#### **Curriculum Vitae**

Travis Idol

### **Business Address**

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### **Professional Interests**

- -Forest nutrition and biogeochemistry
- -Forest restoration and silviculture
- -Design and analysis of agroforestry systems

## **Educational Background**

B.S. Biology Wake Forest University M.S. Forestry Purdue University Ph.D. Forestry Purdue University

### **Positions Held**

Assoc. Professor of Tropical Forestry and Agroforestry, UH-Manoa, August 2009-present Asst. Professor of Tropical Forestry and Agroforestry, University of Hawaii-Manoa, Honolulu, HI, August 2002-present

Post Grad. Researcher, Land, Air, and Water Resources, University of California, Davis, CA, August 2000-July 2002

Grad. Research Asst., Forestry and Natural Resources, Purdue University, West Lafayette, IN, January 1995-June 2000

## **Courses Taught**

Undergraduate

NREM 105 Environmental Service Learning

NREM 380 Tropical Forestry and

Agroforestry

NREM 691 Forest Nutrition and Biogeochem

NREM 695/696 Masters Plan B Capstone

NREM 306 Environmental Ethics

NREM 701 Graduate Seminar

## **Department Service**

- -Faculty Search Committee Member, 2 separate faculty positions
- -Faculty Search Committee Chair, 1 faculty position
- -Website Subcommittee Chair, 2003-2005
- -Graduate Program Committee Member, 2002-2005
- -Undergraduate Program Chair and Head of Advising, 2005-2007, 2012-present

## -Coordinator, Sherman Courtyard Relandscaping Project

## **College Service**

- -Faculty Senate Member, 2003-2007, 2009-2011
- -Faculty Senate Executive Committee, 2005-2007, 2010-2013
- -Student Research Symposium Planning Committee, 2004-present

## **University Service**

- -Ecology, Evolution, and Conservation Biology Program, 2003-present
- -UH Honor's Program Council Member, 2003-2005
- -UH Sustainability Council, curriculum committee member, 2006-2008

#### **Graduate Committee Service**

Advisor Member

MS MS

Christina Anderson (2003-2005)

Maureen DaRin (2007-2010)

Clay Trauernicht (2003-2005)

Dana Crompton (2004-2007)

Erin Hickey (2012-) Christy Hardy (2004-2006) Bradley Kaufmann (2014-) Dan Williams (2008)

Kaipo Dye (2014-)

Leyla Cabugos (2007-2008)

PhD Natalie Kurashima (2013-2014)

Dean Meason (2003-2009)
Adel Youkhana (2004-2010)

PhD

Glassia (2003-2009)

Cynthia Nazario-Leary (2004-2015)

Rodolfo Morales (2006-2010)

Shawn Steiman (2003-2008)

Nicole Scheman (2006-2010)

Mashuri Waite (2008-2010)

Gaoussou Diarra (2008-2013)

Aliza Prodhon (2012-2015)

Tamara Wong (2006-2012)

Aliza Pradhan (2012-2015)

Wendy McDowell (2004-2008)

Chris Nakahashi (2008)

Bambang Hariyadi (2005-2008) Shimona Quazi (2008-2013)

Jacqueline Halbrendt (2011-2014)

Natalie Kurashima (2014-) Gerald Cobian (2014-)

# **Professional Memberships**

- -Hawaii Forest Industry Association
- -Society of American Foresters
- -Soil Science Society of America

### **Professional Service**

- -Hawaii Forest Institute, Board Member and Vice-President, 2006-2009; President, 2009-present
- -Hawaii Forest Industry Association, Board Member, 2007-2008

### **Journal Reviews**

-Manuscript Reviewer (Journals and Books)

36th Binghamton Geomorphology Symposium (special issue of *Geomorphology*)

\*\*Agroforestry Systems\*\*

\*\*Journal of Agricultural, Food, &

Agronomy for Sustainable Environmental Sciences

DevelopmentJournal of Environmental QualityAgronomy JournalJournal of Tropical Ecology

Ecological Applications

Native Plants Journal

Environmental Management New Forests

Forest Ecology and Management Pacific Agriculture and Natural

Forest Science Resources

Handbook of Forest Ecology Soil Science Society of America Journal

HortScienceSouthern Journal of Applied ForestryInternational Journal of AgricultureWestern Journal of Applied Forestry

