

# CURRICULUM VITAE

## Thomas Björkman

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## BACKGROUND

### Professional Positions

- |                |   |
|----------------|---|
| 1996 - present | Associate Professor, Dept. of Horticultural Sciences, Cornell University<br>Vegetable crop physiology; plant-environment interactions; root growth physiology.  |
| 1990 - 1996    | Assistant Professor, Dept. of Horticultural Sciences, Cornell University  |
| 1986 - 1990    | NASA Research Associate, Botany Department, University of Washington<br>Calcium signalling in gravitropism (Robert E. Cleland)  |
| 2000           | Visiting Associate Professor, Department of Molecular, Cell and<br>Developmental Biology, University of California, Los Angeles<br>Localization of homeotic gene expression during floral transition (Jack<br>Okamoto and Bob Goldberg) |
| 1984-1986      | Graduate Student, Boyce Thompson Institute<br>Gravity sensing in root statocytes (Carl Leopold)   |
| 1980-1984      | NSF Graduate Fellow, Department of Agronomy, Cornell University<br>Acclimation to drought stress. (Peter L. Steponkus)  |
| 1980           | Visiting graduate student. Plant Physiology, University of Lund, Sweden<br>(Anders Kylin and Tomas Lundborg)  |
| 1977-1979      | Undergraduate research assistant. University of California, Davis.<br>Chilling injury in tomato roots (Bill Breidenbach)  |

## GRANT SUPPORT

### Contracts, Grants and Sponsored Research

#### Grant

- Björkman, Thomas Nils Erik (Co-Principal), Barlow, Anne Lenox (Principal), "Brassica Cover Crop Choices for Northern New York Vegetable Growers", Sponsored by Toward Sustainability Foundation, Private, \$10,384.00.
- Björkman, Thomas Nils Erik (Principal), Griffiths, Phillip D. (Co-Principal), Gomez, Miguel (Co-Principal), Farnham, Mark (Co-Principal), Hutton, Mark (Co-Principal), Sams, Carl (Co-Principal), Kopsell, Dean (Co-Principal), VanRyn, Mary (Co-Principal), Myers, James (Co-Principal), Hewitt, John (Supporting), Mero, Gene (Supporting), Bellavia, Steven (Supporting), Davis, Jeanine (Supporting), Hoepting, Christine Anne (Supporting), Smith, J Powell (Supporting), Morris, Wythe (Supporting), Straw, Richard (Supporting), Benson, Brinkley (Supporting), Hille, David (Supporting), Pezzini, Joe (Supporting), Wingard, Charles (Supporting), Rawl, James C (Supporting), Christian, Brock (Supporting), Hansen, Eric (Supporting), Riner, Michael (Supporting), Pool, William (Supporting), "Development of East Coast Broccoli Production & Processing", Sponsored by USDA NIFA Specialty Crops Research Initiative, Federal, \$3,172,100.00.
- Melkonian, Jeffrey J (Principal), Björkman, Thomas Nils Erik (Co-Principal), Reiners, Stephen (Co-Principal), "Estimating the Nitrogen Contribution from Cover Crops for Improved Nitrogen Management", Sponsored by USDA, Federal, \$32,420.00.
- Melkonian, Jeffrey J (Principal), Björkman, Thomas Nils Erik (Co-Principal), Reiners, Stephen (Co-Principal), "Estimating the Nitrogen Contribution from Cover Crops for Improved Nitrogen Management", Sponsored by USDA, Federal, \$32,420.00.
- Björkman, Thomas Nils Erik (Principal), Bornt, Charles D. (Co-Principal), Shaw, Molly (Co-Principal), MacNeil, Carol (Co-Principal), Hazzard, Ruth (Co-Principal), DuPont, Tianna (Co-Principal), Mishanec, John Joseph (Co-Principal), "Filling Soil Health Prescriptions with Targeted Cover Crops", Sponsored by USDA Sustainable Agriculture Research & Education (via Univ. of Vermont), Federal, \$98,158.00. (May 15, 2009 - November 30, 2012).
- Björkman, Thomas Nils Erik (Principal), Smart, Christine Durbahn (Co-Principal), "Cover Crop Integration into Phytophthora Management", Sponsored by USDA Hatch FFF competitive initiative, Federal, \$21,500.00. (October 1, 2009 - September 30, 2012).
- Björkman, Thomas Nils Erik (Principal), Gloy, Brent (Co-Principal), Brainard, Dan (Co-Principal), Masiunas, John (Co-Principal), Kikkert, Julie R, Bornt, Charles D., Hadad, Robert G., "Summer Cover Crops for Weed Suppression and Soil Quality in Organic Vegetable Production in the Great Lakes Region", Sponsored by USDA NIFA Organic Research and Extension Initiative, Federal, \$894,067.00. (September 30, 2009 - August 31, 2012).
- Björkman, Thomas Nils Erik (Co-Principal), "Short Cycle Cover Crops for Soil-borne Pest Suppression in Cucurbit Cropping Systems", Sponsored by USDA RAMP via University of Illinois, Federal, \$111,478.00. (September 15, 2007 - September 14, 2011).
- Björkman, Thomas Nils Erik (Principal), Griffiths, Phillip D. (Co-Principal), Gomez, Miguel (Co-Principal), Farnham, Mark (Co-Principal), Hutton, Mark (Co-Principal), Sams, Carl (Co-Principal), Kopsell, Dean (Co-Principal), "Development of East Coast Broccoli Production & Processing", Sponsored by USDA NIFA Specialty Crops Research Initiative, Federal, \$50,000.00. (July 1, 2009 - June 30, 2010).

