# CURRICULUM VITAE Michael Jeffrey Balick, Ph.D.

Center for Plants, People and Culture The New York Botanical Garden 2900 Southern Blvd. Bronx, New York 10458 USA

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# PROFESSIONAL POSITIONS

1980-present	Vice President for Botanical Science, Director and Senior Philecology
	Curator, Center for Plants, People and Culture (2024-present); Vice
	President for Botanical Science, Director and Senior Philecology Curator,
	Institute of Economic Botany (2007-2024); Vice President & Chair, Research
	and Training, Director and Philecology Curator, Institute of Economic Botany
	(2000-2007); Associate Vice President & Chair, Research and Training (1999-
	2000); Director, Institute of Economic Botany (1990-present); Philecology
	Curator of Economic Botany (1989-present); Acting Director, Institute of
	Economic Botany (1988-1990); Executive Assistant to the President (1980-
	1989); Assistant Director, Institute of Economic Botany (1984-1988); Senior
	Curator (1998-present); Curator (1990-1998); Associate Curator (1988-1990);
	Assistant Curator, Herbarium (1980-1988), The New York Botanical Garden
2016-present	Faculty, Integrative Medicine Fellowship Program, University of Arizona,
•	Andrew Weil Center for Integrative Medicine.
1997-present	Adjunct Professor of Ecology, Evolution and Environmental Biology,
-	Columbia University in the City of New York.
1982-present	Adjunct Professor, Department of Plant Sciences, City University of New
	York.
2008-present	Adjunct Professor, Department of Biology, Fordham University
2013-2015	Associate, Harvard University Herbaria
2002-present	Research Associate, National Tropical Botanical Garden, Kalaheo, Kauai,
	Hawaii
1997-2003	Adjunct Visiting Professor, New York University, Department of Biology.
1983-2004	Adjunct Professor, School of Forestry and Environmental Studies, Yale
	University (1992-2004); lecturer in Tropical Studies (1983-1992).
1999	Visiting Scholar, Green College [now Green Templeton College], University
	of Oxford, UK (summer).
1990-1995	Honorary Research Associate, La Salle Foundation, Caracas, Venezuela.
1980-1986	Research Associate in Plant Domestication, Botanical Museum of Harvard
	University.
1979	Research Assistant, Agribusiness Associates, Inc., Wellesley Hills,
	Massachusetts (summer).

1977 Curatorial Assistant, Economic Herbarium of Oakes Ar	nes, Botanical Museum
of Harvard University.	
1975 Research Fellow in Tropical Horticulture and Economic	e Botany, Las Cruces
Tropical Botanical Garden, Costa Rica. Sponsored by	The Organization for
Tropical Studies.	
1974 Intern, The Henry Foundation for Botanical Research, G	Gladwyne,
Pennsylvania (summer).	-
1970 Intern, Winterthur Gardens, Winterthur, Delaware (sum	imer).

# **UNIVERSITY EDUCATION**

1976-1980	Harvard University, Ph.D. in Biology; Harvard Graduate School of Business
	(3 semesters of course work); Certificate, Harvard Introduction to Business
	Program for Ph.D.'s; course work also taken at Harvard School of Public
	Health.
1975-1976	Harvard University, A.M. in Biology.
1972-1973	Tel Aviv University, Junior Year Abroad Program in Biology and Humanities.
1970-1975	University of Delaware, B.Sc. with Honors in Agriculture and Plant Science.

WIKIPEDIA SITE: <a href="https://en.wikipedia.org/wiki/Michael\_Jeffrey\_Balick">https://en.wikipedia.org/wiki/Michael\_Jeffrey\_Balick</a>

# FIELDWORK AND RESEARCH EXPERIENCE

2019	Melanesia: Vanuatu: Ethnobotany and Floristics (August)
2019	Micronesia: Palau: Ethnobotany (March-April)
2018	Melanesia: Vanuatu: Ethnobotany and Floristics (November-December)
2018	Melanesia: Vanuatu: Ethnobotany and Floristics (August)
2018	Micronesia: Palau: Ethnobotany (March)
2017	Melanesia: Vanuatu: Ethnobotany and Floristics (November-December)
2017	Melanesia: Vanuatu: Ethnobotany and Floristics (July-August)
2017	Micronesia: Palau: Ethnobotany (January-February)
2016	Melanesia: Vanuatu: Ethnobotany and Floristics (November-December)
2016	Melanesia: Vanuatu: Ethnobotany and Floristics (April)
2015	Melanesia: Vanuatu: Ethnobotany and Floristics (November-December)
2015	Jordan: Ethnobotany (September)
2015	Melanesia: Vanuatu: Ethnobotany and Floristics (March)
2014	Micronesia: Palau: Ethnobotany (November)
2014	Melanesia: Vanuatu: Ethnobotany and Floristics (June)
2013	Micronesia: Palau: Floristics (November)
2013	Melanesia: Vanuatu: Ethnobotany and Floristics (September-October)
2013	Melanesia: Vanuatu: Ethnobotany and Floristics (February-March)

2012	Micronesia: Palau: Ethnomedical Studies (September-October, November)
2012	Micronesia: Palau: Ethnomedical Studies (March-April)
2011	Micronesia: Pohnpei: NSF-Sponsored Conservation Workshop (September)
2011	Micronesia: Palau: Ethnomedical Studies (September)
2011	Micronesia: Palau: Ethnomedical Studies (June)
2010	Micronesia: Palau: Ethnomedical Studies (October - November)
2010	Costa Rica: Studies of Medicinal Plants (February)
2009	Micronesia: Pohnpei: Ethnobotany and Floristics (February-March)
2008	Micronesia: Palau: Ethnobotany and Floristics (July-August)
2008	Micronesia: Palau: Ethnobotany and Floristics (January)
2007	Micronesia: Pohnpei: Ethnobotany and Floristics (November-December)
2007	Micronesia: Palau: Ethnobotany and Floristics (July-August)
2006	Micronesia: Palau, Yap, Pohnpei: Ethnobotany and Floristics (August-
	September)
2006	Micronesia: Kosrae, Pohnpei: Ethnobotany and Floristics (May-June)
2005	Micronesia: Palau, Pohnpei: Ethnobotany and Floristics (October)
2005	Micronesia: Kosrae, Pohnpei, Palau: Ethnobotany and Floristics (January-
	February)
2005	Belize: Ethnobotany and Floristics (September)
2004	Micronesia: Pohnpei. Ethnobotany and Floristics (August)
2003	Belize: Ethnobotany (January)
2003	Micronesia: Pohnpei. Ethnobotany and Floristics (August)
2002	Micronesia: Pohnpei, Pingelap, Mokil: Ethnobotany and Floristics (August)
2001	Micronesia: Palau, Pohnpei: Ethnobotany and Floristics (August)
2001	Belize: Ethnobotanical Studies (March)
2000	Micronesia: Kosrae, Pohnpei: Ethnobotany and Floristics (August-September)
1999	Micronesia: Kosrae, Pohnpei: Ethnobotany and Floristics (August-September)
1998	Micronesia: Guam, Palau, Kosrae, Pohnpei: Ethnobotany and Floristics
	(August-September)
1998	China: Traditional Healing (July)
1997	Micronesia: Ethnobotany and Floristics (August-September)
1997	Brazil: Maranhão. Studies of the Babassu Palm (November)
1997	Belize: Ethnobotanical Studies (May)
1997	Sri Lanka: Ayurvedic Medicinal Plants (January)
1996	Sri Lanka: Ayurvedic Medicinal Plants (November)
1996	Brazil: Maranhão. Studies of the Babassu Palm
1995	Belize: Ethnobotanical Studies (July)
1995	India: Ayurvedic Medicinal Plants, Pune (January)
1995	Belize: Ethnobotanical Studies (May)
1994	Belize: Punta Gorda, Kekchi Ethnobotanical Studies (November-December)
1994	India: Ayurvedic Medicinal )Plants, Kerala (February-March)
1994	Belize: Video Archival Project (June)
1994	Belize: Ethnobotanical Studies (April)
1993	Brazil: Maranhão, Tocantins. Studies of Orbignya palms (November-
	December)
1993	Belize: Punta Gorda. Kekchi ethnobotanical studies (March-April)

1992	Belize: Cayo District. Ethnobotanical Studies (September)
1992	Thailand: Northern Provinces. Ethnobotanical Studies (December)
1992	Belize: Cayo and Corozal Districts. Ethnobotanical Studies (March)
1991	Belize: Cayo District. Forest Inventory of Native Species Used as Medicinal
1991	• • • • • • • • • • • • • • • • • • • •
	Plants (May)
1990	Belize: Stann Creek. Ethnobotanical Studies in the Cockscomb Jaguar Preserve
	(May)
1990	Belize: Cayo District. Valuation of Tropical Forest as a Source of Medicinal
	Plants (August)
1990	Brazil: Maranhão, Goiás, Minas Gerais. Systematic Studies and Germplasm
1990	· · · · · · · · · · · · · · · · · · ·
1000	Collection of <i>Orbignya</i> (October)
1990	Belize: Cayo District. Ethnobotanical Studies, Medicinal Plants, Dooryard
	Gardens. Toledo District, Dolores Estate. Conservation assessment (January-
	February)
1989	Brazil: Maranhão. Studies of <i>Orbignya</i> palms and their utilization (December)
1989	Belize: Corozal and Orangewalk Districts. Ethnobotanical Studies (November)
1989	Belize: Cayo District, Vaca Plateau. Ethnobotanical Studies; Botanical
	Inventory (July-August)
1989	Haiti: Conservation Biology and Taxonomy of the Endangered Palm Attalea
	crassipatha (May-July)
1989	Belize: Caye Caulker, Ambergris Caye. Ethnobotanical Studies, Collection of
	Plant Samples for National Cancer Institute Screening Program (January-
	February)
1988	Brazil: Goiás, Matto Grosso. Studies of Brazilian Palms (November)
1988	Belize: Cayo. Ethnobotanical Studies in Cayo; Collection of Plant Samples for
	National Cancer Institute Screening Program (June)
1987	Belize: Cayo. Ethnobotanical Studies Among the Mopan, Maya Indians.
	Collection of <i>Orbignya cohune</i> germ plasm; collection of plant samples for
	National Cancer Institute screening program (July-November)
1987	Honduras: Colón, Atlantida, Comayagua. Collection of <i>Orbignya cohune</i> germ
-, -,	plasm; collection of plant samples for National Cancer Institute screening
	program (July)
1006	
1986	Brazil: Piauí, Goiás, Minas Gerais. Biological and Domestication Studies of
	Orbignya (January-February)
1985	Colombia: Chocó. Agroforestry Practices with Jessenia bataua
1984	Brazil: Goiás, Minas Gerais. Biological and Domestication Studies of
	Orbignya (October)
1983	Brazil: Ethnobotany of the Apinayé and Guajajara, and their Utilization of
	Orbignya (August-September)
1983	Mexico: Studies of the Distribution and Utilization of <i>Orbignya</i> spp., an Oil
1703	Yielding Group of Palms (March)
1001	<b>O</b> 1 ' '
1981	Jamaica: Economic and Botanical Studies Concerning the Use of New Crops in
1001	Regional Development (August-September)
1981	Brazil: Pará, Goiás, Piauí, Maranhão. Biological and Domestication Studies of
	Orbignya (November-December)
1980	Bolivia: Biological and Domestication Studies of Orbignya phalerata (July-

