

# Fortuna Field Station Bibliography

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This is a list of publications that are attributed to research done at the Fortuna Field Station at the Smithsonian Tropical Research Institute. The publications are grouped by year and sorted alphabetically by first author, with known Smithsonian Tropical Research Institute researchers marked in bold. The data are generated from [Smithsonian Research Online](#), provided by the Smithsonian Libraries and Archives. Reports are generated on a quarterly basis and may not include the most recent publications.

## 2019

Christian, Martin H., **Ibáñez, Roberto**, Nothias, Louis-Félix, Cristopher, Boya P., Reinert, Laura K., Rollins-Smith, Louise, Dorrestein, Pieter C., and Gutiérrez, Marcelino. 2019. "[Viscosin-like lipopeptides from frog skin bacteria inhibit \*Aspergillus fumigatus\* and \*Batrachochytrium dendrobatidis\* detected by imaging mass spectrometry and molecular networking.](#)" *Scientific Reports* 9 (1):Article 3019. <https://doi.org/10.1038/s41598-019-39583-7>

## 2017

Andersen, Kelly M., **Mayor, Jordan R.**, and **Turner, Benjamin L.** 2017. "Plasticity in nitrogen uptake among sympatric species with contrasting nutrient acquisition strategies in a tropical forest." *Ecology* 98 (5):1388–1398. <https://doi.org/10.1002/ecy.1793>

Corrales, Adriana, **Turner, Benjamin L.**, Tedersoo, Leho, Anslan, Sten, and **Dalling, James W.** 2017. "[Nitrogen addition alters ectomycorrhizal fungal communities and soil enzyme activities in a tropical montane forest.](#)" *Fungal Ecology* 27:14–23. <https://doi.org/10.1016/j.funeco.2017.02.004>

Gómez González, Diana C., Rodríguez Quiel, Calixto, **Zotz, Gerhard**, and Bader, Maaïke Y. 2017. "Species Richness and Biomass of Epiphytic Vegetation in a Tropical Montane Forest in Western Panama." *Tropical Conservation Science* 10:194008291769846. <https://doi.org/10.1177/1940082917698468>

Prada, Cecilia M., Morris, Arturo, Andersen, Kelly M., **Turner, Benjamin L.**, Caballero, Pedro, and **Dalling, James W.** 2017. "[Soils and rainfall drive landscape-scale changes in the diversity and functional composition of tree communities in premontane tropical forest.](#)" *Journal of Vegetation Science* 28 (4):859–870. <https://doi.org/10.1111/jvs.12540>

## 2016

Corrales, Adriana, **Arnold, Anne Elizabeth**, Ferrer, Astrid, **Turner, Benjamin L.**, and **Dalling, James W.** 2016. "[Variation in ectomycorrhizal fungal communities associated with \*Oreomunnea mexicana\* \(Juglandaceae\) in a Neotropical montane forest.](#)" *Mycorrhiza* 26 (1):1–17. <https://doi.org/10.1007/s00572-015-0641-8>

Corrales, Adriana, **Mangan, Scott A., Turner, Benjamin L., and Dalling, James W.** 2016. "[An ectomycorrhizal nitrogen economy facilitates monodominance in a neotropical forest.](https://doi.org/10.1111/ele.12570)" *Ecology Letters* 19 (4):383–392. <https://doi.org/10.1111/ele.12570>

Heineman, Katherine D., **Turner, Benjamin L., and Dalling, James W.** 2016. "[Variation in wood nutrients along a tropical soil fertility gradient.](https://doi.org/10.1111/nph.13904)" *New Phytologist* 211 (2):440–454. <https://doi.org/10.1111/nph.13904>

**Ortiz, Orlando O.** and Croat, Thomas B. 2016. "[New Species of \*Anthurium\* section \*Calomystrium\* from Costa Rica and Panama.](https://doi.org/10.11646/phytotaxa.257.1.2)" *Phytotaxa* 257 (1):34. <https://doi.org/10.11646/phytotaxa.257.1.2>

## 2015

Heineman, Katherine D., Caballero, Pedro, Morris, Arturo, Velasquez, Carmen, Serrano, Kiria, Ramos, Nelly, Gonzalez, Jonathan, Mayorga, Luis, Corre, Marife D., and **Dalling, James W.** 2015. "[Variation in Canopy Litterfall Along a Precipitation and Soil Fertility Gradient in a Panamanian Lower Montane Forest.](https://doi.org/10.1111/btp.12214)" *Biotropica* 47 (3):300–309. <https://doi.org/10.1111/btp.12214>

**Mayor, Jordan,** Bahram, Mohammad, Henkel, Terry, Buegger, Franz, Pritsch, Karin, and Tedersoo, Leho. 2015. "Ectomycorrhizal impacts on plant nitrogen nutrition: emerging isotopic patterns, latitudinal variation and hidden mechanisms." *Ecology Letters* 18 (1):96–107. <https://doi.org/10.1111/ele.12377>

Steidinger, Brian S., **Turner, Benjamin L., Corrales, Adrianna, and Dalling, James W.** 2015. "[Variability in potential to exploit different soil organic phosphorus compounds among tropical montane tree species.](https://doi.org/10.1111/1365-2435.12325)" *Functional Ecology* 29 (1):121–130. <https://doi.org/10.1111/1365-2435.12325>

## 2014

**Moreno, Jorge Enrique,** Vergara, Diana, and **Jaramillo, Carlos A.** 2014. "[Las colecciones palinológicas del Instituto Smithsonian de Investigaciones Tropicales \(STR\), Panama.](https://doi.org/10.1111/1365-2435.12325)" *Boletín de la Asociación Latinoamericana de Paleobotánica y Palinología* 14:207–222.

