

List of publications

Falguni Guharay

1. Books

- 1999 Díaz, U, Guharay, F. Miranda, F & Zamora, M. Integrated Pest management in Cabbage, CATIE, Turrialba, Costa Rica (in Spanish) pp 103. Technical Series CATIE No 38
- 2000 Guharay, F., Monterrey, J., Monterroso, D. & Staver, C. Integrated Pest management in Coffee, CATIE, Turrialba, Costa Rica (in Spanish) pp 264. Technical series CATIE No 39
- 2001 Guharay, F. Zamora, N & Rossini, L Biological Control of vectors of malaria, MOLISV, Managua, Nicaragua (in Spanish) pp 150. Technical Series MINSa No 1
- 2003 Guharay, F. Zamora, N & Rossini, L. Biological Control of rodents, CATIE, Turrialba, Costa Rica (in Spanish) pp 98. ISBN 99924-0-240-7
- 2004 Aguilar, A & Guharay, F. (ed.). Basic concepts of Integrated Pest Management, CATIE, Turrialba, Costa Rica (in Spanish) pp 81. ISBN 99924-0-349-7
- 2004 Samper, M, Gómez, J., Guharay, F., Hooker, R & Valle, D. Environmental governance and innovation in dry and humid tropics of Nicaragua, CATIE, Turrialba, Costa Rica 2004. pp 69. ISBN 99924-0-333-0
- 2004 Carballo, M & Guharay, F. (ed.) Biological control of agricultural pests and diseases, CATIE, Turrialba, Costa Rica (in Spanish) pp 224. ISBN 99924-0-316-0
- 2006 Guharay, F. & Barahona, L. Strengthening local capacity. (in Spanish) CANTERA, Managua, Nicaragua. pp 93.
- 2010 Guharay, F., Villar, L. Gonzalez, M. y Chaput. P. Rural families improving the productivity and quality of their coffee. (In Spanish). AECID, MAGFOR, Fundación ETEA, Managua, Nicaragua. ISBN 978-99924-55-37-1
- 2010 Guharay, F. & Chaput, P (ed) Peasant lives and food sovereignty: Voices from Central America. Fundación Luciérnaga (in Spanish) pp 128. SIMAS. ISBN: 978-99924-55-35-7
- 2012 Alonzo, S., Avila, C., Perdomo, C., Borge, S., Chaput, P., Guharay, F. & Meyrat, A. Preparing the conditions for REDD: case of Sustainable Community Agroforestry project in Central America. (In Spanish) Nordic Development Fund, Oslo, Nicaragua. ISBN: 978-99924-55-42-5
- 2012 Muñoz, D., Viaña, J., Guharay, F. et al. Small producers in Latin America: New ways of thinking and acting in markets position. London/The Hague, Netherlands/La Paz, Bolivia: IIED/HIVOS/Mainumby. ISBN 978-1-84369-920-0
- 2012 Rossini, L., Guharay, F., Vallecillo, R., Lopez, D., Hernandez, J, Baca, P. y Leiva, F. How to develop participatory management plans for medium and high altitude watersheds. (In Spanish) UNOPS, Managua, Nicaragua. ISBN 978-99924-55-41-8
- 2012 Rossini, L., Guharay, F., Vallecillo, R., Lopez, D., Hernandez, J, Baca, P. y Leiva, F. Current state of medium and high watershed of river Coco in Nicaragua. (In Spanish) UNOPS, Managua, Nicaragua. ISBN: 978-99924-55-39-5
- 2012 Rossini, L., Guharay, F., Vallecillo, R., López, D., Hernández, J, Baca, P. y Leiva, F. (2012). Plans for management of medium and high watershed of river Coco in Nicaragua. (In Spanish) UNOPS, Managua, Nicaragua. ISBN: 978-99924-55-40-1