August)
Venezuela: Identifying Sites for a Palm Germ Plasm Bank in the Orinoco
Valley (July)
England: Studies in Herbaria and Botanical Institutes (January)
European Botanical Centers: Amsterdam, Leiden, Utrecht (Holland); West
Berlin (Federal Republic of Germany) (August)
Israel: Studies of Plant-Insect Interaction (August-September)
Amazonian Regions of Brazil, Peru, Ecuador, Colombia, Venezuela and Areas
of Trinidad: Biological Studies of Palms and Other Useful Plants (October-
May)
The Northwest Amazon Valley and Llanos Regions of Colombia: Biological
Studies of Palms and Other Useful Plants (July-September)
Mexico: Studies of Fern-Anthropod Interaction (April)
Costa Rica: Aspects of Tropical Slash and Burn Agriculture and Horticulture
(February-July)
Cultivation and Propagation of Native American Plants (June-August)
Israel: Floristic and Ethnobotanical Studies of All Major Phytogeographic
Regions (August, 1972-July, 1973)

# PRINCIPAL INVESTIGATOR, CO-INVESTIGATOR, RESEARCH GRANTS & CONTRACTS

2023-2025	Nia Tero: Forest Guardianship in Vanuatu. (Co-PI with	
	G.M. Plunkett, PI)	\$265,000
2023-2025	Marisla Foundation: Ethnobotany and Floristics of Vanuatu.	\$60,000
2022-2024	National Science Foundation: Capacity: Biological Collections:	
	Securing and Sharing Biocultural Diversity Collections at The New	
	York Botanical Garden. (Co-PI with Matthew Pace)	\$424,728.
2022-2023	National Science Foundation: Collaborative Research: Plant and Fung	gal
	Diversity of Tafea Province, Vanuatu, A Threatened Pacific Hotspot	
	Supplement (PI with G.M. Plunkett)	\$109,939
2021-2024	Velux Stiftung: Daylight, Culture and Plants in two Pacific Island	
	Societies (PI with K. D. Harrison and G.M.Plunkett, Co-PI)	\$216,722
2020-2023	Franklinia Foundation: Conserving Vanuatu's Only Currently Known	1
	Critically Endangered Tree Species, with a Roadmap to Conserving	
	Vanuatu's Poorly Understood Tree Flora (G.M.Plunkett, PI)	\$253,280
2019-2023	Marisla Foundation: Ethnobotany and Floristics of Southern Vanuatu	,
	Tafea Province	\$80,000
2019-2020	Christensen Fund: Ethnobotany and Floristics of Southern Vanuatu,	
	Tafea Province (Co-PI with G.M. Plunkett)	\$37,000
2018-2020	Christensen Fund: Ethnobotany and Floristics of Southern Vanuatu,	
	Tafea Province (Co-PI with GM. Plunkett)	\$100,000
2018-2019	Gildea Foundation: Belize Bush Medicine Camp and Plants and	
	People of Vanuatu Project	\$20,000

2018-2019 2016-2017 2016-2021	Marisla Foundation: Ethnobotany and Conservation in Palau Marisla Foundation: Ethnobotany and Conservation in Palau National Science Foundation: Collaborative Research: Plant and Fungal Diversity of Tafea Province, Vanuatu, A Threatened Pacific Hotspot	\$80,000 \$100,000
	(PI with G.M. Plunkett Co-PI)	\$1,294,759
2016 2015	Gildea Foundation: Belize Bush Medicine Camp Gildea Foundation: Belize Bush Medicine Camp and Ethnobotanical	\$12,000
2013	Studies in Palau	\$22,000
2014-2017	National Institutes of Health: <i>In Silico</i> identification of Phytotherapies (Co-PI with W. Law, PI)	\$348,876
2014-2016	Critical Ecosystems Partnership Fund: Plants and People: Baseline Floristic and Ethnobotanical Surveys in Tafea Province Vanuatu	¢156 940
2014-2017	(#64251)(Co-PI with G.M. Plunkett) Christensen Fund: Ethnobotany and Floristics of Southern Vanuatu,	\$156,849
	Tafea Province (Co-PI with G.M. Plunkett)	\$120,000
2013-2015	Marisla Foundation: Ethnobotany and Conservation in Palau	\$100,000
2012-2014	Christensen Fund: Ethnobotanical research and Conservation in Southern Vanuatu (Co-PI with G.M. Plunkett)	\$80,000
2012-2013	National Geographic Society: Towards an Annotated Plant Checklist of The Republic of Palau	\$22,240
2011-2013	Marisla Foundation. Ethnobotany and Conservation in the Federated States of Micronesia and Palau	\$100,000
2012-2013	Gildea Foundation: Preparation and Publication of a Primary Health Care Manual for Palau	\$30,000
2010-2011	National Geographic Society: Floristic and ethnobotanical exploration in the Republic of Palau: The traditional villages of Ibobang and Oikull and the Rock Islands region	\$18,500
2011	Aetna Foundation: Improving Healthcare for Underserved Immigrant Latino Communities in New York City	\$25,000
2010–2011	United Hospital Fund: Cultural Competency Training for Health Care Professionals in Latino Ethnomedical Systems in New York City	\$50,000
2009-2012	United States Department of Agriculture: Enhancing Plant Science Education in the Bronx: Training the Next Generation of Botanists to Protect U.S. Natural Resources (Co-PI: NYBG subcontract from Lehman College/CUNY)	\$54,514
2009-2012	V. Kann Rasmussen Foundation. Biodiversity and Human Health in Micronesia	\$450,000
2009-2010	Germeshausen Foundation. Biodiversity and Human Health in Micronesia	\$50,000
2009-2011	Marisla Foundation. Ethnobotany and Conservation in the Federated States of Micronesia	\$100,000
2008-2012	The National Science Foundation. A Biodiversity Survey of Pohnpei and Kosrae Islands, Federated States of Micronesia; Understanding the Impact of Anthropogenic Disturbance on Plant, Fungal, and	\$399,500

	Stream Biodiversity (Co-PI with W. Law)	
2008-2009	Marisla Foundation. Ethnobotany and Conservation in the Federated States of Micronesia	\$60,000
2007-2009	The Jacob and Valeria Langeloth Foundation. Dominican Ethnomedicine and Culturally Effective Health Care in New York City	\$238,421
2006-2008	V. Kann Rasmussen Foundation. Biodiversity and Human Health in Micronesia	\$750,000
2005-2007	MetLife Foundation. Implications for Healthy Aging-Phase II	\$30,000
2005-2007	Marisla Foundation. Ethnobotany and Conservation in the Federated States of Micronesia	\$60,000
2005-2009	National Institutes of Health/National Center for Complementary and Alternative Medicine. Dominican Herbal Medicine: Plants Used for Inflammation	\$549,223
2004-2005	MetLife Foundation. Implications for Healthy Aging	\$30,000
2004	Gildea Foundation. Micronesia Ethnobotany Project	\$35,000
2004	The New York Community Trust. Dominican Ethnomedicine and Culturally Effective Health Care in New York City	\$45,000
2004	United Hospital Fund. Dominican Ethnomedicine and Culturally Effective Health Care in New York City	\$50,000
2004	Homeland Foundation. Ethnobotany and Conservation in the Federated States of Micronesia	\$30,000
2002	Gildea Foundation: Micronesia Ethnobotany Project	\$40,000
2002	Homeland Foundation: Ethnobotany and Conservation in the Federated States of Micronesia	\$25,000
2002-2003	Metropolitan Life Foundation: Studies of Traditional Medicine and Health	\$100,000
2001-2003	The Educational Foundation of America: Herbal Therapies for Women's Health	\$120,000
2001-2003	The Overbrook Foundation: Ethnobotany and Conservation in the Federated States of Micronesia: An Integrative Approach to Understanding, Preserving, Utilizing and Teaching Traditional Knowledge in the Pacific Region	\$150,000
2001-2003	Merck & Co., Inc. Merck Research Laboratories: Plant Collection and Extraction Project (Dennis Stevenson Co-PI)	\$1,721,906
2000-2002	Gildea Foundation, Inc.: Micronesia Ethnobotany Project	\$45,000
2000	Center for Environmental Research and Conservation, Columbia University: Understanding Traditional Plant Use on Pohnpei: Impacts on Habitat Destruction, Biodiversity Loss, and Conservation Potential	\$ 16,828
2000	Gildea Foundation, Inc.: Ethnobotany of Micronesia	\$20,000
1999	Nature's Herbs, Twin Laboratories. Herbal Interventions for Women's Health Issues in the Urban Environment	\$10,000
1999-2001	Edward John Noble Foundation, Inc.: Support of the Use of Ethnobotanical and Ethnoecological Techniques for Monitoring Changes in Northeast Brazil	\$133,032