## 2013

Andersen, Kelly M. and **Turner, Benjamin L.** 2013. "Preferences or plasticity in nitrogen acquisition by understorey palms in a tropical montane forest." *Journal of Ecology* 101 (3):819–825. <https://doi.org/10.1111/1365-2745.12070>

Bader, Maaïke Y., Reich, Theresa, Wagner, Sebastian, Gonzalez, A. Steve, and **Zotz, Gerhard.** 2013. "Differences in desiccation tolerance do not explain altitudinal distribution patterns of tropical bryophytes." *Journal of Bryology* 35 (1):47–56. <https://doi.org/10.1179/1743282012Y.0000000033>

**Higginbotham, Sarah J., Arnold, Anne Elizabeth,** Ibáñez, Alicia, Spadafora, Carmenza, **Coley, Phyllis D., and Kursar, Thomas A.** 2013. "[Bioactivity of Fungal Endophytes as a Function of](https://doi.org/10.1111/1365-2745.12070)

[Endophyte Taxonomy and the Taxonomy and Distribution of Their Host Plants.](#)" *PLoS ONE* 8 (9):e73192. <https://doi.org/10.1371/journal.pone.0073192>

Meyer, Ninon, **Moreno, Ricardo**, and **Jansen, Patrick A.** 2013. "[Distribution and conservation status of the Baird's tapir in Panama.](#)" *Tapir Conservation* 22 (30):10–13.

Sekerka, Lukáš, **Windsor, Donald M.**, and Staines, Charles L. 2013. "[A new species of \*Cephaloleia\* from Panama with description of larva and first record of orchid-feeding in \*Cephaloleiini\* \(Coleoptera: Chrysomelidae: Cassidinae\).](#)" *Acta Entomologica Musei Nationalis Pragae* 53 (1):303–314.

Wagner, Sebastian, **Zotz, Gerhard**, **Salazar Allen, Noris**, and Bader, Maaike Y. 2013. "[Altitudinal changes in temperature responses of net photosynthesis and dark respiration in tropical bryophytes.](#)" *Annals of Botany* 111 (3):455–465. <https://doi.org/10.1093/aob/mcs267>

## 2012

Andersen, K. M., Endara, M. J., **Turner, Benjamin L.**, and **Dalling, James W.** 2012. "[Trait-based community assembly of understory palms along a soil nutrient gradient in a lower montane tropical forest.](#)" *Oecologia* 168 (2):519–531. <https://doi.org/10.1007/s00442-011-2112-z>

Wcislo, Daniel O., **Vargas, Gloria**, **Ihle, Kate E.**, and **Wcislo, William T.** 2012. "[Nest construction behavior by the orchid bee \*Euglossa hyacinthina\*.](#)" *Journal of Hymenoptera Research* 29:15–20. <https://doi.org/10.3897/JHR.29.4067>

## 2011

Connelly, Scott, Pringle, Catherine M., **Whiles, Matt R.**, **Lips, Karen R.**, Kilham, Susan, and Brenes, Roberto. 2011. "Do tadpoles affect leaf decomposition in Neotropical streams?." *Freshwater Biology* 56 (9):1863–1875. <https://doi.org/10.1111/j.1365-2427.2011.02626.x>

Kilburn, Vanessa L., **Ibáñez, Roberto**, and Green, David M. 2011. "[Reptiles as potential vectors and hosts of the amphibian pathogen \*Batrachochytrium dendrobatidis\* in Panama.](#)" *Diseases of Aquatic Organisms* 97 (2):127–134. <https://doi.org/10.3354/dao02409>

Meisner, K. and **Zotz, Gerhard.** 2011. "Three morphs, one species." *Journal of the Bromeliad Society* 61:104–111.

**Zotz, Gerhard**, Wilhelm, Kerstin, and Becker, Annette. 2011. "Heteroblasty-A Review." *Botanical Review* 77 (2):109–151. <https://doi.org/10.1007/s12229-010-9062-8>

## 2010

Adamek, Markus, Corre, Marife D., and Hölischer, Dirk. 2010. "Responses of fine roots to experimental nitrogen addition in a tropical lower montane rain forest, Panama." *Journal of Tropical Ecology* 27 (1):73–81. <https://doi.org/10.1017/s0266467410000507>

Andersen, Kelly M., Corre, Marife D., **Turner, Benjamin L.**, and **Dalling, James W.** 2010. "[Plant-soil associations in a lower montane tropical forest: physiological acclimation and herbivore-](#)

[mediated responses to nitrogen addition.](#)" *Functional Ecology* 24 (6):1171–1180.  
<https://doi.org/10.1111/j.1365-2435.2010.01731.x>