## PUBLICATIONS

### Research Journal Articles

- Björkman, T. (2008). Buckwheat cover crops for vegetable rotations to reduce weeds and improve soil condition. *HortScience*, 43, 1139.
- Duclos, Denise V. and Thomas Björkman. 2008. [Meristem gene expression during reproductive development in \*Brassica oleracea\*](#). *Journal of Experimental Botany* 59: 421-433 [doi:10.1093/jxb/erm327](#)
- Mochizuki, M.J., A. Rangarajan, R.R. Bellinder, T. Björkman, H. M. van Es. 2008. [Rye mulch management affects short-term indicators of soil quality in the transition to conservation tillage for cabbage](#). *HortScience*. 43:862-867.
- Harman, G.E., T. Björkman, K. Ondik, M. Soresh. 2008. [Changing paradigms on the mode of action and uses of \*Trichoderma\* spp. for biocontrol](#). *Outlooks in Pesticide Management*. 19:24-29. [doi: 10.1564/19feb00](#)
- Mochizuki, M.J., A. Rangarajan, R.R. Bellinder, T. Björkman, H. M. van Es. 2007. [Overcoming compaction limitations on cabbage growth and yield in the transition to reduced tillage](#). *HortScience*. 42:1690-1694.
- Labate, Joanne A., Larry D. Robertson, Angela M. Baldo, and Thomas Björkman. 2006. [Inflorescence identity-gene alleles are poor predictors of inflorescence type in broccoli and cauliflower](#). *J. Amer. Soc. Hortic. Sci.* 131: 667-673
- Björkman, T. 2004. [Effect of \*Trichoderma\* colonization on auxin-mediated regulation of root elongation](#). *Plant Growth Regulation* 43: 89-92 [doi:10.1023/B:GROW.0000038260.85276.82](#)
- Altomare, C., Norvell, W.A., Björkman, T. and Harman, G. E. 1999, [Solubilization of phosphates and micronutrients by the plant-growth promoting and biocontrol fungus \*Trichoderma harzianum\* Rifai strain 1295-22](#). *Appl. Environ. Microbiol.* 65: 2926-2933.
- Garner, L. C. and T. Björkman. 1999. [Field performance of tomato transplants treated with mechanical conditioning](#). *HortScience* 34:848-851
- Björkman, T. 1999. [Dose and timing of brushing to control excessive hypocotyl elongation in cucumber transplants](#). *HortTechnology* 9:40-42
- Björkman, T. 1998. [Mechanical conditioning for controlling excessive elongation in transplants](#). *J. Japan Soc. Hort. Sci.* 67:1121-1123
- Harman, G.E. and T. Björkman. 1998. Potential and existing uses of *Trichoderma* and *Gliocladium* for plant disease control and plant growth enhancement. In: G.E. Harman and C. P. Kubicek (eds.), *Trichoderma and Gliocladium*. Vol .2. Enzymes, biological control and commercial applications. Taylor and Francis: London. pp. 229-266
- Björkman, T. and K.J. Pearson. 1998. [High temperature arrest of inflorescence development in broccoli \(\*Brassica oleracea\* var. \*italica\* L.\)](#) *Journal of Experimental Botany*: 49:101-106
- Björkman, T., L.M. Blanchard. and G.E. Harman. 1998. [Growth enhancement of \*shrunken-2 \(sh2\)\* sweet corn by \*Trichoderma harzianum\* 1295-22: Effect of environmental stress](#). *Journal of the American Society for Horticultural Science* 123: 35-40