1998-2001	The Overbrook Foundation: Support for Ethnobotany of Micronesia Project	\$50,000
1998	Nu Skin International, Inc.: Support for Local Community Development Project in Brazil	\$29,700
1998-1999	Pfizer Inc.: Collection and Extraction Research Plans and Budgets	\$250,000
1998-2000	Merck & Co., Inc. Merck Research Laboratories: Plant Collection and Extraction Project (Dennis Stevenson, Co-PI)	\$1,576,250
1998	Gildea Foundation: Support for Micronesia and Belize Projects	\$40,000
1997-1999	Edward John Noble Foundation: Linking Sustainable Utilization and Conservation of Plant Resources in Belize	\$60,000
1997	Gildea Foundation: Support of Micronesia and Belize Projects	\$40,000
1996	Gildea Foundation: Support of Micronesia and Belize Projects	\$20,000
1996	Man & The Biosphere Tropical Ecosystems Directorate: Support of Tri-National Activities in Central American Ethnobotany	\$5,000
1996	National Geographic Society: Ethnobotany in the Urban Environment: Alternative Therapies for Women	\$11,000
1996	Nu Skin International: Ethnobotanical Studies in the Urban Environment of Therapies for Women's Health Problems: A Pilot Study	\$5,000
1996-1998	NYBG/Pfizer Phytochemical Survey: Plant Collection & Extraction Program	\$899,710
1995	Gildea Foundation: Belize Video Project	\$10,000
1995-1997	Merck Research Laboratories: Collections & Extractions	\$1,306,216
1995-1996	Center for Environmental Research and Conservation, Columbia University: Ethnobotanical Studies in the Urban Environment of	\$20,000
	Therapies for Women's Health Problems	
1994-1996	Edward John Noble Foundation: Ethnobotanical Studies in Brazil	\$90,000
1993-1996	Pfizer Inc.: Survey of the U.S. Flora for Pharmaceutical Products	\$2,000,000
1993-1996	Rockefeller Foundation: Project to Stimulate the Development of Local Capabilities in Neotropical Economic Botany	\$300,000
1993-1996	Metropolitan Life Insurance Foundation: Natural Products Research in the Tropics	\$150,000
1993-1994	Merck, Inc.: Natural Products Research Program	\$245,000
1992-1999	The John D. and Catherine T. MacArthur Foundation: Diversity of Botanical Resources in Belize	\$95,000
1992-1994	Edward John Noble Foundation: Ethnobotanical Studies in Belize, Ecuador and Venezuela	\$100,000
1992	New York Community Trust: Support for the Belize Ethnobotany Project	\$10,000
1992	Joyce Mertz-Gilmore Foundation: Support for the IEB Program, Alternatives to Deforestation	\$20,000
1992-1994	Merck Foundation: Support for the IEB Program, Alternatives to Deforestation	\$75,000
1991-1994	Nathan Cummings Foundation: Support for Ethnobotanical Research in Belize	\$60,000

1991-1994 1991-1996	Overbrook Foundation: Support for the Belize Ethnobotany Project National Cancer Institute: Collection of Neotropical Rainforest Plants for Screening for Anti-cancer and Anti-AIDS Activity –NCI- CM-17515-30 (Co-PI; Douglas Daly, PI)	\$120,000 \$1,264,012
1991-1993	Rockefeller Foundation: Stimulating the Development of Local Capabilities in Neotropical Economic Botany – RF900073 #2	\$275,000
1990-1992	U.S. Agency for International Development: Economic and Biological Studies Related to the Development of Extractive Reserves in Ecuador–518-0780-G-00-0247-00	\$108,680
1990-1992	Edward John Noble Foundation: Ethnobotanical Studies in South America	\$50,000
1990-1992	Rex Foundation: Support for the Belize Ethnobotany Project	\$15,000
1990-1991	Joyce Mertz-Gilmore Foundation: Preparation of a Flora on the Palms of Brazilian Amazonia and Their Uses	\$20,000
1989-1993	Metropolitan Life Insurance Foundation: Tropical Plans as Potential Sources of Anti-AIDS Compounds	\$150,000
1989-1992	U.S. Agency for International Development: Application of a Novel Method for Selection and Domestication of Indigenous Plants Among Food Gatherers in Ecuador (Jacob Friedman, PI) DHR-5544-G-SS-9064-00	\$200,000
1989-1991	Boehringer Ingelheim: Natural Products Research	\$25,000
1988-1991	U.S. Agency for International Development: Useful plants and traditional healing systems in Belize–505-0035-G-OPG-8001-00	\$100,000
1988-1991	U.S. Agency for International Development: Improving management practices for biomass (fruit) production from native stands of babassu palms, and developing techniques for improving exploitation of this resource – DPE-5542-G-SS-8070-00	\$149,846
1986-1991	National Cancer Institute: Collection of Neotropical rainforest plants for screening for anti-cancer and anti-AIDS activity–N01-CM-67924	\$626,826
1987-1989	Joyce Mertz-Gilmore Foundation: Preparation of a flora on the palms of Brazilian Amazonia and their uses	\$20,000
1987-1989	U.S. Agency for International Development: Economic botany studies of the lowland tropical forest of Ecuador–LAC-0605-G-SS-7037-00	\$100,000
1987	Rockefeller Foundation: Support for publication of an annotated bibliography of useful palms	\$6,000
1986-1988	Joyce Mertz-Gilmore Foundation: Support of the babassu palm project	\$15,000
1984-1987	U.S. Agency for International Development: Forest palms as tropical tree crops: their agronomic improvement through application of germplasm collection, tissue culture techniques and mycorrhizal symbiosis—DPE-SS42-G-SS-4061-00	\$137,366
1984-1987	U.S. Agency for International Development: Economic botany and floristic studies of the lowland tropical forest of Ecuador–518-0023-G-00-4110-00-0605	\$182,253
1984-1985	Joyce Mertz-Gilmore Foundation: Support of the babassu palm	\$10,000

	project	
1984-1986	Pittsburgh Foundation: Agronomic and ecological studies of babassu	\$27,000
	palms	
1982	Rockefeller Foundation: Identification of Neotropical Sites for Palm	\$8,000
	Germplasm Banks	
1981-1986	Rockefeller Foundation: Preparation of an Annotated Bibliography	\$15,750
	on Economic Palms–RF7023	
1981-1985	U.S. Agency for International Development: Domestication of the	\$184,724
	Babassu Palm–DAN-SS42-G-SS-1089-00	
1980-1981	Charles A. Lindbergh Foundation: Babassu an Economically	\$8,890
	Important Native Amazonian Palm and Its Role in the Rational Use	
	of Tropical Forest Lands	
1979-1980	U.S. Agency for International Development: Introduction of the	\$10,215
	Jessenia-Oenocarpus complex of palms as an agronomic crop for	
	economic development in Latin America	
1979-1980	National Science Foundation: Doctoral Dissertation Research in	\$1,375
	Systematic Biology–DEB 7918347	

#### **HONORS**

Dr. H. Marc Cathey Award for outstanding scientific research that has enriched horticulture and plant science. American Horticultural Society, Great American Gardeners National Award. 2020.

Mary W. Klinger Book Award for *Messages from the Gods: A Guide to the Useful Plants of Belize*, with Rosita Arvigo. Society for Economic Botany. 2018.

David Fairchild Medal for Plant Exploration, National Tropical Botanical Garden. 2018.

Elected as a Founding Member of the Daylight Academy, Zurich, Switzerland, May, 2017.

Doctor of Science, *Honoris Causa*, Lehman College, City University of New York, May 2014

President's Award for Outstanding Contributions to the Society for Economic Botany, 53<sup>rd</sup> Annual Meeting, Frostburg, Maryland. 2012

Distinguished Economic Botanist Award, Society for Economic Botany 50th Annual Meeting, Charleston, South Carolina. 2009

Accorded High Title of *Luhk en Kairoir Dolen Katau Nett*, Pohnpei, Federated States of Micronesia, 2009

Natural Products Association's 2007 Rachel Carson Award Environmental Award, Las Vegas, Nevada. 2007

John Simon Guggenheim Memorial Foundation Fellowship. 2005

International Scientific Cooperation Award, The American Association for the Advancement of Science. 2005

Frontiers of Science Awardee, Society of Cosmetics Chemists. 2001

Elected Fellow of The American Association for the Advancement of Science. 1999

Janaki Ammal Medal for Ethnobotany, Society of Ethnobotanists. 1999

Jean Andrews Centennial Visiting Professorship in Tropical and Economic Botany, University of Texas, Austin. 1997

American Library Association, Oberly Award for Bibliographic Excellence (in Agriculture and

Related Sciences), for the publication, "<u>Useful Palms of the World</u>." 1991 (co-authored by H.T. Beck).

Metropolitan Life Insurance Company Fellowship. 1989-1992; 2000–2002

Elected Fellow of the Linnean Society (London). 1981

Charles A. Lindbergh Foundation Grant Recipient. 1980

George H. M. Lawrence Memorial Award. 1979

Sigma-Xi, The Scientific Research Society of North America, Associate Member,

Harvard Chapter, Chapter, 1976-1985. Elected to full membership, Columbia University Chapter, 1985-present.

Student Travel Award, American Association of Botanical Gardens and Arboreta. 1975

Outstanding Young Horticulturist of 1970, The Pennsylvania Horticultural Society.