International Journal of Agriculture Western Journal of Applied Forestry
International Journal of Sustainability in

Higher Education

### **Awards and Honors**

- -Best paper in session award, 2004 Soil Science Society of America annual meeting.
- -2005 Betty Crocker Landscape Award Winner, Best Community Garden Award, Scenic Hawaii
- -2006 Government Landscape Award Winner, Hawaii Outdoor Circle

### **Grants and Contracts**

Project Title	Funding Agency	Amount	Time Period
Environmental Controls on <i>Acacia koa</i> Productivity in Hawaii	USDA Forest Service	17,841	6/03-3/05
Monitoring of Forest Health in Hawaii's Dry Forest Ecosystems	USDA Forest Service	68,000	10/03-9/08
Koa Productivity and Nutrient Use Efficiency in Response to Fertilization	USDA Mcintire-Stennis	99,904	10/03-9/08
Development of Shade Coffee Agroecosystems In Hawaii	USDA TSTAR	144,506	10/03-9/07
Controlling Invasive Species with Novel Agroforestry Systems Utilizing Native Plants	USDA TSTAR	117,791	10/04-9/09
Developing productivity models and silvicultural guidelines for growing and managing the native Hawaiian hardwood <i>Acacia koa</i>	USDA Mcintire-Stennis	60,000	10/05-9/08

<sup>-</sup>Editorial board member, Hawaii Forest Journal, 2006-present; Editor, 2008-present

Treatment and Reuse of Urban Storm Water With a Customized Constructed Wetland	US EPA P3 Student Sustainability Design	9,968	09/07-05/08
New Innovations in Native Forest Restoration for High-Elevation Rangelands	USDA NRCS Conservation Innovation Grant	46,040	10/07-09/09
An Integrated Strategy to Restore Degraded Dry Forests in Hawaii	USDA Mcintire-Stennis	60,000	10/08-09/11
Assessment of <i>Acacia koa</i> forest cover and productivity across environmental gradients in Hawaii using fine resolution remote sensing	State of Hawaii, Division of Forestry and Wildlife	20,000	10/08-12/09
Innovative greenhouse management for improved outplanting performance of native Hawaii tree seedlings	USDA Mcintire-Stennis	140,000	10-07-07/10
Sustainable Management of Agroecological Resources by Tribal Societies (SMARTS)	US AID, SANREM- CRSP	1,384,915	01/10-12/14
Selection and propagation of koa and <i>Leucaena</i> for production of high-value hardwoods	USDA Mcintire-Stennis	64,500	10/12-09/15
SMARTS2	Belmont Forum FACCE-JPI	224,000	07/14-12/15
Mentorship for Visiting Scholar	World Cocoa Foundation	16,350	08/14-07/15
Mentorship for Visiting Scholar	World Cocoa Foundation	17,697	02/16-01/17

### **Publications**

Peer-Reviewed Journal Articles

- **Idol TW** and G. Diarra. *In press*. Mycorrhizal colonization is compatible with exponential fertilization to improve tree seedling quality. Journal of Plant Nutrition.
- Youkhana A and **TW Idol.** *In review*. Mulch additions increase growth, yield and soil C and N in a managed full-sun coffee system in Hawaii. Agroforestry Systems.
- Lai C, C Chan, J Halbrendt, L Shariq, P Roul, **T Idol**, C Ray, and C Evensen. 2012. Comparative economic and gender, labor analysis of conservation agriculture practices in tribal villages in India. International Food and Agribusiness Management Review 15:73-86.
- Martinez Morales R, **Idol TW**, Friday JB, and Chen Q. 2012. differentiation of koa forest stands across an elevation gradient in Hawaii using fine resolution remotely sensed imagery. International Journal of Remote Sensing 33:3492-3511. doi:10.1080/01431161.2011.629234