- Garner, L. C. and T. Björkman. 1997. [Using impedance for mechanical conditioning of tomato transplants to control excessive stem elongation.](#) HortScience 32:227-229
- Björkman, T. 1997. Root colonization and growth responses to an improved biocontrol fungus. In: H.E. Flores, J.P. Lynch and D. Eissenstat (eds.) Radical biology: advances and perspectives on the function of plant roots. American Society of Plant Physiologists. pp. 532-534
- Garner, L. C., F.A. Langton and T. Björkman. 1997. Commercial adaptations of mechanical stimulation for the control of transplant growth. Acta Horticulturae 435: 219-226
- Samimy, C., T. Björkman, D. Siritunga and L. Blanchard. 1996. [Overcoming the barrier to interspecific hybridization of \*Fagopyrum esculentum\* with \*F. tataricum\*.](#) Euphytica 91: 323-330
- Garner, L. C. and T. Björkman. 1996. [Mechanical conditioning for controlling excessive elongation in tomato transplants: sensitivity to dose, frequency and timing of brushing.](#) Journal of the American Society for Horticultural Science 121: 894-900
- Björkman, T. 1995. [The Role of Honeybees \(Order: Hymenoptera\) in the Pollination of Buckwheat \(Family: Polygonaceae\)](#) Journal of Economic Entomology 88:1739-1745
- Björkman, T. 1995. [The effectiveness of heterostyly in preventing illegitimate pollination in dish-shaped flowers.](#) Sexual Plant Reproduction 8:143-146
- Björkman, T. 1995. [The effect of pollen load and pollen grain competition in fertilization success and progeny performance in \*Fagopyrum esculentum\*.](#) Euphytica 83: 47-52
- Björkman, T., C. Samimy and K. Pearson. 1995. [Variation in pollen performance among plants of \*Fagopyrum esculentum\*.](#) Euphytica 82: 235-240
- Björkman, T. 1994. Pollen competition in buckwheat. In: A. Stephenson and T-h. Kao (Eds). Pollen-pistil interactions and pollen tube growth. American Society of Plant Physiologists. pp. 280-283
- Björkman, T. 1992. Perception of gravity by plants. Advances in Space Research 12:195-201
- Björkman, T. and R.E. Cleland. 1991. Extracellular calcium in gravitropic signalling in maize roots. Planta 185:379-385
- Björkman, T. and R.E. Cleland. 1991. Root growth regulation and gravitropism in maize roots does not require the epidermis. Planta 185:34-37
- Cleland, R.E., S.S. Virk, D. Taylor and T. Björkman. 1990. Calcium, cell walls and growth. In: Calcium in plant growth and development (R.T. Leonard and P.K. Hepler, eds.) Amer. Soc. Plant Physiologists: Rockville, MD pp. 9-16.

## Extension/Outreach

### Bulletin

- Björkman, T., Bellinder, R. R., Hahn, R. R., Shail, J. W. (2008). *Buckwheat cover crop handbook. A precise tool for weed management on northeastern farms* (18pp. ). Geneva, NY, USA: NYSAES Bulletin, Cornell University.

## **Newsletter**

Björkman, T. (1994 to present). *Northeast Buckwheat Growers Association Newsletter*. Northeast Buckwheat Growers Association. 2 issues per year

## **Newsletter articles**

Björkman, T. (2010) *Another way to improve your ground after harvesting early vegetables: Teff* (July 2010)

Björkman, T. (2010) *June is the time for Sudangrass cover crops*. (June, 2010)

Björkman, T. (2010) *Cover crop management in May* VegEdge (May 2010)

Björkman, T. (2009) *October-sown winter-grain cover crops* VegEdge (October, 2009)

Björkman, T. (2009) *Bringing new ground into production using buckwheat*. VegEdge, May.