Harvard Club of Delaware Scholarship. 1976-1980

Garden Club of Delaware Scholarship. 1975

Florists Transworld Delivery Scholarship. 1975

#### TEACHING EXPERIENCE

2020-2023	Ethnobotany: A Practitioner's Perspective. NYBG Adult Education
	Program, October-November, 2020; April-May, 2021, January-February, 2023 (virtual courses comprising 6 contact hours).
2016-present	Botanical Medicine Course. Fellowship Program for Integrative Medicine Physicians Andrew Weil Center for Integrative Medicine, University of Arizona. Taught twice yearly.
1988-present	ENVB W4086 – "Ethnobotany: The Study of People and Plants," Spring term.
r	Center for Environmental Research and Conservation, Columbia University (currently with A. McAlvay).
2014	Bio502- "Ethnobotany, The Study of People and Plants," Fall term, Macaulay
	Honors College, Lehman College (with I. Vandebroek).
1997-2002	New York University, Plant Resources II: Economic Botany and the Global
	Environment Lecture Series, Spring term, "Essential Oils, Perfumes and the
	Nutraceutical Industry." (Team taught, 1 lecture)
1996-2007	Faculty Member, Botanical Medicine in Modern Clinical Practice, One Week
	Continuing Medical Education (CME) Course, Columbia University College of
	Physicians & Surgeons, taught annually in May
1981-2001	Forestry and Environmental Science 583B—"Botanical Resources of the
	Tropics," Spring term. School of Forestry and Environmental Studies, Yale
	University
1985-1994	Bio. U792.01 – "Economic Botany (Advanced Study," Fall term. City
	University of New York
1982, 1986,	Botany 220 – "Economic Botany," The New York Botanical Garden Education
1989, 1991	Program
1979-1980	"Management of Technological Innovation in Agriculture," co-organizer of
	non-credit seminar course offered at the Harvard Graduate School of Business
1978-1979	Biology 104 – "Plants and Human Affairs," Spring term. Teaching Fellow,
	Harvard University

1978-1979	Biology E104C – "Foods and Beverages: Their Botany, Chemistry, and Role in
	Human Affairs," Fall term. Course Assistant, Harvard University
1976-1977	Biology 104 – "Plants and Human Affairs, " Fall term. Teaching Fellow,
	Harvard University
1975-1976	Biology: Extension course – "The Importance of Plant Chemistry in Human
	Affairs," Spring term. Course Assistant, Harvard University
1975-1976	Biology: Extension course – "Plants and Human Affairs," Fall term. Teaching
	Assistant, Harvard University

# POSTDOCTORAL, DOCTORAL, MASTERS AND INTERNATIONAL FELLOWSHIP STUDENTS: ADVISOR OR COMMITTEE MEMBER

Luis E. Forero P. (Palms) 1982; Claudio U.B. Pinheiro (palms, economic botany) 1986; Anna Arguello (palms, economic botany) 1987; Marc Baker (Post-doc, economic botany) 1987; Andrew Henderson (palms) 1987; Steven R. King (economic botany) 1988; Bradley C. Bennett (Post-doc, economic botany) 1988-92; Hans T. Beck (systematics, economic botany) 1991; N. Hasegawa (Molecular Systematics of Ranunculaceae) 1992; Miguel Alexiades (economic botany) 1997; Claudio U.B. Pinheiro (palms, economic botany) 1997; Flor Chavez (palms, economic botany) 1997; Alfredo Gomez-Beloz (ethnomedicine) 2000; Andreana Ososki (ethnobotany) 2004; Sarah Khan (ethnomedicine) 2006; Ryan Huish (ethnomedicine) 2009; Jillian DeGezelle (ethnomedicine) 2013; Lisa Offringa (ethnomedicine) 2013; Jon Ferrier (natural products chemistry and ethnomedicine) 2013; Fabiana Fonseca (Post-doc 2013); C. Kitalong (natural products chemistry and ethnomedicine) 2014; Daniel Kulakowski (natural products chemistry and ethnomedicine) 2014; C. Tipton (ethnobotany [on leave]); R. Wolkow (ethnomedicine [dropped]); Taylan Morcol (ethnobotany, natural products chemistry (2021)); Lan Truong (ethnomedicine (2022)); Ashley McGuigan, University of Hawaii, ethnoecology [2022].0

#### SYMPOSIA AND CONFERENCES ORGANIZED

Daylight Academy, Annual Conference, Trondheim, Norway. Workshop, Back to the Roots in One Health: Plant and Animal Health and Daylight. 30 May, 2024. (with Heinrich Walt)
Daylight Academy, Annual Conference, Lausanne, Switzerland. Workshop, Perspectives on Daylight and Health in Traditional Societies of Oceania. June 2, 2023. (Keynote with K. David Harrison).
Daylight Academy, Annual Conference, Zurich, Switzerland. Workshop, "The Impact of Daylight in Biology and Medicine. February 25, 2022. (with Heinrich Walt and K. David Harrison).
Daylight Academy, Annual Conference, Zurich, Switzerland. Workshop on "The Impact of Daylight in Biology and Medicine. November 2019. (with Heinrich Walt).
Society for Economic Botany, Annual Meeting, Bragança, Portugal. Workshop on publishing economic botany topics. June 2017. (with Ina Vandebroek)

- International Congress on Natural Products Research, American Society of Pharmacognosy. New York City, July 28-August 1, 2012. (Scientific Organizing Committee member and Co-Organizer with Barbara Timmerman of Symposium on Ethnobotanical Research and Development)
- Annual Symposium on Ethnomedicine, Conservation and Clinical Research, Alan G. Johnson Memorial Symposium on Ethnomedicine, Health, and Environmental Conservation, Costa Rica 2007,2008, 2009, 2010 (Organizer)
- Traditional Knowledge in the 21<sup>st</sup> Century. AAAS Annual Meeting" Grand Challenges, Great Opportunities, "The Erosion of Traditional Knowledge and The Impact of Its Loss." Ancient Wisdom and Contemporary Science: "St. Louis, MO. 2006. (Co-organizer)
- Discussion and Commentary on Ethnobotany, U.S. National Committee, International Union of Biological Sciences: Internet Symposium (www4.nas.edu/usnc/home.nsf) 1998.
- Botanical Medicine in Modern Clinical Practice, The Columbia University College of Physicians & Surgeons at The Columbia-Presbyterian Medical Center, 1997-2002 (Course co-organizer and lecturer), "Ethnobotany and pharmaceuticals from tropical forests."
- Society for Economic Botany 27th Annual Meeting Symposium: Palms—Biology, Utilization and Conservation. The New York Botanical Garden, Bronx, New York, June 13-16, 1986 (Symposium Organizer, Meeting Co-organizer).
- CENARGEN/EMBRAPA/UEPAE-Teresina: International Workshop on Babassu Palm Research Activities, Teresina, Piauí, Brazil, March 10-15, 1986 (Co-organizer).
- Interciencia/Colciencias: Workshop on promising oil crops, Bogotá, Colombia, November 4-6, 1985 (Vice President).
- FAO/CATIE: Workshop on Underutilized Palms of Tropical America, Turríalba, Costa Rica, August 8-10, 1983 (Co-organizer).
- American Association of Botanical Gardens and Arboreta Annual Meeting: Ethnobotany Symposium, Columbus, Ohio, June 17, 1992 (Symposium Organizer; Member of Program Committee).
- Ciba Foundation Meeting: Ethnobotany and the Search for New Drugs. Fortaleza, Brazil. November 30-December 2, 1993.
- Society for Economic Botany Annual Meeting Symposium: "New Directions in Ethnobotany." Fairchild Tropical Garden, Miami, Florida, June 23-27, 1993.
- Society for Economic Botany Annual Meeting Symposium: "Pacific Island Ethnobotany." With Will McClatchey, Botanical Research Institute of Texas, June 5, 2005.

# SELECTED INVITED SEMINARS AND PRESENTATIONS

1983

1978	"The biology and economics of the <i>Oenocarpus—Jessenia</i> Palm Complex."
	Botanical Museum of Harvard University, Cambridge, Massachusetts.
1980	"Jessenia bataua and Oenocarpus species: Native Amazonian palms as new
	sources of edible oil." Presented at the symposium "New Sources of Fats and Oils,"
	International Society for Fats/Research/American Oil Chemists Society
	(ISF/AOCS) World Congress, New York.
1981	"Research prospects and opportunities for Amazonian palms." Museu Paraense
	Emilio Goeldi, Belém, Pará, Brazil.
1983	"Useful palms of Amazonia: germplasm conservation and research priorities."
	Centro Nacional de Recursos Geneticos, CENARGEN/EMBRAPA, Brasilia, Brazil.

"Prospects for the domestication of the *Oenocarpus–Jessenia* palm complex", and

- "Advances in Babassu palm research." FAO symposium on underutilized Neotropical palms, Turrialba, Costa Rica.
- "A Report on progress in studies of the Babassu palm complex." Society for Economic Botany Annual Meeting, Gainesville, Florida.
- "Palms and development in the humid tropics." Invited seminar, First Symposium on the Humid Tropics, Belém, Brazil.
- "O complexo *Jessenia/Oenocarpus* (Palmae): sistemática, ethnobotânica e potencial para domesticão," and "O que é Babaçu." XXXVI Congresso Nacional de Botânica, Botanical Society of Brazil, Curitiba, Paraná, Brazil.
- 1985 "Palms and progress: genetic resources for Brazilian development." Cornell University, International Agriculture 650, Agriculture and Biomass Resource Development: The Case of Brazil.
- Ethnobotany of New World palms." Cornell University, Economic Botany course taught by Dr. David Bates.
- "Amazonian Indians and their useful palms." Biology seminar series, Connecticut College, New London, Connecticut.
- 1985 "Palms, people and progress." New England Botanical Club, Yale University, New Haven, Connecticut.
- "Perspectives on the rational utilization of the *Oenocarpus-Jessenia* (Palmae) complex." Workshop on Promising Native Oil Plants, Programa Internacional de Recursos Bioticos, Interciencia Association, Bogota, Colombia.
- "Babassu (*Orbignya* sp.) palm complex: systematics and utilization." Seminar series, New York Botanical Garden, Bronx, New York.
- "Hybridization in the Babassu (*Orbignya, Attalea, Maximiliana* spp.) palm complex," and "ethnobotanical utilization of Babassu palms." International Workshop on Babassu Palm Research Activities, Teresina, Piauí, Brazil.
- "Ethnobotany of the Guajajara and Apinayé Indians of Northeastern Brazil." Palm Symposium, Society for Economic Botany, Annual Meeting, New York Botanical Garden, Bronx, New York.
- "Hybridization in Neotropical palms." International Palm Symposium. L. H. Bailey Hortorium, Cornell University, Ithaca, New York.
- "Tropical deforestation and economic botany alternatives." Institute of Ecosystem Studies, The Mary Flagler Cary Arboretum, Millbrook, New York.
- "Neotropical palms as new sources of food, fuel and raw materials for industry and development." University of Southampton, England, International Symposium on New Crops for Food and Industry.
- "Mayan medicine in the 20th Century." The Environmental Center, Belize City, Belize.
- "Ethnobotanical studies in the tropical rain forest and the search for anti-cancer agents." New York Rainforest Alliance Symposium, New York, New York.
- "Ethnobotany and its implications for modern medicine." American Association of Botanical Gardens and Arboreta Annual Meeting, Phoenix, Arizona.
- "Scholarly research in botanical gardens and arboreta." Symposium on Scholarly Research in Museums, Ninth Annual Museum Studies Conference, University of Delaware, Newark, Delaware.
- "The tropical forest, ethnobotany and the search for modern medicine." Haverford