- 2013 Avila, A., Campos, M., Guharay, F. & Camacho, A. Learning and innovating about Cocoa agroforestry systems: collection of 10 guides. (In Spanish) Lutheran World Relief, Managua, Nicaragua. <http://www.cacaomovil.com>
- 2014 Chaput, P., Guharay, F., Meyrat, A., Gutierrez, V.H, & Schion, M. Improving competitiveness of forestry SME's in Central America: Lessons from a regional project. (In Spanish). CATIE, Turrialba, Costa Rica. ISBN: 978-99924-968-9-3.
- 2014 Chaput, P., Guharay, F., Meyrat, A., Gutierrez, V.H, & Schion, M. Improving competitiveness of forestry SME's in Central America: Guide for implementing an emerging model. (In Spanish). CATIE, Turrialba, Costa Rica. ISBN: 978-99924-968-8-6
- 2015 Toruño, I. Guharay, F. y Mena, M. Establishment and management of silvopastoral systems. CRS, CIAT, USDA. (In Spanish). 72 p. Managua, Nicaragua. Technical Series CRS
- 2015 Statsenko, L. y Guharay, F. Processing of milk and elaboration of milk products. CRS, Progres, CIAT, USDA. (In Spanish). pp 121 Managua, Nicaragua. Technical series CRS

2. Chapter in books

- 1997 Grimm, C & Guharay, F. Potential of Entomopathogenous fungi for the biological control of true bugs in physic nut plantations in Nicaragua. in Biofuels and Industrial Products from *Jatropha curcas*, Gubitze et al. (ed.) Dv-Verlag fur die Technische Universitat Graz, Austria. pp. 40-46.
- 2003 Staver, C. & Guharay, F. Building IPM Programs in Central America: Experiences of CATIE in Integrated Pest Management in the Global Arena, Edited by K. M. Marelda, D. Dakouo and D. Mota-Sanchez, CAB International, UK pp 477-492
- 2005 Staver, C & Guharay, F. Beyond Integrated Pest Management: from farm household to learning capacity and innovation systems. In Gonsalves, J., T. Becker, A. Braun, D. Campilán, H. De Chavez, E. Fajber, M. Kaporiri, J. Rivaca-Caminade and R. Vernooij (eds). Participatory Research and Development for Sustainable Agriculture and Natural Resource Management: A Sourcebook. IPC-UPWARDS, Philippines; IDRC, Canada; IFAD,, Italy
- 2005 Morales, F, Sediles, A., Llano, A & Guharay, F. Whiteflies as vectors of Viruses in legume and vegetable mixed cropping systems in the tropical lowlands of Central America: Nicaragua. In Whitefly and Whitefly-borne viruses in the tropics: Building a knowledge base for Global action. Anderson. P & Morales, F. (ed.). CIAT, Cali, Colombia. Pp 210-216
- 2008 Ginzo, H., Valle Lima, S., Bellamy, S., Gomes de Castro, A., Guharay, F. & Saldaña, R. Agricultural Knowledge and Technology in Latin America and the Caribbean: Plausible Scenarios for Sustainable Development. In International assessment of agricultural knowledge, science and technology for development (IAASTD): Latin America and the Caribbean (LAC) report / edited by Beverly D. McIntyre. IAASTD.