Björkman, T. (2008). *Buckwheat for summer cover crops* (p. 13). Small Farm Quarterly.

Björkman, T. (2008). *Choosing a Cover Crop-New Decision Tool* VegEdge, May 2008.

Björkman, T. (2008). Organic fertility recommendations. *Organic University; Advanced Row Crop Management* (pp. 65-80). Midwest Organic Sustainable Education Service.

Björkman, T. (2008). *Selecting the right cover crop* (p. 17). Small Farm Quarterly.

Björkman, T. (2008). *Summer broccoli* VegEdge. (April 2008)

Björkman, T. (2008). A decision tool to help New York vegetable growers easily pick the best cover crop. *New York State Vegetable Growers News* (pp. 14). New York State Vegetable Growers Association.

## **Production Guide**

Seaman, A. J., Kirkwyland, M., Thomas, E. G., Abawi, G. S., Björkman, T., Cobb, A., Dillard, H. R., Grubinger, V., Gugino, B., Hadad, R. G., Helms, M. J., Kikkert, J. R., McGrath, M. T., Mohler, C. L., Nault, B. A., Rangarajan, A., Zitter, T. A. (2009). In Abby J. Seaman (Ed.), *2009 Production Guide for Organic Beans for Processing* (ed., pp. 30 pages). Geneva, NY, USA: NYS IPM Program.

Seaman, A. J., Thomas, E. G., Kirkwyland, M., Abawi, G. S., Björkman, T., Cobb, A., Gugino, B., Helms, M. J., Hoepfing, C. A., Hadad, R. G., McGrath, M. T., Mohler, C. L., Rangarajan, A., Shelton, A. M., Smart, C. D. (2009). In Abby J. Seaman (Ed.), *2009 Production Guide for Organic Cole Crops* (ed., pp. 61 pages). Geneva, NY, USA: NYS IPM Program.

## **Training Manual**

Björkman, T. (2008). Organic fertility recommendations. *Organic University; Advanced Row Crop Management*. (pp. 65-80). Midwest Organic Sustainable Education Service.

# Academic Responsibilities

## Graduate Field Membership

Horticulture, Plant Biology

## Extension/Outreach Responsibilities

### Program Work Team, Administrative Leadership positions related to Extension)

Research Review Panel, New York State Department of Agriculture and Markets. (2009 - Present).

Chairperson, American Society for Horticultural Sciences, National Issues Task Force. (2007 - Present).

Faculty chair, Vegetable Program Work Team. 2009- present) Organize annual team meetings and In-service program. Advise on state-wide extension priorities.

### Extension/Outreach Workshops, Field Days, and Conferences

Björkman, T. (Presenter & Author), Cover Crop Field Day, "Buckwheat cover crop", USDA-NRCS, Big Flats, NY. (November 18, 2009).

Björkman, T. (Presenter & Author), CCE Ag & Food In-service conference, "Cover crops for soil health", Cornell Cooperative Extension, Ithaca, NY. (November 12, 2009).

Björkman, T. (Organizer), CCE Ag & Food In-service conference, "Vegetable track Day 3", Cornell Cooperative Extension, Ithaca, NY. (November 12, 2009).

Björkman, T. (Organizer), CCE Ag & Food In-service conference, "Electronic Communication for Field Staff", Cornell Cooperative Extension, Ithaca, NY. (November 11, 2009).

Björkman, T. (Organizer), CCE Ag & Food In-service conference, "Vegetable track Day 2", Cornell Cooperative Extension, Ithaca, NY. (November 11, 2009).

Björkman, T. (Organizer), CCE Ag & Food In-service conference, "Vegetable track Day 1", Cornell Cooperative Extension, Ithaca, NY. (November 10, 2009).

Björkman, T. (Organizer), Northeast Buckwheat Field Day, Northeast Buckwheat Growers Association, Geneva, NY. (August 25, 2009).

Björkman, T. (Presenter & Author), Improving Soil Health: Cover crops & reduced tillage, "Getting the most from your cover crops", Cornell Vegetable Team CCE, Williamson, NY. (August 20, 2009).

Björkman, T. (Organizer), Schindelbeck, R. R. (Presenter & Author), Making cover crop recommendations based on soil health test, Troy NY. (August 17, 2009).