College, Haverford, Pennsylvania. "Systematics and economic botany of Orbignya." Bailey Hortorium, Cornell 1989 University, Ithaca, New York. 1990 Biological conservation: the case of the world's rarest palm, *Attalea crassispatha*. "International Conflict and Cooperation: Environmental Security in the 1990's," University of Wisconsin. "Perspectives on the role of the ethnobotanist in pharmaceutical research." New 1990 York Zoological Society. 1990 "Ethnobotany and the identification of therapeutic agents from the rain forest." CIBA Foundation Symposium on Bioactive Compounds from Plants. Bangkok, Thailand. 1990 "The tropical forest, ethnobotany and the search for modern therapeutics," Morris Arboretum, Philadelphia; North Carolina State University (July 17, 1990); Scott Arboretum, Swarthmore, PA (September 10, 1990); Lederle Laboratories, New Jersey (April 23, 1991). 1990 "An overview of palm germplasm research employing tools from molecular biology," CENARGEN, Brasilia, Brasil. "Ethnobotanical Research and Perspectives on the Issue of Compensation." 1991 Environmental Defense Fund-Rainforest Alliance Workshop. "Medicinal plants and the conservation of tropical biodiversity." American 1991 Museum of Natural History-Rainforest Alliance Workshop. "Tropical conservation: the case of *Attalea crass*is*patha* in Haiti," Annual Meeting, 1991 American Association of Botanical Gardens and Arboreta. "The potential of the tropical rain forest as a source of new pharmaceutical 1991 products." Sterling Drugs, Pennsylvania. 1991 "Ethnobotany and the search for modern medicine." NYBG Symposium "Plants for Health and Healing—Their Role in Modern Medicine". "The tropical rain forest and the search for plants that heal." Bartlett Arboretum. 1991 1991 "The role of the NCI in drug development (for G. Cragg)." IEB/Rainforest Alliance Symposium: Tropical Forest Medical Resources and the Conservation of Biodiversity. "Ethnobotany and the search for modern therapeutics." Lehman College, 1992 Department of Biological Sciences Seminar. 1992 "Progress in the NCI collection program" including panel discussion on the ethics of this issue, NCI Contractors Meeting, Frederick, Maryland. "The tropical rain forest, ethnobotany and the search for modern medicine." 1992 Princeton University. Special Lecture Series for the Columbian Quincentenary. Symposium on biodiversity conservation and development, "Ethnobotany, drug 1992 development and conservation of biodiversity." Penn State University, Pennsylvania. 1993 "Ethnobotany and the tropical rain forest—the search for modern medicines," Chicago Botanic Garden, Zimmerman Lecture Series. "Linking ethnopharmacology and conservation in Belize." Harvard University, 1993 **OEB Seminar Series.** 

"Conservation and preservation of medicinal plants." Morris Arboretum, WHO

1993

Medical Plant Symposium.

- "Ethnobotany and conservation in Belize." The Nature Conservancy of Texas, 1993 Annual Meeting, Keynote Speaker.
- "Valuation of extractive medicine from tropical forests—implications of conservation." Princess Science Congress II, Bangkok, Thailand.
- "Ethnopharmacology and tropical forest conservation—is there a link?." Royal Botanic Garden, Kew, U.K. Chapter of the Society for Economic Botany.
- "Ethnobotany and the search for new pharmaceuticals in tropical forests." Tulane University, Graduate Anthropology Colloquim.
- "Ethnopharmacology and conservation in Belize." Vassar College, Tropical Biology Seminar.
- "Linking modern medicine, ancient healing and conservation in the tropical forests of Belize." Central Westchester Audubon Society.
- "Linking traditional healing and tropical forest conservation in Belize." The New York Botanical Garden Healing Plants Symposium.
- "Ethnobotany and conservation in the rain forests of Belize." The Belizean Cultural Society of New York.
- "A new market—trees for medicine?" Menninger Sunbelt Tree Conference, Orlando.
- "Linking ethnopharmacology and conservation in the rain forest of Belize." Buffalo Medicinal Chemistry Symposium.
- "Primary health care and pharmaceutical prospecting." Metropolitan Life Insurance Company Officer's Lunch.
- "Good botanical practices" in botanicals: a role in U.S. health care? NIH Office of Alternative Medicine in Cooperation with the U.S. Food and Drug Administration, Washington, D.C.
- "Uncovering ancient remedies in the tropical rain forest." Delaware Center for Horticulture, Wilmington, Delaware.
- "Ancient wisdom and modern medicine: the search for new therapies in the tropical rain forest." Sasqua Garden Club, Southport, CT.
- "Consequences of extinction" a panel, in "The living planet in crisis: biodiversity science and policy." American Museum of Natural History Center for Biodiversity and Conservation, New York.
- "Ethnobotany for the new millennium" Keynote Address for "Biodiversity: Keystone of Life," Annual Systematics Symposium. Missouri Botanical Garden, St. Louis, Missouri.
- "Ethnopharmacology and tropical forest conservation in Belize." Kansas Academy of Science, Pittsburgh State University, Pittsburgh, Kansas.
- "Ethnobotany, conservation and corporate responsibility." Mitsubishi International Corporation, New York.
- "Ancient wisdom and modern medicine." Greenwich Garden Club, Greenwich, Connecticut.
- "Richard Evans Schultes: life of a legend." Botanical Research Institute of Texas, Fort Worth, Texas.
- 1995 "Ethnomedicine and modern health care." Memorial Sloan-Kettering Cancer Center, New York.
- "Ethnobotany, biodiversity prospecting and conservation in Belize" The Botanical

Garden of Smith College, Northampton, Massachusetts. 1996 "Traditional healers and herbal remedies." Herb Society of America, New York. "Assessment of future activities in the rain forest biome." Biodiversity Cycle 1996 Working Group, Research Program Review and Planning Meeting, Biosphere 2, Oracle, Arizona. "Ethnopharmacology and tropical forest conservation in Belize." Adelphi 1996 University, Garden City, New York. 1996 "Drug discovery in the rain forest." Bronx-Lebanon Hospital Center, Bronx, New York. "Ethnobotany and pharmaceutical prospecting in tropical forests." Continuing 1996 Medical Education Course, Herbal Medicine and Your Health, Columbia University College of Physicians and Surgeons, New York. "The ethical issues in ethnobotanical research." The Ethical Society of Northern 1997 Westchester, Ossining, New York. "Studies of plants and people in Belize." The Conservancy of Southwest Florida, 1997 Naples, Florida. 1997 "Studies of plants and people in Belize." The Barbara Cushing Paley Horticultural Seminars, The New York Botanical Garden. "Learning from the rain forest: plants, people and culture." The NYBG 1997 Conservatory Lecture Series, The Rockefeller University. "Ethnobotany and conservation in Belize." Wesleyan University, CT. 1997 "Public health related activities of the Institute of Economic Botany." Columbia 1997 University, NY. "Linking traditional medicine and forest conservation in Belize." "Ethnobotany of 1997 New World palms;" and "Traditional healers in Belize—educating the next generation." The Jean Andrews Centennial Visiting Professorship in Tropical and Economic Botany, The University of Texas at Austin, Austin, Texas. "Ethnomedical studies in the urban environment." The New York Times, NY. 1997 1997 "Linking ethnomedicine and conservation in Belize." The Newark Museum, Newark, NJ 1997 "The importance of the tropical forest as a source of modern therapeutic drugs." National Catholic Franciscan Sisters of Poor Health Care System. "NYBG's role in the development of therapeutic drugs." Cancer Information 1997 Service, New York City. "Ethnobotany and conservation in Belize." Easton Garden Club and the Friends of 1997 the Easton Public Library, Easton, CT. Radio show, "Revealing secrets for mind and body." Interview on Medicinal 1997 Plants. 1997 "New ethnobotany project in Micronesia." Botanical Science Committee and Library Visiting Committee, The New York Botanical Garden, Chase Manhattan Bank, NY. 1997 "Ancient wisdom and modern medicine: the search for new therapies from the tropical rain forest." Adelphi University, Garden City, NY. "Ancient wisdom and modern Medicine." The Southampton Garden Club, New 1997