3. Refereed Publications

A. Published in SCI journals.

- 1984 Guharay, F. & Sachs, F. Stretch-activated single ion channel currents in tissue-cultured embryonic chick skeletal muscle. *The Journal of physiology* 352 (1): 685-701
- 1985 Guharay, F. & Sachs, F. Mechanotransducer ion channels in chick skeletal muscle: the effects of extracellular pH. *The Journal of physiology* 363(1):119-134
- 1985 Guharay, F., Ramsey, R.L & Usherwood, P.N.R. 5-Hydroxytryptamine-activated single-channel currents recorded from murine neuroblastoma cells. *Brain research* 340(2):325-332
- 1993 Guharay, F. 1993. The White Fly. Manejo Integrado de Plagas y Agroecología, CATIE (Costa Rica). IPM information bulletin no. 27:1-4.
- 1997 Guharay, F. & Ruiz, B. Effects of war on cropping systems: a study of two zones in Nicaragua. in War and Crop Diversity. Sperling, L. (ed.) Agren Network Paper No. 75:1-12
- 1997 Guharay, F. & Monterrey, J. (1997). Ecological management of coffee berry borer in Central America. Manejo Integrado de Plagas y Agroecología CATIE. 45: 1-8
- 1998 Grimm, C. and Guharay, F. Control of leaf-footed bug *Leptoglossus zonatus* and shield-backed bug *Pachycoris klugii* with entomopathogenic fungi. *Biocontrol Science and Technology* 8:3 365-76.
- 1999 Guharay, F. Biology, damage and management of rice stink bug. *Revista Manejo Integrado de Plagas*. CATIE (Costa Rica) Technical notes p i-iv
- 2001 Grimm, C., Guharay, F. Potential of entomopathogenous fungi for the biological control of true bugs in *Jatropha curcas* plantations in Nicaragua. *BioresourceTechnology*. 50: 52-57.
- 2001 Wiegel, J & Guharay, F. Influence of participatory research processes on farmer experimentation. *Revista Manejo Integrado de Plagas*, CATIE (Costa Rica). 62: 72-80.
- 2001 Staver, C., Guharay, F., Monterroso, D., & Muschler, R. G. (2001). Designing pest-suppressive multistrata perennial crop systems: shade-grown coffee in Central America. *Agroforestry Systems*, 53(2), 151-170.
- 2003 Rugama F, R.A.; Guharay, F. Rural household participation in training processes, and their knowledge of pests and pesticides. *Revista Manejo Integrado de Plagas y Agroecología*, CATIE (Costa Rica) 69: 77-83.
- 2004 Feliz M, D; Guharay, F.; Beer, J. Incidence of coffee berry borer (*Hypothenemus hampei*) in coffee plants grown without shade and under shades of *Eugenia jambos* y *Gliricidia sepium* in San marcos, Nicaragua. *Revista Agroforestería en las Américas*, CATIE (Costa Rica) 41-42:56-61.
- 2005 Jarquín, R., Jiménez, L., Guharay, F. & Barrera, J. (2005). Farmers and Scientists inputs for understanding aggregation of Coffee berry borer population in Chiapas, Mexico. *Revista Manejo Integrado de Plagas y Agroecología*, CATIE (Costa Rica). 75: 77-82
- 2006 Jarquín, R., Barrera, J., Guharay, F. & Barrios L.G. Integrated management of coffee berry borer *Hypothenemus hampei* under two models of training and

- knowledge difusión. *Revista Manejo Integrado de Plagas y Agroecología*, CATIE (Costa Rica). 78: 36-45
- 2007 Staver, C., Kuan, E., López, M., Padilla, D., Saavedra, D., Guharay, F. Analyzing organizational learning capacity as a window on the national agricultural innovation system: a participatory approach in Nicaragua. *International Journal for Agricultural Resources, Governance, and Ecology* 6 (2): 194-221
- 2008 Monzón, A.J., Guharay, F. & Klingen I. Natural occurrence of *Beauveria bassiana* in *Hypothenemus hampei* (Coleoptera: Curculionidae) populations in unsprayed coffee fields. *Journal of Invertebrate Pathology* 97:134–141.