Andersen, Kelly M., **Turner, Benjamin L.**, and **Dalling, James W.** 2010. "[Soil-based habitat partitioning in understorey palms in lower montane tropical forests.](#)" *Journal of Biogeography* 37 (2):278–292. <https://doi.org/10.1111/j.1365-2699.2009.02192.x>

Brown, Jason L., Maan, Martine E., **Cummings, Molly E.**, and Summers, Kyle. 2010. "[Evidence for selection on coloration in a Panamanian poison frog: a coalescent-based approach.](#)" *Journal of Biogeography* 37 (5):891–901. <https://doi.org/10.1111/j.1365-2699.2009.02260.x>

**Dalling, James W.**, Morris Valdes, Arturo, Caballero Ruiz, Pedro, Andersen, Kelly, and **Turner, Benjamin L.** 2010. "[La dinámica del bosque de montaña en la Reserva Forestal de Fortuna, Chiriquí.](#)" *Tecnociencia* 12 (1):119–135.

Kilburn, Vanessa L., **Ibáñez, Roberto, Sanjur, Oris I., Bermingham, Eldredge,** Suraci, Justin P., and Green, David M. 2010. "Ubiquity of the Pathogenic Chytrid Fungus, *Batrachochytrium dendrobatidis*, in Anuran Communities in Panama." *Ecohealth* 7 (4):537–548.  
<https://doi.org/10.1007/s10393-010-0634-1>

Navarro, Sara Pinzon, Jurado Rivera, Jose A., Gomez Zurita, Jesus, Lyal, Christopher H. C., and Vogler, Alfred P. 2010. "[DNA profiling of host-herbivore interactions in tropical forests.](#)" *Ecological Entomology* 35 (1):18–32. <https://doi.org/10.1111/j.1365-2311.2009.01145.x>

Pinzon-Navarro, Sara, **Barrios, Hector,** Murria, Cesc, Lyal, Christopher H. C., and Vogler, Alfred P. 2010. "DNA-based taxonomy of larval stages reveals huge unknown species diversity in Neotropical seed weevils (genus *Conotrachelus*): relevance to evolutionary ecology." *Molecular phylogenetics and evolution* 56 (1):281–293. <https://doi.org/10.1016/j.ympev.2010.02.022>

## 2009

Adamek, Markus, Corre, Marife D., and Hölscher, Dirk. 2009. "Early effect of elevated nitrogen input on above-ground net primary production of a lower montane rain forest, Panama." *Journal of Tropical Ecology* 25 (6):637–647. <https://doi.org/10.1017/S0266467409990253>

Holscher, Dirk, Dunker, Bianca, Harbusch, Marco, and Corre, Marife D. 2009. "[Fine root distribution in a lower montane rain forest of Panama.](#)" *Biotropica* 41 (3):312–318.  
<https://doi.org/10.1111/j.1744-7429.2009.00492.x>

Koehler, Birgit, Corre, Marife D., Veldkamp, Edzo, Wullaert, Hans, and **Wright, S. Joseph.** 2009. "[Immediate and long-term nitrogen oxide emissions from tropical forest soils exposed to elevated nitrogen input.](#)" *Global Change Biology* 15 (8):2049–2066.  
<https://doi.org/10.1111/j.1365-2486.2008.01826.x>

Riveros, Andre J., Hernández, Edgar J., and **Wcislo, William T.** 2009. "[Nesting Biology of \*Euglossa dodsoni\* Moure \(Hymenoptera: Euglossinae\) in Panama.](#)" *Journal of the Kansas Entomological Society* 82 (2):210–214. <https://doi.org/10.2317/JkES808.15.1>

Smith, Kevin G., **Lips, Karen R.**, and Chase, Jonathan M. 2009. "[Selecting for extinction: nonrandom disease-associated extinction homogenizes amphibian biotas.](https://doi.org/10.1111/j.1461-0248.2009.01363.x)" *Ecology Letters* 12 (10):1069–1078. <https://doi.org/10.1111/j.1461-0248.2009.01363.x>

**Zotz, Gerhard** and Reuter, Norman. 2009. "[The effect of exposure to sea water on germination and vegetative growth of an epiphytic bromeliad.](https://doi.org/10.1017/S0266467409006014)" *Journal of Tropical Ecology* 25:311–319. <https://doi.org/10.1017/S0266467409006014>

## 2008

**Angehr, George R.**, Engleman, Dodge, and Engleman, Lorna. 2008. *A bird-finding guide to Panama*. New York: Cornell University Press.

Weir, Jason T., **Bermingham, Eldredge, Miller, Matthew J.**, Klicka, John, and Gonzalez, Maribel A. 2008. "[Phylogeography of a Morphologically Diverse Neotropical Montane Species, The Common Bush Tanager \(\*Chlorospingus ophthalmicus\*\).](https://doi.org/10.1016/j.ympev.2008.02.004)" *Molecular Phylogenetics and Evolution* 47 (2):650–664. <https://doi.org/10.1016/j.ympev.2008.02.004>

**Woodhams, Douglas**, Kilburn, Vanessa L., Reinert, Laura, Voyles, Jamie, **Medina, Daniel, Ibáñez, Roberto**, Hyatt, Alex, Boyle, Donna, Pask, James D., Green, David, and Rollins-Smith, Louise. 2008. "[Chytridiomycosis and amphibian population declines continue to spread eastward in Panamá.](https://doi.org/10.1007/s10393-008-0190-0)" *EcoHealth* 5 (3):268–274. <https://doi.org/10.1007/s10393-008-0190-0>

## 2007

Capaldi, E. A., Flynn, C. J., and **Wcislo, W. T.** 2007. "Sex Ratio and Nest Observations of *Euglossa Hyacinthina* (Hymenoptera : Apidae : Euglossini)." *Journal of the Kansas Entomological Society* (4): 395.