- Martinez Morales R, **Idol T**, and Friday JB. 2011. Assessment of *Acacia koa* forest health across environmental gradients using fine resolution remote sensing and GIS. Sensors 11:5677-5694. doi:10.3390/s110605677
- Steiman S, **Idol TW**, and Bittenbender HC. 2011. Shade coffee in Hawaii-exploring some aspects of quality, growth, yield, and nutrition. Scientiae Horticulturae 158:152-158. doi:10.1016/j.scienta.2011.01.011.
- Youkhana A and **Idol T**. 2011. Addition of *Leucaena*-KX2 mulch in a shaded coffee agroforestry system increases both stable and labile soil C fractions. Soil Biology and Biochemistry 43:961-966. doi:10.1016/j.soilbio.2011.01.011
- Youkhana A and **Idol T**. 2011. Allometric models for predicting above- and belowground biomass of *Leucaena*-KX2 in a shaded coffee agroecosystem in Hawaii. Agroforestry Systems. 83:331-345 doi: 10.1007/s10457-011-9403-6.
- Youkhana A and **Idol T**. 2011. Growth, yield and value of managed coffee agroecosystem in Hawaii. Pacific Agriculture and Natural Resources. 2:12-19.
- Scowcroft PG, Friday JB, Haraguchi J, **Idol TW**, and Dudley N. 2010. Poor stem form as a potential obstacle to private investment in koa plantation forestry in Hawaii. Small-Scale Forestry 9:243-262. doi: 10.1007/s11842-009-9107-1
- Youkhana A and **Idol TW**. 2009. Tree pruning mulch increases soil carbon and nitrogen in shade and full sun coffee agroecosystems in Hawaii. Soil Biology and Biochemistry. 41:2527-2534.
- Meason DF, **Idol TW**, Friday JB, and Scowcroft PG. 2009. Persistence of elevated phosphorus availability after fertilisation in the volcanic soil of a managed tropical forest. Forest Ecology and Management 258:2199-2206.
- Meason D and **Idol TW**. 2008. Comparison of ion exchange resin membranes (PRS-probes) with resin bags in the field: effects of incubation time, soil depth, and P fertilization. Soil Science Society of America Journal 72:1806-1814.
- Youkhana A and **Idol T**. 2008. First-year biomass production and soil improvement in young *Leucaena* and *Robinia* stands under different pollarding systems. Journal of Tropical Forest Science 20:181-187.
- Martinez Morales R, Miura T, and **Idol T**. 2008. An assessment of Hawaiian dry forest condition and restoration potential with fine resolution remote sensing. Forest Ecology and Management 255:2524-2532.
- Steiman SR, **Idol TW**, and Bittenbender HC. 2007. Analysis of kaolin particle film usage and its application on coffee. HortScience 42:1605-1608.
- **Idol TW**, Baker PJ, and Meason D. 2007. Indicators of forest ecosystem productivity and nutrient status across precipitation and temperature gradients in Hawaii. Journal of Tropical Ecology 23:693-704.
- Scowcroft PG, Friday JB, **Idol TW**, Dudley N, Haraguchi J, and Meason D. 2007. Growth response of *Acacia koa* trees to thinning, grass control, and phosphorus fertilization in a secondary stand in Hawaii. For. Ecol. Manage. 239:69-80.