B. Published in any journal other than SCI journals.

- 1988 Varela, G. & Guharay, F. Effect of intercrop of cabbage and carrots on the incidence of defoliators of cabbage. *Revista Nicaragüense de Entomología*. 2: 23-27
- 1990 Barahona, L., Miranda, F. & Guharay, F. Effect of botanical and biological insecticides on the entomofauna in cabbage. *Revista de la Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua* 2(1): 53-58
- 1990 Pozo, O. & Guharay, F. Effect of coffee pulp used as organic fertilizer on the incidence of brown leaf spot of coffee in nursery (in Spanish). *Revista de la Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua*. 2(1): 48-53
- 1990 Svienhaug, T., Jorgensen, M. & Guharay, F. (1990). Tolerance of six varieties of maize to corn stunt transmitted by *Dalbulus maidis*. *Revista de la Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua*. 2(1):10-16
- 1990 Martínez, E., Zamora, M. & Guharay, F. Tolerance of different varieties of cabbage to bacteriosis caused by *Xanthomonas campestris* pv. *campestris* studied under greenhouse conditions (in Spanish) *Revista de la Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua* 1(4):36-42
- 1990 Martínez, E., Zamora, M. & Guharay, F. Tolerance of different varieties of cabbage to bacteriosis caused by *Xanthomonas campestris* pv. *campestris* studied under field conditions. *Revista de Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua*. 1(4):43-49
- 1990 Ubeda, R. & Guharay, F. Population dynamics of *Dalbulus maidis* (DeLong & Wolcott) and the incidence of corn stunt *Revista de Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua* 1(4):8-17
- 1990 Guadamuz, A. & Guharay, F. Effect of intercrops cabbage-tomato and cabbage-carrot on the incidence of defoliators of cabbage. *Revista de la Escuela de Sanidad Vegetal. Universidad Nacional Agraria, Nicaragua* 1(3): 57-60
- 1995 Guharay, F., Valverde, L., Sanchez, J, Dinarte, S & Santamaria, B. Is it possible to predict the pattern of incidence of whiteflies in a farm? *Revista Ceiba, Zamorano* (Honduras). 36(1):163
- 2009 Wymann, S., Kläy, A. , Sieber, P., Mukerji, R., Schaltenbrand, H., Guharay, F., Kiteme, B., Wenger, R & Kakridii, F. Natural Resources in 2025- Implications for Development. Opportunity of a turnaround: an expert reassessment 2005 – 2009. *InfoResources Trends. InfoResources Bern, Switzerland*.
- 2015 Cretin-Pablo, J., Fréguin-Gresh , S., Guharay, F. & Faret, L. Circulation of environmental information, actors and dynamic games in the context of conflict

- linked to the mining project in Rancho Grande (Nicaragua). Dossier des Cahiers des Amériques Latines .
- 2016 Guharay, F., Mora, A & Valbuena, D. Asset portfolios of rural women and men as a window to improve our understanding of the dynamics of gender roles for agriculture and food for Journal Gender, Agriculture and Food Security (in review)
- 2017 Arceda, E & Guharay, F. Market access of rural farm households living in remote communities of Nicaragua. Envio. Nicaragua (In preparation).
- 2017 Caceres, L., Granado, N., Guharay, F., Hoppe, C., López, D., Mena, C., Rocha, E., Salgado, D., Treminio, Z., Guharay, F., Godek, W., Carrión Fonseca, G. Public Policy and its impact on rural women in Nicaragua. Envio Nicaragua (in preparation)
- 2017 Godek, W & Guharay, F. Organizational landscape: research for development platform of northern Nicaragua. Envio Nicaragua (in preparation)

C. Title of Doctoral Thesis.

- 1982 Physiology and Pharmacology of NIE-115 murine neuroblastoma cells. University of Nottingham, Nottingham, U.K

4. Reviews, Research Reports, Proceedings, communication products

Presentations in International meetings

- 2001 Simonsen, Ø., Klingen, I. & Guharay, F., 2001. Natural occurrence of pathogenic hyphomycetes in coffee leaf miner *Leucoptera coffeella* in Nicaragua. 34th Annual Meeting of the Society for Invertebrate Pathology. August 2001. Noordwijkerhout, Netherlands.
- 2004 Monzón, A., Klingen, I. and Guharay, F. Naturally occurring insect pathogenic fungi on key coffee pests, and the influence of management practices. 37th Annual Meeting of the Society for Invertebrate Pathology. 1-6 August 2004. Helsinki, Finland. Pp 98.
- 2005 Monzón, A., Klingen, I. & Guharay, F. *Beauveria* spp on key coffee pest insects and the influence of management practices. The 10th European Meeting of the IOBC/WPRS Working Group on insect pathogens and entomoparasitic nematodes. “Invertebrate pathogens in biological control: Present and future”. 10-15 June 2005. Locorotondo, Bari, Italy. Pp 107
- 2014 Garming, H., Marin, J., Purckhauer, S., Weyori, A., Staver, C. , Rivera, G. & Guharay, F. (2014). From Technology Adoption to Understanding Innovation: Lessons from Plantain Innovation Systems in Four Countries. Tropentag, September 17-19, 2014, Prague, Czech Republic.
- 2015 Staver, C., Freguin, S., Guharay, F., Mena, M., Siles, P., Turmel, M. & Van der Hoek, R. Small farm viability in Central America – can tools for smallholder decision-making play a key role? 5th International Symposium for Farming Systems Design, 7-10 Sep 2015, Montpellier, France.