Björkman, T. (Organizer), Moore, J. (Presenter & Author), Kornegay, J. (Presenter & Author), ASHS Annual Conference, "National Issues Task Force update", American Society for Horticultural Sciences, St. Louis, MO. (July 27, 2009).

Björkman, T. (Presenter & Author), Shail, J. W. (Author Only), (Presenter & Author), ASHS Annual Conference, "An online decision tool to quickly choose the right cover crop", American Society for Horticultural Sciences, St. Louis, MO. (July 26, 2009).

Björkman, T. (Organizer), ASHS Annual Conference, "Outcomes Funding workshop", American Society for Horticultural Sciences, St. Louis, MO. (July 26, 2009).

Björkman, T. (Presenter & Author), (Presenter & Author), (Presenter & Author), ASHS Annual Conference, "Specialty Crops Block Grants", American Society for Horticultural Sciences, St. Louis, MO. (July 25, 2009).

Björkman, T. (Presenter & Author), NRCS Workshop on organic cover crops and EQIP, "Organic Cover Crop Practices", NYS DAM and USDA-NRCS, Cortland. (June 24, 2009).

Björkman, T. (Presenter & Author), Finger Lakes Grape Growers Convention, "Cover Crops for NY Grapes", Cornell Cooperative Extension, Waterloo NY. (March 6, 2009).

Björkman, T. (Presenter & Author), Annual Meeting, "Buckwheat in New York", Manitoba Buckwheat Growers Assn., Carman, MB. (March 5, 2009).

Björkman, T. (Presenter & Author), Ontario Fruit and Vegetable Convention, "Cover Crops for Soil Health", Ontario Ministry of Food and Agriculture, St. Catherines, ON. (February 26, 2009).

Björkman, T. (Presenter & Author), Ontario Fruit and Vegetable Convention, "Managing Weather, from the Plant's View", Ontario Ministry of Food and Agriculture, St. Catherines, ON. (February 26, 2009).

Björkman, T. (Presenter & Author), Empire Fruit and Vegetable Expo, "Shades of Black. Storage disorders of cabbage.", Cornell Cooperative Extension, Syracuse, NY. (February 12, 2009).

Björkman, T. (Presenter & Author), Mid-Atlantic Fruit and Vegetable Grower Conference, "Cover Crops for SOil Health", Pennsylvania Vegetable Growers Assn., Hershey, PA. (February 5, 2009).

Björkman, T. (Presenter & Author), Mid-Atlantic Fruit and Vegetable Grower Conference, "Using Buckwheat as a Precision Weed Control Tool", Pennsylvania Vegetable Growers Assn., Hershey, PA. (February 4, 2009).

Björkman, T. (Presenter & Author), Orr, C. (Presenter & Author), Wigfield, N. (Presenter & Author), Northeast Organic Farming Association Winter Conference, "Raising organic buckwheat", NOFA-NY, Rochester, NY. (January 25, 2009).

Björkman, T. (Presenter & Author), CCE Ag & Food In-service conference, "Cover crops for soil health improvement", Invited, Cornell Cooperative Extension, Ithaca, NY. (November 12, 2008).

Björkman, T. (Organizer), Northeast Buckwheat Field Day, Northeast Buckwheat Growers Association, Cazenovia, NY. (August 23, 2008).

Björkman, T. (Presenter & Author), Cover crop workshop, "Cover crops for Jefferson County vegetable farms.", Invited, Cornell Cooperative Extension, Watertown, NY. (March 28, 2008).

Björkman, T. (Presenter & Author), SARE 2008 National Conference, "A biocontrol fungus that colonizes roots consistently. From concept to organic product", Invited, National Sustainable Agriculture Research and Education, Kansas City, KS. (March 25, 2008).

Björkman, T., Capital District Small Fruit and Vegetable Growers Winter meeting, "Trying to decide which cover crops to grow", Invited, Cornell Cooperative Extension, Albany, NY. (March 13, 2008).

Björkman, T., Empire Fruit and Vegetable Expo, "Filling open niches in your rotation with cover crops to improve your soil", Invited, Cornell Cooperative Extension, Syracuse, NY. (February 14, 2008).

Björkman, T. (Presenter & Author), 2008 Niagara Fresh Market Vegetable Meeting, "Cover crop utilization for vegetable", Invited, Cornell Cooperative Extension, Lockport, NY. (January 9, 2008).