- **Idol TW**, Pope PE, and Ponder Jr F. 2003. N mineralization, nitrification, and N uptake across a 100-year chronosequence of upland hardwood forests. For. Ecol. Manage. 176:509-518.
- **Idol TW**, Pope PE, and Ponder Jr F. 2002. Changes in microbial nitrogen across a 100-year chronosequence of upland hardwood forests. Soil Sci. Soc. Am. J. 66:1662-1668.
- **Idol TW**, Holzbaur KA, Pope PE, and Ponder Jr F. 2002. Control-bag correction for forest floor litterbag contamination. Soil Sci. Soc. Am. J. 66:620-623.
- **Idol TW**, Figler RA, Pope PE, and Ponder Jr F. 2001. Characterization of coarse woody debris across a 100 year chronosequence of upland oak-hickory forests. For. Ecol. Manage. 149:153-161.
- **Idol TW**, Pope PE, and Ponder Jr. F. 2000. Fine root dynamics across a chronosequence of upland temperate deciduous forests. Forest Ecology and Management 127:153-167.pg
- Book Chapters
- **Idol T.** 2015. A brief history of conservation agriculture. *In* C. Chan-Halbrendt and J. Fantle-Lepczyk (eds.) Conservation Agriculture in Susbsistence Farming: Case Studies from South Asia and Beyond. CABI, Oxford. pp. 1-21.
- Pradhan A, **T. Idol**, P.K. Roul, K.N. Mishra, C. Chan-Halbrendt, J. Halbrendt, and C. Ray. 2015. Effect of tillage, intercropping and residue cover on crop productivity, profitability and soil fertility under tribal farming situations of India. *In* C. Chan-Halbrendt and J. Fantle-Lepczyk (eds.) Conservation Agriculture in Susbsistence Farming: Case Studies from South Asia and Beyond. CABI, Oxford. pp. 77-94.
- Roul P.K., A Pradhan, P. Ray, K.N. Mishra, S.N. Dash, C. Chan-Halbrendt, **T. Idol** and C. Ray. 2015. Influence of maize-based conservation agricultural production systems (CAPS) on crop yield, profitability and soil fertility in rainfed uplands of Odisha, India. *In* C. Chan-Halbrendt and J. Fantle-Lepczyk (eds.) Conservation Agriculture in Susbsistence Farming: Case Studies from South Asia and Beyond. CABI, Oxford. pp. 95-108.
- **Idol T**, Haggar J, and Cox L. 2011. Ecosystem services from smallholder forestry and agroforestry in the tropics. p. 209-270 *In* WB Campbell and SL Lopez (eds.) Integrating agriculture, conservation, and ecotourism: examples from the field. Springer, New York.

## Conference Proceedings Papers

- Lai, C., C. Chan-Halbrendt, J. Halbrendt, P. Roul, **T. Idol**, C. Ray and C. Evensen. 2011. Comparative economic analysis of conservation agricultural practices in tribal villages in India. Proceedings of the 21st Annual IFAMA World Forum and Symposium in Frankfurt, Germany (June 2011).
- **Idol TW**, Steiman S, Bittenbender HC, Gautz L, and Jackson, M. 2007. Not all shade is created equal: reflections on shade management based on preliminary studies from Hawaii. Second International Symposium on Multi-Strata Agroforestry Systems with Perennial Crops. Sept. 17-22, 2007. CATIE, Turrialba, Costa Rica.
- Steiman S, Bittenbender HC, **Idol TW**, Gautz LD, Jackson MC. 2007. Shade coffee in Hawaii -- the impact of light on coffee quality. 21st International Conference on Coffee Science, Montpellier, France, 11-15 September, 2006. Paris: Association Scientifique Internationale du Cafe (ASIC), p.1214-1216.

- Steiman S, **Idol TW**, Bittenbender HC, Gautz LD, Jackson MC. 2007. Physiological response of coffee to different shading regimes. 21st International Conference on Coffee Science, Montpellier, France, 11-15 September, 2006. Paris: Association Scientifique Internationale du Cafe (ASIC), p.1212-1213.
- Jackson MC, Steiman SR, Gautz LD, Bittenbender HC, Idol TW. 2007. Quality determination and group discrimination of shade grown coffee using solid phase microextraction as a means of coffee discrimination. 21st International Conference on Coffee Science, Montpellier, France, 11-15 September, 2006. Paris: Association Scientifique Internationale du Cafe (ASIC), p. 306-309.
- **Idol TW**, Pope PE, and Ponder Jr F. 2002. The effects of harvesting on long-term soil productivity in southern Indiana oak-hickory forests. pp. 233-238 *In* Outcalt, K.W. (Ed.) Proc. 11th Bienn. South. Silvic. Res. Conf., Mar. 20-22, 2001, Knoxville, TN. Gen. Tech. Rep. SRS-48. U.S. Dept. Agric., For. Serv., South. Res. Stn, Asheville, N.C.
- **Idol TW**, Pope PE, Tucker J, and Ponder Jr F. 1998. The role of fine root dynamics in the N and P cycles of regenerating upland oak-hickory forests. pp. 136-140 *In* Waldrop, T.A. (Ed.) Proc. 9th Bienn. South. Silv. Res. Conf., Feb. 25-27, 1997, Clemson, SC. Gen. Tech. Rep. SRS-20, US Dept. Agric., Forest Service, Southern Research Station, Asheville, NC.
- Technical Papers, Trade Journals, and Other Reports
- **Idol TW** and G. Diarra. 2013. Sustainable practices to boost tree seedling performance. Hanai Ai Spring 2013. 7 pp.
- Idol TW. 2012. History of forestry in Hawaii: an overview. Hawaii Forest Journal 6:1-2.
- **Idol TW**. 2012. Ecosystem services from trees in coffee agroecosystems. Hanai Ai, Spring 2012. 4 pp.
- **Idol TW** and Youkhana A. 2010. Managing shade trees for coffee can benefit the soil. Hanai Ai, Winter 2010. 2 pp.
- Elevitch C., **Idol T**, Friday J. B., Lepczyk C., Easton Smith V., and Nelson S. C. 2009. Shadegrown coffee for Hawaii: results of a twelve farm study in Kona. Permanent Agriculture Resources, Holualua, HI. 22 pp.
- **Idol TW**, Scowcroft PG, Dudley N, Dancil K, and Simmons P. 2007. The value of managing *Acacia koa* forests. Hawaii Forest Journal 2:8-11.
- Radovich T, LJ Cox, J Sugano, and **T Idol**. 2009. Benefits and costs of using perennial peanut as living mulch for fruit trees in Hawaii. SCM-27. University of Hawaii, College of Tropical Agriculture and Human Resources, Soil and Crop Management report.