Capaldi, Elizabeth A., Flynn, Corey J., and **Wcislo, William T.** 2007. "[Sex ratio and nest observations of \*Euglossa hyacinthina\* \(Hymenoptera: Apidae: Euglossini\).](https://doi.org/10.2317/0022-8567(2007)80[395:SRANOO]2.0.CO)" *Journal of the Kansas Entomological Society* 80 (4):395–399. [https://doi.org/10.2317/0022-8567\(2007\)80\[395:SRANOO\]2.0.CO](https://doi.org/10.2317/0022-8567(2007)80[395:SRANOO]2.0.CO)

**Crawford, Andrew J., Bermingham, Eldredge,** and Polania S., Carolina. 2007. "[The role of tropical dry forest as a long-term barrier to dispersal: a comparative phylogeographical analysis of dry forest tolerant and intolerant frogs.](https://doi.org/10.1111/j.1365-294X.2007.03524.x)" *Molecular Ecology* 16 (22):4789–4807. <https://doi.org/10.1111/j.1365-294X.2007.03524.x>

Taerum, Stephen J., Cafaro, Matias J., Little, Ainslie E. F., Schultz, Ted R., and Currie, Cameron Robert. 2007. "[Low host-pathogen specificity in the leaf-cutting ant-microbe symbiosis.](https://doi.org/10.1098/rspb.2007.0431)" *Proceedings of the Royal Society B: Biological Sciences* 274 (1621):1971–1978. <https://doi.org/10.1098/rspb.2007.0431>

## 2006

**Lips, Karen R.**, Brem, Forrest, Brenes, Roberto, Reeve, John D., Alford, Ross A., Voyles, Jamie, Carey, Cynthia, Livo, Lauren, Pessier, Allan P., and Collins, James P. 2006. "[Emerging](https://doi.org/10.1111/j.1365-294X.2006.02824.x)

[Infectious Disease and the Loss of Biodiversity in a Neotropical Amphibian Community.](#)" *Proceedings of the National Academy of Sciences of the United States of America* (9): 3165-3170.

**Whiles, Matt R., Lips, Karen R.,** Pringle, Catherine M., Kilham, Susan K., Kilham, Susan S., Bixby, Rebecca J., Brenes, Roberto, Connelly, Scott, Colon-Gaud, Jose Checo, Hunte-Brown, Meshagae, Huryn, Alexander D., Montgomey, Chad, and Peterson, Scot. 2006. "[The Effects of Amphibian Population Declines on the Structure and Function of Neotropical Stream Ecosystems.](#)" *Frontiers in Ecology and the Environment* (1): 27–34.  
[https://doi.org/10.1890/1540-9295\(2006\)004\[0027:TEOAPD\]2.0.CO](https://doi.org/10.1890/1540-9295(2006)004[0027:TEOAPD]2.0.CO)

## 2005

**Crawford, Andrew J.** and Smith, Eric N. 2005. "[Cenozoic Biogeography and Evolution in Direct-Developing Frogs of Central America \(Leptodactylidae: Eleutherodactylus\) As Inferred From a Phylogenetic Analysis of Nuclear and Mitochondrial Genes.](#)" *Molecular Phylogenetics and Evolution* (3): 536–555.

Fornara, D. A. and **Dalling, James W.** 2005. "[Seed Bank Dynamics in Five Panamanian Forests.](#)" *Journal of Tropical Ecology* (2): 223–226.

Fornara, D. A. and **Dalling, James W.** 2005. "[Post-dispersal removal of seeds of pioneer species from five Panamanian forests.](#)" *Journal of Tropical Ecology* 21 (1):79–84.

Mallarino, Ricardo, **Bermingham, Eldredge,** Willmott, Keith R., Whinnett, Alaine, and **Jiggins, Chris D.** 2005. "[Molecular Systematics of the Butterfly Genus Ithomia \(Lepidoptera: Ithomiinae\): a Composite Phylogenetic Hypothesis Based on Seven Genes.](#)" *Molecular Phylogenetics and Evolution* (3): 625–644.

## 2004

Holtum, Joseph A. M., **Aranda, Jorge E., Virgo, Aurelio,** Gehrig, Hans H., and **Winter, Klaus.** 2004. "[13C Values and Crassulacean Acid Metabolism in Clusia Species From Panamá.](#)" *Trees Structure and Function* 18 (6):658–668.

Joseph, Leo, Wilke, Thomas, **Bermingham, Eldredge,** Alpers, Deryn, and **Ricklefs, Robert E.** 2004. "[Towards a Phylogenetic Framework for the Evolution of Shakes, Rattles, and Rolls in Myiarchus Tyrant-Flycatchers \(Aves: Passeriformes: Tyrannidae\).](#)" *Molecular Phylogenetics and Evolution* (1): 139–152.