"Linking ethno-medicine and conservation in the tropical forest." Contemporary

1998

Club of Albemarle, Charlottesville, VA. 1998 "Plants, people and culture: the science of ethnobotany and tropical rain forests." Department of Ecology, Evolution and Natural Resources, Cook College, New Brunswick, New Jersey, Distinguished Lecturer Series Seminar. "Ethnobotany, drug development and conservation: exploring the linkage." 1998 Shaman Pharmaceuticals, Inc., San Francisco, CA. "Ancient wisdom and modern medicine." New England Science Center, 130<sup>th</sup> 1998 Annual Meeting of the Worcester Natural History Society, Worcester, MA. "Plants, people and culture: linking ethnobotany, conservation and traditional 1998 medicine in the tropical rain forest." Santa Barbara Botanic Garden, Second Annual Vernon Cheadle Memorial Lecture, Santa Barbara, CA. "Plants, people and culture: the science of ethnobotany." Department of Biology, 1998 University of Utah, Salt Lake City, UT. "Ethnobotany and conservation in Belize." Red Butte Garden and Arboretum, 1998 University of Utah, Salt Lake City, UT. 1998 "Ethnobotany and pharmaceuticals from tropical forests." Botanical Medicine in Modern Clinical Practice, The Columbia University College of Physicians and Surgeons at the Columbia-Presbyterian Medical Center, New York. "Human impacts on the environments of Brazilian Amazonia: does traditional 1998 ecological knowledge have a role in the future of the region?." Centre for Brazilian Studies, University of Oxford, Oxford, England, an International Conference. "The role of plants in medicine: past, present and future." The Royal Society of 1998 Medicine, Medicines from Nature: Scientific, Legal and Ethical Aspects, London, England. "Ancient wisdom and modern medicine." Today's Horticulture at Longwood 1998 Gardens, Chanticeer Foundation, Wayne, PA. "Ancient wisdom and modern medicine: Ethnobotany of Belize." The Garden Club 1999 of America, New York, N.Y. 1999 "Ethnobotany and conservation in the tropics." Leadership Conference, Nu Skin International, Salt Lake City, Utah. 1999 "Women's health studies on herbal medicines in New York City." Richard and Hinda Rosenthal Center for Complementary and Alternative Medicine, Columbia University College of Physicians and Surgeons, New York, N.Y. 1999 "The healing herbs." SUNY Rockland Community College, Suffern, N.Y. 1999 "Ethnobotany and cultural conservation." Seed Seminar Series, Nightingale-Bamford School, New York, N.Y. "The study of bioactive compounds from Belize: Linking Ethnomedicine, 1999 Floristics, Biodiversity Conservation, and Education." International Conference on Ethnomedicine and Drug Discovery, Silver Spring, MD. "Searching for, evaluating, and cultivating new botanicals: New Responsibilities 1999 for Industry." The Cosmetic, Toiletry, and Fragrance Association Science

"Effectiveness of herbals in western medicine: beliefs and proofs." The Science

"Ancient wisdom and modern medicine: lessons from the rain forest." Symposium on Integrative Medicine: Foundation for the Advancement of Innovative Medicine

Conference, Boston, MA.

Center of Eastern Connecticut, New London, CT.

2000

2000

	Education Fund, Oradell, NJ.
2000	"Ancient wisdom and modern medicine: The search for new therapies in the
	tropical rain forest." University of Pennsylvania, Institute for Environmental
	Studies, Philadelphia, PA
2000	"Ancient wisdom and modern medicine: ethnobotany, conservation and therapies
	of the tropical rain forest." Distinguished Lecture Series for 1999–2000, Botanical
	Research Institute, Forth Worth, Texas.
2000	"Healing herbs: ethnobotany of medicinal plants." Walt Disney World, Orlando,
	Florida.
2000	"Between plants and people." Penn State Berks-Lehigh Valley, College, PA.
2000	"The economic, medicinal & cultural impact of the loss of the rain forest."
	University of Connecticut at Avery Point, Groton, CT.
2000	"Ancient wisdom and modern medicine: ethnobotanical exploration in Central
	America and the Pacific." The Arboretum of Los Angeles County, Arcadia,
	California.
2001	"Plants, people and culture: the science of ethnobotany." Trinity School, Science
2001	Department Faculty, New York, N.Y.
2001	"Ethnobotanical and floristic research in Belize—accomplishments, experiences,
	and challenges." Building Bridges with Traditional Knowledge II: An International
	Summit Meeting on Issues Involving Indigenous Peoples, Conservation, Sustainable
	Development and Ethnoscience, University of Hawaii, Honolulu, Hawaii.
2001	"Ethnobotanical studies and educational opportunities." National Institutes of
	Health/Peabody Biodiversity and Human Health Program, Peabody Museum of
	Natural History, Yale University, New Haven, CT.
2001	"Ancient wisdom for contemporary healing." From Plants to Medicines: Honoring
	our Relationship to Nature's Pharmacy, 12 <sup>th</sup> Annual Symposium of the American
	Herbalists Guild, Helen, GA. (Plenary address)
2001	"Plants, People, and Culture: The Science of Ethnobotany." Long Island
	University, Arnold & Marie Schwartz College of Pharmacy and Health Sciences.
2001	"Ancient wisdom for modern times: an ethnobotanist's perspectives on the
	cosmetics industry." Frontiers of Science Award Lecture, Society of Cosmetic
	Chemists, New York, N.Y.
2002	"Ancient wisdom and modern medicine: ethnobotany, conservation, and therapies
	of the tropical rain forest." The Power of Herbs: Tenth Anniversary Weekend
	Celebration, The New York Botanical Garden, Bronx, N.Y.
2002	"The globalization of ethnomedicine." Health Care Education in the Developing
	World: Bridging Global and Local Health Care Practices, Harvard Health Caucus at
	the Harvard Medical School, Boston MA
2002	"Ancient wisdom and modern medicine: plants, people, and culture. The
	Therapeutic Relationship, Scientific, Cultural and Personal Perspectives." The
	Sixth Annual Alternative Therapies Symposium and Exhibition, San Diego, CA.
2002	"Ancient wisdom, modern medicine." Chappaqua Library, Chappaqua, New York.
2002	"Ethnobotany an pharmaceuticals from tropical forests." Botanical Medicine in
	Modern Clinical Practice, Columbia University College of Physicians & Surgeons
	at Columbia-Presbyterian Medical Center, New York, New York.
2002	"Ethnomedicine and the environment." Society of Environmental Journalists 12 <sup>th</sup>

- Annual Conference, Baltimore, Maryland.

  "Traditional knowledge: lessons from the past, lessons for the future." Conference on Biodiversity, Biotechnology and the Protection of Traditional Knowledge, Washington University, St. Louis, Missouri.
- 2003 "Ancient wisdom and modern medicine: ethnobotany, conservation and therapies of the tropical rain forest." The Healing Power of Herbs, The New York Botanical Garden, Bronx, New York.

2003

- "Urban ethnobotany: plants, people and culture in New York City." Biodiversity and the Empire State: Conserving our Landscapes, The Nature Conservancy and The Center for Environmental Research and Conservation at the Earth Institute, Columbia University, New York.
- 2003 "Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the Tropical Rainforest." Cantor Arts Center, Stanford University, Stanford, CA.
- 2004 "Nature's Subsidy: A Current Perspective on Plants and the Healing Process." Plants and Your Health, The New York Botanical Garden, Bronx, New York.
- 2004 "Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the Tropical Rainforest." Copeland Lecture, Delaware Center for Horticulture, Wilmington, Delaware.
- 2004 "Ethnomedicine and Ethnobotany: A Consideration of Their Potential Contribution to the Development of CAM." National Center for Complementary and Alternative Medicine, Bethesda, MD.
- 2005 "Ancient Wisdom and Modern Medicine: Rainforest Remedies." Valencia Community College, Orlando, Florida.
- 2005 "Plants, People and Culture: The Science of Ethnobotany," Department of Biology and Curriculum in Ecology Seminar; and "Ancient wisdom and modern medicine," public lecture. University of North Carolina at Chapel Hill, NC.
- 2005 "Exploring Ancient Wisdom and Traditional Healing in Micronesia." Botanical Research Institute of Texas, Fort Worth, Texas.
- 2005 "Ancient Wisdom and Modern Medicine: Examining the Value of Traditional Healing in Contemporary Patient Care." Strang Cancer Prevention Center, Weill College of Cornell University, New York.
- 2005 "Piper methysticum (Sakau) and its cultural use in Pohnpei." Society for Economic Botany Annual Meeting, Botanical Research Institute of Texas.
- 2005 "Ancient Wisdom and Modern Medicine: Plants, People and Culture in the Tropical Rainforest." Rainforest Alliance, New York City.
- 2006 "Ancient Wisdom, Modern Science: Biodiversity and Cultural Conservation in Pohnpei, Micronesia." Briefings from the Field, The New York Botanical Garden, Sotheby's, New York City
- 2006 "Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the Tropical Rainforest." The Plant Biology Seminar Series. Rutgers University Cook College, New Brunswick, New Jersey.
- 2006 "Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the Tropical Rainforest." Cornell University, Cooperative Extension, Westchester County, Valhalla, New York
- 2006 "The Erosion of Traditional Knowledge and The Impact of Its Loss." Ancient Wisdom and Contemporary Science: Traditional Knowledge in the 21<sup>st</sup> Century.

2006	AAAS Annual Meeting" Grand Challenges, Great Opportunities," St. Louis, MO. "Ancient Wisdom, Modern Practices: Ethnomedical Studies and Conservation in Belize." Maya Shamans, The 24 <sup>th</sup> Annual Maya Weekend. The University of
	Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, PA.
2006	"Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the
2000	Tropical Rainforest." United States National Herbarium, National Museum of
	Natural History, Smithsonian Institution, Washington, D.C.
2006	"Bioprospecting in the Cragg Era: Accomplishments and the Road Ahead." Legal
	and Ethical Issues: From the Convention on Biological Diversity to Conservation,
	Realizing Nature's Potential: The Once and future King of Drug Discovery, A
	Symposium Honoring the Lifetime Achievements of Dr. Gordon Cragg of the
	National Cancer Institute, The William L. brown Center of Plant Genetic Resources
	and The Missouri Botanical Garden, St. Louis, MO
2006	"Ethnobotany and The Development of Phytopharmaceuticals." MB&B 230
	Rainforest Expedition and Laboratory, Spring/Summer Semester, Yale University
2007	"Evening with Ethnobotanists." The Public Face of Ethnobotany, Ethnobotany
	Summit, The National Tropical Botanical Garden (NTBG), Kauai, Hawaii.
2007	Ethnobotany, MB&B230 Rainforest Expedition and laboratory Spring/ Summer
2007	2007 Yale University, CT
2007	"Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the
2007	Tropical Rainforest." Harvard Museum of Natural History, Cambridge, MA
2007	Ethnobotany, MB&B230 Rainforest Expedition and laboratory Spring/ Summer 2007 Yale University, CT
2008	"Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the
2000	Tropical Rainforest." Valencia Community College, FL
2008	Ethnobotany, MB&B230 Rainforest Expedition and laboratory Spring/Summer
	2008. Yale University, CT. February 4.
2008	"Ancient Wisdom and Modern Medicine: Plants, People, and Cultures in the
	Tropical Rainforest." Adelphi University, NY. February 21.
2008	"Traditional Knowledge & Modern Practice": Science Across Border: Global NHP
	Research, 5 <sup>th</sup> Annual NHP Research Conference, Toronto, Canada. March 26-29
2008	"Ethnobotany in the Urban Environment": Featured Symposium, Building Upon the
	Legacy of Botanical Education and Traditional Knowledge, The Society of
2000	Economic Botany, 49 <sup>th</sup> Annual Meeting, Duke University, Durham, NC. June 1-5.
2008	"Greening the Personal Care Industry": 16 <sup>th</sup> Annual HBA Global Expo & Educational Conference. Jacob K. Javis Convention Center, NY. September 9-11.
2008	"Ancient Wisdom and Modern Medicine": 1st Symposium on Drug Discovery,
2000	Development and Clinical Research in Academia, School of Pharmacy Medical
	Sciences Campus, University of Puerto Rico, San Juan, Puerto Rico. September 17-
	19
2008	"Indigenous Practices in the Context of Integrative Care": Pangea 2008 Conference:
	a Conference for the Future of Pediatric Wellness, NY. November 15-16.
2009	"Ethnomedical Systems, Biodiversity and Primary Health Care in Micronesia": The
	Center for Biodiversity and Conservation Milstein Sciences Symposium, Exploring
	the Dynamic Relationship between Health and Environment, American Museum of
	Natural History, NY. April 2-3.