### **Book Reviews**

- **Idol TW.** 2007. Rev. of Tropical homegardens: a time-tested example of sustainable agroforestry. Edited by B.M. Kumar and P.K.R. Nair. Forest Science. 53:710.
- **Idol TW.** 2005. Rev. of Profiles in the history of the U.S. soil survey. Edited by D. Helms, A.B.W. Effland, and P.J. Durana. Journal of Southern History 71:971-972.

### **Selected Professional Presentations**

- **Idol TW**. Integrating nitrogen fixing trees in tropical forest plantations. 2014 Society of American Foresters National Convention. 08-11 October, Salt Lake City, UT.
- Diarra G and **TW Idol**. Effect of exponential nutrient loading and mycorrhizal inoculation on *Acacia koa* seedling survival at outplanting on former Hawaii pasture lands. Nāhelehele Dry Forest Symposium. 31 March 2013. Kaahahui O Ka Nahelehele.
- **Idol T,** A Pradhan, C Chan-Halbrendt, PK Roul, KN Mishra, J Halbrendt and C Evensen. Effect of maize based conservation agriculture production systems (CAPS) under tribal farming situations of Odisha in India. 2012 Annual meeting of the ASA-CSSA-SSSA. 22-25 October 2012, Cincinnati, OH.
- Scowcroft PG, JB Friday and **TW Idol**. Advantage conferred on koa crop trees by targeted silviculture persists despite overall slowing growth rates. Hawaii Conservation Conference. 31 July-02 August 2012. Hawaii Conservation Alliance. Honolulu, HI.
- **Idol TW**. Conservation agriculture and soil health: the US perspective. Workshop on Conservation Agriculture in Orissa, India. 24 December 2011, Bhubaneswar, India.
- Diarra G and **TW Idol**. Optimizing fertilization and root symbioses to improve seedling performance in abandoned pastures of Hawaii. 02-06 November 2011, Honolulu, HI.
- Nazario-Leary C and **TW Idol**. Native understory species cultivated under different light conditions in a non-native mesic forest in Hawaii. Society of American Foresters 91<sup>st</sup> National Convention. 02-06 November 2011, Honolulu, HI.
- **Idol T**, Friday JB, Scowcroft P, Meason D, and Martinez Morales R. Phosphorus nutrition and biogeochemistry in *Acacia koa* forests of Hawaii. Society of American Foresters 90<sup>th</sup> National Convention. 27-31 October 2010. Albequerque, NM.
- Friday JB, **Idol TW**, Scowcroft PG, Meason DF, and Martinez Morales R. Carbon sequestration in koa forest restoration. Hawaii Conservation Conference. 28-30 July 2009. Hawaii Conservation Alliance. Honolulu, HI.
- Friday JB, **Idol TW**, Scowcroft PG, Meason DF, and Martinez Morales R. Carbon sequestration in koa forest restoration. Hawaii Conservation Conference. 28-30 July 2009. Hawaii Conservation Alliance. Honolulu, HI.
- **Idol TW**, Elevitch C, and Friday JB. Carbon sequestration in agroforestry systems. Hawaii Conservation Conference. 28-30 July 2009. Hawaii Conservation Alliance. Honolulu, HI.
- Martinez-Morales R, **Idol T** and Chen Q. *Acacia koa* forest classification and productivity assessment across environmental gradients in Hawaii using fine resolution remotely sensed imagery. Hawaii Conservation Conference. 28-30 July 2009. Hawaii Conservation Alliance. Honolulu, HI.
- Youkhana A and **Idol TW**. Biomass and soil carbon sequestration in a *Leucaena* agroforestry system in Hawaii. Hawaii Conservation Conference. 28-30 July 2009. Hawaii Conservation Alliance. Honolulu, HI.
- Martinez-Morales R, **Idol T** and Chen Q. *Acacia koa* forest classification and productivity assessment across environmental gradients in Hawaii using fine resolution remotely sensed imagery. American Geophysical Union Joint Assembly, May 23-27, 2009. Toronto, Canada.