Pasteels, Jacques M., Daloz, Desire, de Biseau, Jean-Christophe, Termonia, Arnaud, and **Windsor, Donald M.** 2004. "Patters in Host-Plant Association and Defensive Toxins Produced by Neotropical Chrysomeline Beetles." in *New Developments in the Biology of Chrysomelidae*, edited by Jolivet, Pierre H., Santiago-Blay, Jorge A., and Schmitt, M., 669. SPB Academic Publications.

## 2003

- Gehrig, Hans H., **Aranda, Jorge E.**, Cushman, Mary Ann, **Virgo, Aurelio**, Cushman, J. H., Hammel, Barry E., and **Winter, Klaus**. 2003. "[Cladogram of Panamanian \*Clusia\* Based on Nuclear DNA: Implications for the Origins of Crassulacean Acid Metabolism.](#)" *Plant Biology* 5 (1):59–70.
- Lips, Karen R.**, Green, Earl, and Papendick, Rebecca. 2003. "[Chytridiomycosis in Wild Frogs From Southern Costa Rica.](#)" *Journal of Herpetology* (1): 215–128.
- Lips, Karen R.**, Reeve, John D., and Witters, Lani R. 2003. "[Ecological Traits Predicting Amphibian Population Declines in Central America.](#)" *Conservation Biology* (4): 1078–1088.
- Soucy, S. L., Giray, Tugrul, and **Roubik, David Ward**. 2003. "[Solitary and Group Nesting in the Orchid Bee \*Euglossa Huacinthina\* \(Hymenoptera, Apidae\).](#)" *Insectes Sociaux* (3): 248–255.
- Zeh, David W.**, **Zeh, Jeanne A.**, and Bonilla, Melvin M. 2003. "[Phylogeography of the Giant Harlequin Beetle \(\*Acrocinus Longimanus\*\).](#)" *Journal of Biogeography* (5): 747–753.
- Zeh, Jeanne A.**, **Zeh, David W.**, and Bonilla, M. M. 2003. "[Phylogeography of the Harlequin Beetle-Riding Pseudoscorpion and the Rise of the Isthmus of Panamá.](#)" *Molecular Ecology* (10): 2759.

## 2001

- Henry, Thomas J. 2001. "Revision of the Orthotyline Plant Bug Genus *Hyalochloria*, With a Key and Descriptions of Four New Species (Hemiptera: Heteroptera: Miridae)." *Journal of the New York Entomological Society* (2): 235–262.
- Holtum, Joseph A. M. and **Winter, Klaus**. 2001. "[Are Plants Growing Close to the Floors of Tropical Forests Exposed to Markedly Elevated Concentrations of Carbon Dioxide?](#)" *Australian Journal of Botany* 49 (5):629–636.
- Lyteyn, James L. 2001. "Two New Species and Two New Combinations in Mesoamerican Ericaceae." *Brittonia* (3): 437–446.
- Nicholson, Lirsten E., **Ibáñez, Roberto**, **Jaramillo, Cesar A.**, and **Lips, Karen R.** 2001. "Morphological Variation in the Tropical Anole, *Anolis Casildae* (Squamata: Polychrotidae)." *Revista De Biología Tropical* (2): 709–714.
- Samudio, Rafael. 2001. "Panamá." in *Bosques Nublados Del Neotrópico*, edited by Brown, Martin Kapelle and A. D., 371. Editorial INBio.
- Vargas, J. J. and Castrellon M., W. A. 2001. "Patrones Reproductivos En Murcielagos Frugivoros En La Reserva Forestal De Fortuna, Enero a Diciembre De 1998."

## 2000

- Budel, Burkhard, Meyer, Angelika, **Salazar Allen, Noris**, **Zotz, Gerhard**, and Lange, Otto L. 2000. "Macrolichens of Montane Rain Forests in Panama, Province Chiriquí." *The Lichenologist (London)* (6): 539–551.

Gonzalez Guerra, Y. E. and Tapia Castillo, M. C. 2000. "Diversidad De Roedores En Cerro Batipa y La Reserva Forestal Fortuna, Provincia De Chiriqui, Panamá."

**Mangan, Scott A.** and Adler, Gregory H. 2000. "[Consumption or Arbuscular Mycorrhizal Fungi by Terrestrial and Arboreal Small Mammals in a Panamanian Cloud Forest.](#)" *Journal of Mammalogy* (2): 563–570.

Orellana B., Andres M. 2000. "Palatabilidad, Mimetismo y Defensas Químicas En Polillas Dioprinae (Lepidoptera: Notodontidae)."

Pierce, Simon and **Aranda, Jorge E.** 2000. "Weraubia Lutheri, a New Species from Central Panamá." *Journal of the Bromeliad Society* (5): 206–212.

**Roubik, David Ward.** 2000. "Deceptive Orchids With Meliponini As Pollinators." *Plant Systematics and Evolution* (1-4): 271–279.

## 1999

Cox, M. L. and **Windsor, Donald M.** 1999. "The First Instar Larva of Aulacoscelis Appendiculata N. Sp. (Coleoptera: Chrysomelidae: Aulacoscelinae) and Its Value in the Placement of the Aulacoscelinae." *Journal of Natural History* 1049–1087.