- "Ethnobotany, Traditional Medicine and Dietary Supplements: Research Priorities and Lessons to be Learned, 8<sup>th</sup> Oxford International Conference on Science of Botanicals (ICBS), University of Mississippi, MS. April 6-9.
   "Greening the Future": Society of Cosmetics Chemists, NJ Convention Center, Edison, NJ. May 12-13.
- 2009 "A Sense of Wonder": Distinguished Economic Botanist Lecture, Society for Economic Botany 50<sup>th</sup> Annual meeting, College of Charleston, SC. May 30-June8.

  "Community-based conservation of plant diversity and traditional medical
- 2009 "Community-based conservation of plant diversity and traditional medical knowledge in Micronesia": Conservation conversations: a dialog, Fordham University, Bronx, NY. September 25.
- 2010 "Ecological Impact of Sakau (*Piper methysticum*) production in Pohnpei and Kosrae, Micronesia and update on animal studies": Alan G. Johnson Memorial Symposium, Luna Nueva, Costa Rica. February 19.
- 2010 "Ethnomedical Studies in the Urban Environment with Dominican Immigrant Populations, Jardin Botanico, Santo Domingo, Dominican Republic, Aug 19-21
- 2011 "Reflections on Richard Evans Schultes": Healing the planet: medicinal plants and the legacy of Richard E. Schultes, The Society for Economic Botany and the trajectory of ethnobotanical research, St. Louis, MO. July 9-15
- "Increased local demand for *sakau* (*Piper methysticum*) in Micronesia, and the impact on biodiversity": 70 Years After Schultes [W. Law], The Society for Economic Botany and the trajectory of ethnobotanical research, St. Louis, MO. July 9-15
- 2011 "Ethnobotany and Medical Education": 70 Years After Schultes [I. Vandebroek], The Society for Economic Botany and the trajectory of ethnobotanical research, St. Louis, MO. July 9-15
- 2011 "Effect of Kava (*Piper methysticum* G. Forst.) on Social and Affect Behaviors of Prairie Voles (*Microtus ochrogaster*)" [K. Herrera]: Annual Meeting, The Society for Economic Botany, St. Louis, MO. July 9-15
- 2012 "Ancient Wisdom and Modern Medicine: Plants, People and Cultures in the Tropical Rainforest": Sherman Fairchild Foundation Lecture, Connecticut College, New London, CT. January 30.
- 2012 "Ancient Wisdom, Modern Science"; Valencia College, Orlando, FL. February 14.
- 2012 "A Botanists' Perspective on Personal Care Ingredients from Nature: Opportunities, Challenges and Responsibilities": Health and Beauty Association, Sustainability and Eco-Responsibility Workshop. Javits Center, New York City. June 21.
- 2012 "Ethnobotany and its Application to Improving Primary Health Care Delivery": International Congress on Natural Products Research, American Society of Pharmacognosy, New York City, July 28-August 1, 2012.
- 2012 "Ancient Wisdom and Modern Medicine: Plants, People and Culture"; Taft School, November 28, 2012, Watertown, Connecticut.
- 2013 "Sakau (Kava) on Pohnpei: Traditional use, animal studies and environmental effects of uncontrolled cultivation on a small Pacific Island habitat—What can we learn?" Lehman College, Bronx, New York May 13, 2013.
- 2013 "Wild Medicine: Healing Plants Around the World" Opening lecture and awards ceremony, New York Botanical Garden, Bronx, New York, May 18, 2013.
- "The Garden of Good and Evil" Guggenheim Museum, New York City, June 2, 3,

	2013.
2013	"Ancient Wisdom and Modern Medicine" Closing lecture, Wild Medicine, New
	York Botanical Garden, September 8, 2013.
2014	"Healing Herbs: Bodies in Balance: The Art of Tibetan Medicine" Rubin Museum
	of Art, April 30, 2014
2014	"Ancestral Wisdom in Modern medicine: Plants, People, and Cultures in the tropical
	Rainforest" University of Delaware, May 5, 2014
2014	"Ancient Wisdom and Modern Therapies" Sigma Xi Dinner and Lecture, Lehman
	College, May 7, 2014
2014	"Herbs in Health and Healing: Ancient Wisdom and Modern Medicine" Macaulay
	Honors College, May 16, 2014
2014	"Ancient Wisdom and Modern Medicine: Plants, People and Cultures in the
	Tropical Rainforest, June 24, 2014
2014	"The Institute of Economic Botany's Plants and Human Health Program," NYBG
	Intern Program, July 2, 2014
2019	"Plants and People of Vanuatu: An interdisciplinary approach to survey, understand
	and conserve biological diversity." (With Gregory M. Plunkett) Britton Gallery
	Talk, NYBG. February 15, 2019.
2019	"Exploring Vanuatu: Plants, People and Traditional Culture." (With Gregory M.
	Plunkett). NYBG Education Department Talk. February 26, 2019.
2019	"American Eden and The New York Botanical Garden" with Prof. Victoria
	Johnson, Harvard Club of New York City, March 5, 2019.
	"Botanical Remedies in Clinical Practice: Historic and Contemporary Use."
2019	University of Arizona, Andrew Weil Center for Integrative Medicine. March 18,
• • • • •	2019.
2019	"Scientific Research at The New York Botanical Garden: Nature and Purpose."
2010	Princeton Alumni Association. April 13, 2019.
2019	"The Nature and Purpose of Ethnobotanical Research." NYBG School of
	Professional Horticulture. August 2, 2019.
2010	"Plants Mo Pipol Blong Vanutatu: A Progress Report." A seminar to the Port
2019	Resolution Community, Tanna, Vanuatu. (With Gregory M. Plunkett). August 15, 2019.
2019	"Plants Mo Pipol Blong Vanutatu: An Introduction." A seminar to the Futuna
2019	Community, Futuna, Vanuatu. (With Gregory M. Plunkett). August 18, 2019.
2019	"Indigenous Perspectives on Daylight: Examples from Vanuatu," Plenary address,
2019	Annual meeting of the Daylight Academy, November 15, 2019.
2020	"Plants, People and Culture: The Science of Ethnobotany," Rutgers University
2020	Department of Plant Biology, Natural Products. February 21, 2020.
2020	Plants, People and Culture: The Science of Ethnobotany. American Botanical
2020	Council Webinar with Paul A. Cox. September 17, 2020.
2020	"The History of Medicinal Plant Use: Ethnomedicine and Clinical Application,"
2020	College of Pharmacy, University of Minnesota. September 23, 2020.
2020	"Ethnobotany and Ethnomedicine: Plants that Heal. CUNY Seminar "Current
	Topics in Plant Biology. October 2, 2020.
2020	"Ethnomedicine: Botanical Remedies in Clinical Practice," University of Arizona,
-	Andrew Weil Center for Integrative Medicine. October 12, 2020.

- "Plants and People of Vanuatu," Earth Day video premier. April 22, 2021.
- "Scott Mori memorial tribute." May 12, 2021.
- "Ethnobotany at the NYBG," Botanical Science Committee Meeting. May 13, 2021.
- 2021 "Ethnobotany of Palau: From concept to publication." Belau National Museum, May 18, 2021.
- 2021 "Ethnobotany and the Search for Bioactive Plants: Contemporary Approaches in the Pacific." Keynote Address, American Council of Medicinally Active Plants. June 24, 2021.
- 2021 "Ethnobotany: The Science of Indigenous Medicine." Podcast with Andrew Weil and Victoria Maizes. July 13, 2021. https://integrativemedicine.arizona.edu/podcast/episode21\_balick.html
- "Introduction to Toxic Plants, in situ". Rutgers University Hospital Fellowship in Toxicology. July 29, 2021.
- Conversations with Great American Gardeners", with Michael Balick, hosted by Holly Shimizu. American Horticultural Society, January 27, 2022.

  <a href="https://us02web.zoom.us/rec/share/-y4kxB3Uqi69q3KZrw96MemruNusGO6RjwLM4Oa\_ZCImw8hRnCknwr3n-z8HzJRy.YKVDIkpBN\_ErxKap">https://us02web.zoom.us/rec/share/-y4kxB3Uqi69q3KZrw96MemruNusGO6RjwLM4Oa\_ZCImw8hRnCknwr3n-z8HzJRy.YKVDIkpBN\_ErxKap</a> [passcode 8?A335W=]
- Indigenous Perspectives on Daylight: Environmental, Cultural and Personal Health. With K. David Harrison. June 2, 2023. Annual meeting of the Daylight Academy, Lausanne, Switzerland.
- Plants that Harm: Developing a Toxic Plant Tour at NYBG. With Kenneth Walker. August 22, 2023. https://vimeo.com/858021842/556b078ea4
- "The History of Medicinal Plant Use: Ethnomedicine and Clinical Application," College of Pharmacy, University of Minnesota. September 21, 2023.
- Plants and People of Vanuatu: Discussion of scientific outputs. CUNY PS Bio79302. With Gregory M. Plunkett. October 27, 2023.
- Ethnobotany, Primary Health Care, Drug Development and the Importance of Keeping Traditional Practices Alive. Department of Plant Biology, New Use Agriculture and Natural Plant Products Program, Rutgers University. March 29, 2024.
- Biocultural Diversity of Foods in the Pacific. Periodic Table of Foods Initiative, New York Botanical Garden. April 23, 2024.
- 2024 Rehabilitation of Forests in Vanuatu and Impact on the Livelihoods of the Local People. Annual meeting of the Daylight Academy. May 31, 2024. Trondheim, Norway. With Gregory M. Plunkett.
- 2024 Ethnobotany and Ethnomedicine: Investigating the Potential of Plants in Health. Address to the North American Congress of Clinical Toxicology. September 20, 2024. Denver, Colorado.