## **Key Audiences and Scope of Impact**

### ***Summer cover crops for weed management in vegetable production - (2007 - Present)***

**Impact Summary:** Successful vegetable farms devote a great deal of attention to weed and soil management. Strategies to address both management goals involve integrating many complementary methods. Summer cover crops can complement existing strategies with far reaching benefits.

### ***Improving phosphorus management in vegetable production - (1997 - Present)***

**Impact Summary:** Long-term application of fertilizer in intensive production has led to some vegetable ground with excessive phosphorus content. These fields can be a prime source of phosphorus pollution. Growers are interested in taking a proactive approach to reducing the pollution potential. Beans, especially when sown early, generally receive substantial extra phosphorus to assure good growth, but also exacerbating the problem. We developed a method for releasing some of the soil phosphorus in an environmentally benign way, so that beans could take it up without additional phosphorus application. The technique is particularly effective on sandy soils, which is prevalent on the highly impacted soils of the Delmarva Peninsula. However, the technique will not release enough phosphorus on the heavier soils of New York. Starter phosphorus application is still necessary for snap beans, unlike field corn where it is now discouraged.

### ***Broccoli, a new high-value vegetable for New York - (1993 - Present)***

**Impact Summary:** Broccoli is a high-volume, high-value vegetable crop that would be well-suited for New York if it had greater tolerance of summer heat. The opportunity is great because New York has the land base, the grower expertise, and the processors who would buy the product. We are working toward identifying germplasm with heat tolerance and markers for efficient selection of heat tolerance in combination with other essential morphological characters. So far, we have developed a screening method that has improved commercial breeders' ability to do selection. They are now providing new material with improved heat tolerance that allows some late-summer production in New York.

### ***Revitalizing a traditional New York specialty crop - (1990 - Present)***

**Impact Summary:** New York is home to the East's dominant producer of buckwheat products. While buckwheat production has declined in favor of other grains over the past century, demand remains strong for the whole-foods, ethnic and celiac markets. Even though buckwheat production has a long history, it requires current research and continuous extension for production to remain efficient and processing to be economical. A new research and extension program has brought Northeast production up to date, and built a community of successful growers

### ***Organic Vegetable Production Guides - (2008 - 2010)***

**Impact Summary:** New farmers interested in raising organic fruit, vegetables, or livestock, experienced growers transitioning to organic production, or diversifying their organic crop mix to include vegetables or fruit have had few resources to help them develop the nutrient, weed, and pest management systems necessary for successful organic production. Available resources tend to be scattered across various web sites and publications, or are embodied in the experience of researchers and successful organic farmers. Concerns about weed and pest management failures are often cited by conventional farmers as obstacles to undertaking a transition to organic production. At the request of, and with funding from the New York State Department of Agriculture and Markets, we have undertaken the job of coordinating the production of organic guidelines for livestock insect pest management, production of eight vegetable crops: carrots, cucurbits, snap beans, and peas for processing, and cole crops, potatoes, lettuce, and spinach.

***Providing vegetable growers with tools for weed control - (2008)***

**Impact Summary:** The goal of my research program is to identify and evaluate multiple strategies that can be integrated to control weeds in vegetable and fruit crops. The strategies may be traditional (chemical, mechanical) or more unusual (cover crops, natural products, weed biology/ecology, crop rotations). The intention is to develop methods of ensuring continued production of healthy foods while maintaining economic sustainability for growers and the safety of the food supply and environment.

## **OTHER CURRENT PROFESSIONAL ACTIVITIES**

### **Professional Service**

Member, American Society for Horticultural Science.

Member, American Society of Plant Biologists.

Member, Botanical Society of America.

### **Editorial Boards**

#### **Journal**

"Fagopyrum, International Journal for Buckwheat Research", Editorial Review Board Member.  
(2003 - Present).

### **University Service**

#### **Department Senator**

University Faculty Senate. (2003 - Present).