Cox, M. L. and **Windsor, Donald M.** 1999. "[The First Instar Larva of Aulacoscelis Sp. and Megascelis Puella Lacordaire \(Coleoptera: Chrysomelidae: Aulacoscelinae, Megascelinae\) and Their Value in the Placement of the Aulacoscelinae and Megascelinae.](#)" in *Advances in Chrysomelidae Biology*, edited by Cox, M. L., 51. Backhuys Publishers.

**Ibáñez, Roberto.** 1999. "Report From Panamá." *Froglog* (33): 1.

**Lips, Karen R.** 1999. "[Mass Mortality and Population Declines of Anurans at an Upland Site in Western Panamá.](#)" *Conservation Biology* (1): 117.

Patino, Sandra, **Gilbert, Gregory S., Zotz, Gerhard,** and Tyree, Melvin T. 1999. "Growth and Survival of Aerial Roots of Hemiepiphytes in a Lower Montane Tropical Forest in Panamá." *Journal of Tropical Ecology* 651–665.

Summers, Kyle, Weigt, Lee A., Boag, Peter, and **Bermingham, Eldredge.** 1999. "The Evolution of Female Parental Care in Poison Frogs of the Genus Dendrobates: Evidence From Mitochondrial DNA Sequences." *Herpetologica* (2): 254–270.

Suzuki, Kunio and **Windsor, Donald M.** 1999. "The Internal Reproductive System of Panamanian Aulacoscelis Sp. (Coleoptera: Chrysomelidae, Aulacoscelinae) and Comments on the Systematic Position of the Subfamily." *Entomological Science* (3): 391–398.

**Windsor, Donald M.,** Ness, Joshua, Gomez, Luis Diego, and Jolivet, Pierre H. 1999. "Species of Aulacoscelis Duponchel and Chevrolat (Chrysomelidae) and Nomotus Gorham (Languriidae) Feed on Fronds of Central American Cycads." *The Coleopterists Bulletin* (3): 217–231.

## 1998



**Zotz, Gerhard**, Tyree, Melvin T., Patino, Sandra, and Carlton, Matthew R. 1998. "Hydraulic Architecture and Water Use of Selected Species From a Lower Montane Rainforest in Panamá." *Trees* 302–309.

#### 1997

Anderson, Robert S. 1997. "New species and new records of *Smicraulax* Pierce 1908 and *Cionomimus* Marshall 1939 from Central America (Curculionidae Curculioninae Anthonomini)." *Tropical Zoology* 10 (2):255–270.

Eltz, Thomas, Schmid, Michael, and **Roubik, David Ward**. 1997. "Haploid karyotypes of two species of orchid bees (Hymenoptera: apidae, Euglossini)." *Journal of the Kansas Entomological Society* 70 (2):142–144.

**Zotz, Gerhard**, Buedel, Burkhard, Meyer, Angelika, Zellner, Hans, and Lange, Otto L. 1997. "Water relations and CO<sub>2</sub> exchange of tropical bryophytes in a lower montaner rainforest in Panama." *Botanica Acta* 110:9–17.

#### 1996

Ashe, James S. and Lingafelter, Steven W. 1996. "Revision of *Gansia* sharp of Mexico and Central America (Coleoptera: Staphylinidae; Aleocharinae)." *Journal of the New York Entomological Society* 103 (3):251–280.

Wolda, Hendrik and Chandler, Donald S. 1996. "Diversity and seasonality of tropical Pselaphidae and Anthicidae (Coleoptera)." *Koninklijke Nederlandse Akademie van Wetenschappen* 99 (3-4):313–333.

#### 1995

Gonzalez, Antonio G., Bazzocchi, Isabel L., Moujir, Laila, Ravelo, Angel G., **Correa A., Mireya D.**, and Gupta, Mahabir P. 1995. "Xanthine oxidase inhibitory activity of some Panamanian plants from Celastraceae and Lamiaceae." *Journal of ethnopharmacology* 46 (1):25–29.

#### 1994

Arosemena, Fernando A. and **Ibáñez, Roberto**. 1994. "Un saurio nuevo del genero *Anolis* (Reptilia, Polychridae), grupo fuscoauratus, de las Tierras Altas de Chiriqui, Panama [A new saurian of the genus *Anolis* (Reptilia, Polychridae), fuscoauratus group, of the highlands of Chiriqui, Panama]." *Caribbean Journal of Science* 30 (3-4):222–227.

Lange, Otto L., Buedel, Burkhard, Zellner, Hans, **Zotz, Gerhard**, and Meyer, Angelika. 1994. "Field Measurements of Water Relations and CO<sub>2</sub> Exchange of the Tropical, Cyanobacterial Basidiolichen *Dictyonema glabratum* in a Panamanian Rainforest." *Botanica Acta* 107 (5):279–290.

Olson, David M. 1994. "The Distribution of Leaf Litter Invertebrates Along a Neotropical Altitudinal Gradient." *Journal of Tropical Ecology* 10:129–150.