- Nazario-Leary C, **Idol TW**, and Ticktin T. Development of a Native Forest Understory Agroforestry System for Restoration, Invasive Species Control and Sustainable Use. International Scientific Conference on Tropical Rainforests and Agroforests under Global Change. 05-09 October 2008. Bali, Indonesia.
- Meason D, Friday JB, **Idol TW**, and Scowcroft P. The Dynamics of Soil Water Content in a Montane Hawaiian *Acacia koa* Forest in Response to Silvicultural Management. 2008 International Meetings of the ASA-CSSA-SSSA. October 04-09, 2008. Houston, TX.
- Youkhana A and **Idol TW**. Tree pruning residues increase soil carbon and nitrogen in shade and full-sun coffee agroecosystems in Hawaii. 2008 International Meetings of the ASA-CSSA-SSSA. October 04-09, 2008. Houston, TX.
- Gautz LD, Steiman SR, Jackson MC, Bittenbender HC, and **Idol TW**. Shade Coffee in Hawaii: Economic Impact of Creating Shade for Culture of Coffee. 22nd International Conference on Coffee Science–ASIC 2008. 14-19 September, 2008. Campinas, SP, Brazil.
- Martinez-Morales R, **Idol T**, Friday JB, and Chen Q. Remote Sensing of Acacia koa Forest Growth, Productivity, and Health Across Elevation and Climate Gradients. Hawaii Conservation Conference. July 28-30, 2008. Hawaii Conservation Alliance, Honolulu, HI.
- Nazario-Leary C, **Idol T**, and Ticktin T. Survival, Growth, and Photosynthetic Light Response of a Native Fern, *Microlepia strigosa* (Thumb.) K. Presl, to Varying Understory Light Conditions. Hawaii Conservation Conference. July 28-30, 2008. Hawaii Conservation Alliance, Honolulu, HI.
- Youkhana A and **Idol T**. Tree Pruning Residues Increase Soil Carbon and Nitrogen in Shade and Full-Sun Coffee Agroecosystems in Hawaii. Hawaii Conservation Conference. July 28-30, 2008. Hawaii Conservation Alliance, Honolulu, HI.
- Meason DF, **Idol TW**, Friday JB, and Scowcroft P. Changes In Soil Water And Phosphorus In Response To Thinning, Grass Control, And P Fertilization For *Acacia Koa* In Hawaii: Implications For Developing Management Stratagies. North American Forest Soils Conference. June 22-26, 2008. Blacksburg, VA.
- Martinez-Morales R, Miura T, and **Idol T**. An assessment of Hawaiian Dry Forest Condition with Fine Resolution Remote Sensing. February 11-15, 2008. Forest Health Monitoring Working Group Meeting, San Antonio, TX.
- **Idol TW**, Steiman S, Bittenbender HC, Gautz L, and Jackson M. Not All Shade is Created Equal: Reflections on Shade Management Based on Preliminary Studies from Hawaii. 2<sup>nd</sup> International Symposium on Multi-Strata Agroforestry Systems With Perennial Crops. 17-21 September 2007. Turrialba, Costa Rica.
- **Idol T.** Protocols for improved seedlings for degraded soils. Forestry Short Course, Restoration of Degraded Lands. August 13-17, 2007. US Dept of Agriculture, Forest Service, Institute of Pacific Islands Forestry, Hilo HI.
- Meason D, **Idol T**, Friday JB, and Scowcroft PG. Potential mechanisms that limit koa growth and what it could mean for koa forest management-a case study. Hawaii Conservation Conference. July 25-27, 2007. Hawaii Conservation Alliance, Honolulu, HI.