## OTHER CURRENT PROFESSIONAL CONTRIBUTIONS

### Conferences/Workshops/In-Service Participation

- Conference Attendance, "CCE Ag & Food In-service conference", Cornell Cooperative Extension, Ithaca, New York. (November 10, 2009 - November 12, 2009).
- Conference Attendance, "ASHS Annual Conference", American Society for Horticultural Science, St Louis, MO. (July 25, 2009 - July 28, 2009).
- Conference Attendance, "CCE Ag & Food In-service conference", Cornell Cooperative Extension, Ithaca, New York. (November 12, 2008).
- Conference Attendance, "ASHS Annual Conference", American Society for Horticultural Science, Orlando, FL. (July 21, 2008 - July 23, 2008).
- Conference Attendance, "SARE National Conference", Sustainable Agriculture Research and Education, Kansas City, Missouri. (March 25, 2008 - March 27, 2008).

### Presentations Given

#### Presentation (Other)

- Mohler, C. L. (Author Only), Björkman, T. (Author Only), DiTommaso, A. (Presenter & Author), Weed Science Society of America Annual Meeting, "Control of weed size by compost application rate in an organic cropping system.", Accepted, Weed Science Society of America, Chicago, IL. (February 6, 2008).

#### Conference Presenter/Organizer

- Björkman, T. (Organizer), ASHS Annual Conference, "Achieving the promise of transgenic and genomic horticultural crops", Invited, American Society for Horticultural Sciences, Orlando, FL. (July 23, 2008).
- Björkman, T. (Presenter & Author), ASHS Annual Conference, "Buckwheat cover crops for vegetable rotations to reduce weeds and improve soil condition", Accepted, American Society for Horticultural Sciences, Orlando, FL. (July 23, 2008).
- Mark, F. (Presenter & Author), Björkman, T. (Author Only), ASHS Annual Conference, "Development of broccoli adapted to summer conditions in the southeastern United States", Accepted, American Society for Horticultural Sciences, Orlando, FL. (July 23, 2008).
- Björkman, T. (Organizer), ASHS Annual Conference, "National Issues Task Force Approaches and Actions", Invited, American Society for Horticultural Sciences, Orlando, FL. (July 22, 2008).
- Björkman, T. (Presenter & Author), ASHS Annual Conference, "Specialty Crops Block Grants. What is your state's plan?", Invited, American Society for Horticultural Sciences, Orlando, FL. (July 22, 2008).

#### Invited Presentation

- Björkman, T. (Presenter & Author), Systems Based Trans-disciplinary Projects for USDA-NIFA Programs, "Linking research and extension", USDA-NIFA, Ithaca, NY. (December 10,

2009).

Björkman, T. (Presenter & Author), Peet, M. (Presenter & Author), Systems Based Trans-disciplinary Projects for USDA-NIFA Programs, "Organic Research and Extension Initiative", USDA-NIFA, Ithaca, NY. (December 10, 2009).

Björkman, T. (Presenter & Author), "Targeted Cover Crops for Vegetable Production", University of Illinois, Urbana, IL. (March 23, 2009).

Björkman, T. (Presenter & Author), "Cover crop decision tool", USDA-ARS, Beltsville, MD. (April 21, 2009).

### **Workshop Presenter/Organizer**

Björkman, T. (Organizer), Eastern Broccoli Production, USDA-SCRI, Geneva, NY. (September 30, 2009).

Björkman, T. (Presenter & Author), Gomez, M. (Presenter & Author), Farnham, M. (Presenter & Author), Eastern Broccoli Production, "Potential for commercial broccoli production", USDA-SCRI, Geneva, NY. (September 29, 2009).

Björkman, T. (Presenter & Author), Gomez, M. (Presenter & Author), Farnham, M. (Presenter & Author), Griffiths, P. D., Eastern Broccoli Production, "Potential for commercial broccoli production", USDA-SCRI, Geneva, NY. (September 29, 2009).

## **Media Contributions**

### **Internet**

Northeast Buckwheat Production Guide Website. Leader. <http://www.nysaes.cornell.edu/hort/faculty/Björkman/buck/Buck.html>.

Tomato Brushing for Height Control Technical Guide. Leader. <http://www.nysaes.cornell.edu/hort/faculty/Björkman/tomato/index.html>.

Trichoderma for Vegetable Production Research Report and Technical Guide. Leader. <http://www.nysaes.cornell.edu/hort/faculty/Björkman/trichoweb/>.

Vegetable Cover Crops Website. Leader. <http://www.nysaes.cornell.edu/hort/faculty/Björkman/covercrops/why.html>.