## 1993

Arosemena, Fernando A. and **Ibáñez, Roberto**. 1993. "A new species of Anolis (Squamata: Iguanidae) of the fuscoauratus group from Fortuna, Panama [Una Especie Nueva de Anolis (Squamata: Iguanidae) del Grupo fuscoauratus de Fortuna, Panamá]." *Revista de Biología Tropical* 41 (2):267–272.

**Coley, Phyllis D., Kursar, Thomas A.,** and Machado, Jose Luis. 1993. "Colonization of Tropical Rain Forest Leaves by Epiphylls: Effects of Site and Host Plant Leaf Lifetime." *Ecology* 74 (2):619–623.

Olson, Storrs L. 1993. "Integradation Between the Bush-Tanagers *Chlorospingus punctulatus* and *C. ophthalmicus* in Western Panama (Aves: Thraupidae)." *The Auk* 110 (1):148–150.

**Valdespino, Ivan A.** 1993. "Notes on Neotropical Selaginella (Selaginellaceae), Including New Species from Panama." *Brittonia* 45 (4):315–327.

## 1991

Arosemena, Fernando A., **Ibáñez, Roberto,** and Sousa, Francisca de. 1991. "Una Especie Nueva de Anolis squamata (Iguanidae) del Grupo latifrons de Fortuna, Panamá." *Revista de Biología Tropical* 39 (2):255–262.

Arosemena, Fernando A., **Ibáñez, Roberto,** and Sousa, Francisca de. 1991. "A New Species of Anolis Squamata Iguanidae of the Latifrons Group from Fortuna Panama." *Revista de Biología Tropical*

Flowers, R. W. 1991. "Diversity of Stream-Living Insects in Northwestern Panamá." *Journal of the National American Benthological Society* 10 (3):322–334.

Santamaria Espinosa, Dilia. 1991. "Estudio Preliminar de los musgos cortícolas de Fortuna, Provincia de Chiriquí (Proyecto Hidroeléctrico Fortuna - Fase II)."

Sporle, Jurg, Becker, Hans, **Salazar Allen, Noris,** and Gupta, Mahabir P. 1991. "Lipophilic Constituents from the Panamanian Liverwort *Monoclea gottschei* Subsp. *neotropica*." *Journal of Hattori Botanical Laboratories* 70:151–155.

Sporle, Jurg, Becker, Hans, **Salazar Allen, Noris,** and Gupta, Mahabir P. 1991. "Occurrence of (-)-Geosmin and other terpenoids in an axenic culture of the liverwort *Symphyogyna brongniartii*." *Zeitschrift fur Naturforschung* 46:183–188.

## 1990

Arosemena, Fernando A. 1990. "Los Anolis de Fortuna." *Publicaciones Técnicas* 1:5–31.

Johnston, Marla. 1990. "Estudio Preliminar de los musgos epipétricos, terrestres y de los que crecen en troncos en descomposición de Fortuna (Proyecto Hidroeléctrico Fortuna - Fase II)."

Ochi, Harumi and **Salazar Allen, Noris.** 1990. "Bryum incrassatolimbatum New to Panama, with First Description of Its Sporophyte." *Bryologist* 93 (3):286–287.

**Rubinoff, Ira and Leigh, Egbert Giles, Jr.** 1990. "Dealing with Diversity: The Smithsonian Tropical Research Institute and Tropical Biology." *Trends in Ecology and Evolution* 5 (4):115–118.

### **1989**

Choe, Jae Chun. 1989. "Zorotypus gurneyi, New Species, from Panama and Redescription of *Z. barberi* Gurney (Zoraptera: Zorotypidae)." *Annals of the Entomological Society of America* 82 (2):149–155.

### **1988**

Brindle, Alan. 1988. "Dermaptera at Light in Panama." *The Entomologist's Monthly Magazine* 124 (1484-87):45–56.

Jungfer, Karl Heinz. 1988. "Froschlurche von Fortuna, Panama. 1. Microhylidae, Ranidae, Bufonidae, Hylidae." *Herpetofauna* 10:25–34.

Jungfer, Karl Heinz. 1988. "Froschlurche von Fortuna, Panama. 3. Leptodactylidae." *Herpetofauna* 10:15–21.

Jungfer, Karl Heinz. 1988. "Froschlurche von Fortuna, Panama. 2. Hylidae (2), Centrolenidae, Dendrobatidae." *Herpetofauna* 10:6–12.

Tanaka, Seiji. 1988. "Field Work in Panama, Central America - On Adult Diapause in *Stenotarsus rotundus* (Endomychidae) - 5." *Insectarium* 25:356–362.

### **1987**

Flowers, R. W. 1987. "New Species and Life Stages of *Atopophlebia* (Ephemeroptera: Leptophlebiidae: Atalophlebiinae)." *Aquatic Insects* 9 (4):203–209.

Howden, Henry F. and Gill, B. D. 1987. "New Species and New Records of Panamanian and Cost Rican Scarabaeinae (Coleoptera: Scarabaeidae)." *The Coleopterists Bulletin* 41 (3):201–224.

Wolda, Hendrik. 1987. "Altitude, habitat and tropical insect diversity." *Biological Journal of the Linnean Society* 30 (4):313–323.

