poster Presentation. *HortScience* 38(5):793 (Abstr.)

Sullivan, J.A., R.M. Harbut, H.J. Swartz, and R. Bors (2003). Progress in Breeding with *Fragaria* Species. *HortScience* 38(5):782 (Abstr.)

EXTENSION

Presentations and Workshops:

Understanding Nitrogen. Northland Community and Technical College. Thief River Falls, MN. March 29, 2008.

Climate Change and Strawberry Production in the Northeast. Empire State Fruit and Vegetable Expo. Syracuse, NY Feb. 13-15, 2007

Introduction to Berry Growing. Cooperative Extension, Bath NY Dec. 7, 2007

Introduction to Grafting. Cooperative Extension. Wayne County, New York April 17, 2008.

SERVICE

Professional:

Reviewer for *HortScience* (2008)

Member, American Society of Horticultural Science (2003-present)

University:

Coordinator, Cornell Orchards Education Program (2005-present)

Vice-President, Society of Horticulture Graduate Students (2007)

President, Society of Horticulture Graduate Students (2006)