- 2015 Valbuena, D., Siles, P., Castro, A., Fonte, S., Mena, M., Tellez, O., Rousseau, L., Mendoza, R., Guharay, F., & Van der Hoek, R. Designing agroforestry systems for food production and provision of other ecosystems services: cases in the sub-humid tropics of Nicaragua. ? 5th International Symposium for Farming Systems Design, 7-10 Sep 2015, Montpellier, France.
- 2015 Valbuena, D., Van Wijk, M., López-Ridaura, S., Siles, P. Frelat, R., Guharay, F., Garcia, E., Tellez, O., Cayetano, E. (Sept 2015). Family Agriculture and Land Use in the New Ruralities of Subhumid Tropics in Central America. Tropentag, September 16-18, 2015, Berlin, Germany.
- 2015 Guharay, F., Godek, W., Van der Hoek, R., Okafor, C., Idrissou, L. & Hiwasaki, L. (March 2015). Institutional Constraints and Opportunities in Implementing Integrated Agricultural Research for Development (IAR4D) International Conference on Integrated Systems, IITA, Ibadan, Nigeria.

Field notebooks for training of farm households

- 2001 Guharay, F. *Management of coffee berry borer*, CATIE
- 2002 Aguilar, A. & Guharay, F. *Production capacity of coffee plots*, CATIE
- 2004 Guharay, F. *Quality coffee production in the wet mills*, CATIE
- 2012 Guharay, F. (ed.) *Trees for sustainable banana production with coffee*, Bioversity
- 2015 Guharay, F. et al. *Tools for decision-making by Cocoa growers* CIAT, Bioversity, Humidtropics.

Popular magazines for farm households and adult education

- 2008 Guharay, F. (ed.) *Farm households developing sustainable business*. SIMAS
- 2009 Guharay, F. (ed.) *Strengthening community actions for development*. CANTERA
- 2009 Guharay, F. (ed.) *Trees, water and forest for a better future*. FADCANIC
- 2009 Guharay, F. (ed.) *Community forest management in humid tropics*. PRODESOC
- 2010 Fandiño, M & Guharay, F. *From seed to cup: experiences of a coffee project*. AECID
- 2011 Guharay, F. & Rossini, L. *Best technologies for watershed management*. UNOPS
- 2011 Guharay, F. & Rossini, L. *Best methodologies for watershed management*. UNOPS
- 2012 Guharay, F. & Rocha, B. *Farmers markets: more than just a place to sell and buy*, SIMAS

Radio programs

- 2004 Hernandez, J. & Guharay, F. *With aroma of the future*, CATIE
- 2008 Hernandez, J. & Guharay, F. *Seeds of the future*, SIMAS
- 2008 Hernandez, J. & Guharay, F. *Looking for the future*, SIMAS
- 2009 Guharay, F. & Oliva, A. *Lessons for improving livelihood*. FADCANIC
- 2010 Guharay, F. & Oliva, A. *From seed to cup: experiences of a coffee project*. AECID

Videos

- 2002 Zurita, F. & Guharay, F. *IPM in the hands of rural families* (17 min), CATIE
- 2004 Zurita, F., Guharay, F. *Easier said than done* (30 min) CATIE
- 2006 Zurita, F, Guharay, F & Corrioles, M. *Our poison of everyday* (17 min) DANIDA
- 2009 Zuniga, J & Guharay,F *Schools for the Caribbean coast* (11 mins) FADCANIC
- 2010 Zuniga, J & Guharay,F. *Travelling with CATIE* (10 mins). CATIE
- 2011 Urbina, F. & Guharay, F. *Local capacities for watershed management* (14 mins)
UNOPS
- 2012 Zuniga, J & Guharay,F. *Changing mindsets* (5 mins). IIED

Interactive CD's

- 2012 Learning materials for cocoa management, IFC
- 2011 Guide for micro-watershed planning. UNOPS
- 2009 Guide for extreme natural phenomenon, ACICAFOC.
- 2008 Guide for agroecological management of Coffee. CATIE
- 2007 Guide for agroecological management of Cocoa. IPADE
- 2004 Guide for agroecological management of sweet pepper. CATIE
- 2004 Guide for agroecological management of Cucurbits. CATIE