### **1986**

Chandler, Donald S. and Wolda, Hendrik. 1986. "Seasonality and diversity of *Caccopletus*, with a review of the genus and description of a new genus, *Caccoplectinus* (Coleoptera: Pselaphidae)." *Zool.Jb.Syst.* 113:469–524.

### **1985**

Broadhead, Edward and Wolda, Hendrik. 1985. "The diversity of Psocoptera in two tropical forests in Panama." *Journal of Animal Ecology* 54 (3):739–754.

Dressler, Robert L. 1985. "The orchid flora of Panamá." in *The Botany and Natural History of Panamá: La Botánica e Historia Natural de Panamá*, edited by D'Arcy, William G. and **Correa A., Mireya D.**, 25–28. Saint Louis, Missouri: Missouri Botanical Garden.

Wolda, Hendrik and Estribi, Miguel A. 1985. "Seasonal distribution of the Large Sloth Beetle *Uroxys gorgon* Arrow (Scarabaeidae; Scarabaeinae) in light traps in Panama." in *The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas*, edited by Montgomery, G. Gene., 313–318. Washington, D.C.: Smithsonian Institution Press.

#### **1984**

Broadhead, Edward. 1984. "Adaptations for fungal grazing in Lauzaniis flies." *Journal of Natural History* 18:639–649.

Him F., Jose J. 1984. "Estudio de las angiospermas del Valle de Hornito y los cerros Fortuna y Pinola, ubicados en el Proyecto Hidroeléctrico Fortuna."

#### **1983**

DeLong, Dwight M., Wolda, Hendrik, and Estribi, Miguel A. 1983. "The Ponana (Homoptera, Cicadellidae) of Panama." *Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen, Series C* 86 (4):455–474.

Dressler, Robert L. 1983. "Die Gattung *Chondrorhyncha* in Panama mit zwei neuen Arten: *Chondrorhyncha crassa* und *Chondrorhyncha eburnea*." *Die Orchidee* 34:220–226.

Petersen, J. L., Adames, Abdiel J., and **De Leon, Luis Fernando**. 1983. "Bionomics and Control of Black Flies Diptera Simuliidae at the Fortuna Hydro Electric Project Panama." *Journal of medical entomology* 20 (4):399–408.

Wolda, Hendrik. 1983. "Diversity, diversity indices and tropical cockroaches." *Oecologia* 58 (3):290–298.

Wolda, Hendrik, Fisk, Frank W., and Estribi, Miguel A. 1983. "Faunistics of Panamanian cockroaches (Blattaria)." *Uttar Pradesh Journal of Zoology* 3 (1):1–9.

#### **1982**

DeLong, Dwight M. and Wolda, Hendrik. 1982. "New species of *Curtara*, *Polana* and *Acuera* (Homoptera: Cicadellidae, Gyponinae) from Panama, Peru, Bolivia, and Venezuela." *Entomologica Scandinavica* 13:301–311.

Dressler, Robert L. 1982. "New species of *Euglossa*. III. The *bursigera* species group (Hymenoptera: Apidae)." *Revista de Biología Tropical* 30:131–140.

McElravy, E. P., Wolda, Hendrik, and Resh, V. H. 1982. "Seasonality and Annual Variability of Caddis-Fly Adults Trichoptera in a Nonseasonal Tropical Environment." *Archiv fuer Hydrobiologie* 94 (3):302–317.

#### **1981**

Flowers, R. W. 1981. "Orchids of Fortuna, Panama." *American Orchid Society Bulletin* 50 (8):920–924.

Wolda, Hendrik and Fisk, Frank W. 1981. "Seasonality of tropical insects. II. Blattaria in Panama." *Journal of Animal Ecology* 50:827–838.

### **1980**

Flowers, R. W. 1980. "Atopophlebia fortunensis, a new genus and species from Panama (Leptophlebiidae: Ephemeroptera)." *The Florida Entomologist* 63 (1):162–165.

Wolda, Hendrik. 1980. "Fluctuaciones estacionales de insectos en Hornitos (Fortuna) Provincia de Chiriquí." *ConCiencia* 7:8–10.

### **1978**

Wolda, Hendrik. 1978. "Estudios ecológicos sobre insectos en la región de Fortuna y su importancia para la conservación de la naturaleza." *ConCiencia* 5 (1):3–6.

### **1977**

Adames, Abdiel J. 1977. "Evaluación ambiental y efectos del Proyecto Hidroeléctrico La Fortuna." *Lotería* 254, 255, 256:1–531.

**Cooke, Richard G.** 1977. "Recursos arqueológicos. In: Evaluación ambiental y efectos del Proyecto Hidroeléctrico Fortuna. Informe Final, Apéndice no. 7." *Revista Lotería* 254-256:399–444.

Dressler, Robert L. 1977. "Orquídeas colectadas en Fortuna, 1976. In: Evaluación ambiental y efectos del Proyecto Hidroeléctrico Fortuna." *Revista Lotería* 254-256:209–216.

Robinson, Michael H. and Robinson, Barbara C. 1977. "Association between flies and spiders: bibliocomensalism and dipsoparasitism?." *Psyche* 84 (2):150–157.

Wolda, Hendrik. 1977. "Ecología de insectos en la Provincia de Chiriquí." *ConCiencia* 4 (1):3–5.