- Scowcroft PG, Friday JB, **Idol T**, Dudley N, Meason D, and Hariguchi J. Plantation koa: another inconvenient truth? Hawaii Conservation Conference. July 25-27, 2007. Hawaii Conservation Alliance. Honolulu, HI.
- Meason D, Nazario-Leary C, **Idol T**, Friday JB, Scowcroft PG. The strengths and weaknesses of Decagon Devices ECH2O soil moisture probes in two different forest environments in Hawaii. Oral presentation. 2007 Soil Moisture Sensing Technology Conference: current and future research directions in soil moisture sensing.
- **Idol, T.** Where have we been? An overview of current knowledge about the relationship between vegetation and hydrology in Hawaii. *Invited speaker*. 2006 Hawaii Association of Watershed Partnerships Symposium.
- Gautz L, Steiman S, **Idol T**, Bittenbender HC. Preliminary Economic Impact of Creating Shade for Culture of Coffee. poster presentation. 2006 ASIC International Coffee Conference.
- Steiman S, **Idol T**, Bittenbender HC. The impacts of shade on coffee quality in Hawaii. poster presentation. 2006 ASIC International Coffee Conference.
- Steiman S, **Idol T**, Bittenbender HC. Physiological response of coffee to different shading regimes. 2006 ASIC International Coffee Conference.
- Steiman S, Jackson M, **Idol T**, Bittenbender HC. Quality determination and group discrimination of shade grown coffee using solid phase microextraction as a means of coffee discrimination. poster presentation. 2006 ASIC International Coffee Conference.
- Scowcroft PG, Friday JB, **Idol T**, Dudley N, Haraguchi J, and Meason,D. Targeted silviculture improves koa (*Acacia koa*) tree growth. Oral presentation. 2006 Hawaii Conservation Conference.
- Martinez R, Miura T, **Idol T**, and Cordell S. Large-scale assessment of Hawaiian dry forest decline and restoration potential with remote sensing and GIS. Oral presentation. 2006 Hawaii Conservation Conference.
- Nazario-Leary C, **Idol T**, and Ticktin T. Development of a Hawaiian agroforestry system to control invasive species and encourage restoration of native biodiversity. Poster presentation. 2006 Hawaii Conservation Conference.
- Wong T, and **Idol T.** *Morinda citrifolia* L. (Rubiaceae) growth and light environment in the understory of differing tree species in an agroforestry system, O'ahu, Hawai'i. Poster presentation. 2006 Society for Economic Botany Annual Meeting.
- **Idol TW** and Baker PJ. Canopy and soil N and P in a tropical forest across temperature and precipitation gradients. Poster presentation. 2006 International Meetings of the ASA-CSSA-SSSA.
- Meason D, **Idol T**, Friday JB, and Scowcroft P. Sustained increases in soil P availability after fertilization in a tropical Hapludand forest soil. 2006 International Meetings of the ASACSSA-SSSA.

# **Departmental Seminars**

- **Idol T**, Friday JB, Scowcroft P, Meason D, and Martinez Morales R. Phosphorus nutrition and biogeochemistry in *Acacia koa* forests of Hawaii. Spring 2011 Ecology, Evolution, and Conservation Biology Evoluncheon Series.
- **Idol T**, Ticktin T, Nazario-Leary C, and Wong T. Restoration Agroforestry: Opportunities for Hawaii. Spring 2008 Ecology, Evolution, and Conservation Biology Evoluncheon Series.