#### DOCTORAL DISSERTATION

The Biology and Economics of the *Oenocarpus–Jessenia* (Palmae) Complex. A study of the systematics, ethnobotany, nutrition, growth and economics of the domestication of two genera of Neotropical Palms. Richard Evans Schultes, Advisor, Department of Biology, Harvard University, 1980.

#### **DATABASES AND WEBSITES**

Developed jointly with H. T. Beck, the PALM-USE database on economic palms of the world, indexed by product, use and genus. Primary users are scientists in tropical countries working on palm domestication or extractive production who have limited access to the literature. Funded by the Rockefeller Foundation and Andrew W. Mellon Foundation.

Flora of Vanuatu. Vanuatu National Herbarium, *Plants mo Pipol*. The Flora of Vanuatu (pvnh.net). Contributor.

New Pohnpeian-English Online Dictionary. <u>New Pohnpeian-English Online Dictionary</u> (hawaii.edu). Botanical Consultant.

Vanuatu Talking Dictionaries<sup>™</sup> and Plant Lexicons for Aneityum, Futuna-Aniwa, Lenakel, Nafe, Naka, Newai and Raga languages. <u>Vanuatu Talking Dictionaries and Plant Lexicons</u> (<u>swarthmore.edu</u>). Botanical Consultant.

#### **PATENT**

Hetero-substituted cyclic lactone analogues and uses thereof. Guzman, M.L., Compadre, C.M., Ordonez, P., Martinez, M., Balick, M.J., Jones, D.E. Gaudio, F.G.. June 1,2021. US Patent Number 11.021.488.

### COMMITTEE AND RELATED PROFESSIONAL SERVICE

Board Member, Beneficial Plants Research Association, 2024-present

Member of the Jury, Daylight Award 2024, Copenhagen, Denmark.

Board of Trustees, American Botanical Council, 1996-present.

Advisory Committee, William L. Brown Center, Missouri Botanical Garden, 2012-present.

Board of Trustees, Sacred Seeds Foundation, Costa Rica, 2010-2019.

Editorial Advisory Board Member, Pharmaceutical Crops, 2010-1018

Contributing Editor, Explore: The Journal of Science and Healing, 2004-2019

Associate Editor, Journal of Economic Botany, 2000-present

Associate Editor, Alternative Therapies in Health and Medicine, 2001-present

International Advisory Board, Journal of Tropical Medicinal Plants; 2000-2019

Editorial Board, Fitoterapia; 1999-2015

Guest Editor, Advances in Economic Botany; 2019-2020.

Expert Panel Member, Research on Botanical Medicines. National Institutes of Health, 2013

Associate Editor, The Journal of Alternative and Complementary Medicine, 1997-2003

NYBG Biodiversity Convention Officer, 1997-2005

Editorial Board, Elaeis, Palm Oil Research Institute of Malaysia, 1997-2005

Board Member, Teatown Lake Reservation, Inc., 1997-2001

Scientific Advisory Board, Richard and Hinda Rosenthal Center for Complementary & Alternative Medicine, Columbia University, 1996-2007.

Board of Advisors, Indic Traditions of Healthcare, Dharam Hinduja Indic Research Center, Columbia University, 1996-2000.

Member, US National Committee for the International Union of Biological Sciences, 1995-2000.

National Genetic Resources Advisory Council, U.S. Department of Agriculture, 1995-1996.

Advisory Board, The Botanical Organization and Mae Sa Botanic Garden, Thailand, 1992-2008.

President, Society for Economic Botany, 1992-1993.

Council Member, Society for Conservation Biology, 1992-1995.

Editor, Columbia University Press series, Biology and Resource Management, 1990-2010.

Chairman, Ix Chel Tropical Research Center, Ltd., Belize, 1990-2001.

Council Member, Society for Economic Botany, 1984-1986; 1987-1991.

Review Editor, Journal of Ethnopharmacology, 1990-present.

Associate Editor, Advances in Economic Botany, 1990-1998.

Member, Conservation Committee, American Association of Botanical Gardens and Arboreta, 1989-1993.

Member, Advisory Committee, Las Cruces Tropical Botanical Garden, San Vito, Costa Rica (OTS), 1989-1996.

Advisory Committee on Technology Innovation (ACTI) of the Board on Science and Technology for International Development (BOSTID), National Research Council, 1988-1990.

Chairman, Palm Specialist Group, 1991-1997; Species Survival Commission of the International Union for the Conservation of Nature (IUCN); Member, Ethnobotany Specialist Group, 1981-1990.

Scientific Advisory Board, Society for Protection of Nature in Israel, U.S. Chapter, 1988-1995.

Plant Registration Committee, American Association of Botanical Gardens and Arboreta, 1980.

Member, Board of Directors, American Association of Botanical Gardens and Arboreta, 1984-1986.

Book Review Editor, American Association of Botanical Gardens and Arboreta for: Newsletter and Public Gardens, 1981-1986.

Coordinator, Summer Student Placement Service of the Education Committee, American Association of Botanical Gardens and Arboreta, 1974-1977.

Plant Collector, Ein Gedi Field School, Israel, 1973.

Paralegal Assistant, Community Legal Aid Society, Wilmington, Delaware, 1971-72.

Vice President, Student Coalition for the Environment, University of Delaware, 1970-71.

# SELECTED EXHIBTIONS, PRESENTATIONS AND MEDIA APPEARANCES (SINCE 2010)

A Conversation about People, Nature and Daylight, with Michael Balick and Nanet Mathiasen. February 26, 2024.

The Daylight Award presents: a conversation about People, Nature, and Daylight - YouTube

A Gardening Calendar for the era of Climate Change. With Gregory M. Plunkett, Hosted by Tom Christopher. Growing Greener Podcast. November 15, 2023.

 $\underline{https://www.thomaschristophergardens.com/podcasts/a-gardening-calendar-for-the-era-of-climate-change}$ 

Psychoactive Plants. NPR WNYC Morning Edition, August 16, 2023. <a href="https://www.dropbox.com/scl/fi/7i407q3kcpuz4114xas0v/NYBG-WNYC-8am-8-16-23-1.mp3?rlkey=bbak75lh4zfhedegnuh2ddmrp&dl=0">https://www.dropbox.com/scl/fi/7i407q3kcpuz4114xas0v/NYBG-WNYC-8am-8-16-23-1.mp3?rlkey=bbak75lh4zfhedegnuh2ddmrp&dl=0</a>

Plants Mo Pipol Blong Vanuatu (Plants and People of Vanuatu). February, 2021. A video about the biocultural conservation program in Vanuatu. <a href="https://youtu.be/m3ii4qihIww">https://youtu.be/m3ii4qihIww</a>

Lebensraum, Museum for Applied Arts Vienna, Vienna Biennale for Change 2021. Siegrun Appelt and Constanze Müller and scientific contributors. Exhibition revised in 2023 as Lighten Up! in cooperation with the Daylight Academy, at the École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland.

Plants, People and Culture: The Science of Ethnobotany. A webinar hosted by the American Botanical Council. September 17, 2020. <a href="https://vimeo.com/460565477">https://vimeo.com/460565477</a>

Unladylike 2020: Ynés Mexía. <a href="https://unladylike2020.com/profile/ynes-mexia/">https://unladylike2020.com/profile/ynes-mexia/</a> (Scientific Advisor)

Poisonous Plants, with Dr. Michael Balick of NYBG. July, 27, 2020. https://awaytogarden.com/poisonous-plants-with-dr-michael-balick-of-nybg/

10 Best Healing Plants You Can Grow. Because Mother Nature knows what she is doing. Interviewed by Erica Elin Sansone, January 27, 2020.

https://www.countryliving.com/gardening/garden-ideas/g29804807/best-healing-plants/

Sacred Science: Remedy, Ancient Medicine for Modern Illness, a 9 part series. 2018, 2019. <a href="https://remedy.thesacredscience.com/">https://remedy.thesacredscience.com/</a>

The Scientist Podcast: Michael Balick. 2018. http://www.scientistpodcast.org/home/027-michael-balick

"Incredible Healing Plants from Around the World.", Wild Medicine at Weather.com, interviewed by Annie Hauser, December 3, 2013

http://www.weather.com/health/incredible-healing-plants-around-world-photos-20130730

"Wild Botanical solutions for Beauty & Therapeutics", Beauty Inside Out Show, August 27, 2013 <a href="http://radiomd.com/show/beauty-inside-out/item/13862-wild-botanical-solutions-for-beauty-therapeutics">http://radiomd.com/show/beauty-inside-out/item/13862-wild-botanical-solutions-for-beauty-therapeutics</a>

Science & U!: Science and Health, CUNY-TV, interviewed by Donna Hanover, August 27, 2013 <a href="http://www.cuny.tv/show/scienceandu/PR2002094">http://www.cuny.tv/show/scienceandu/PR2002094</a>

Curator, **Wild Medicine: Healing Plants Around the World**. An exhibition at The New York Botanical Garden, May 18 to September 8, 2013, seen by over 200,000 visitors.

Developed and presented two live performances at The Guggenheim Museum, entitled "The Garden of Good and Evil: Harmful and Healing Properties of Plants", combining performance art with a scientific lecture (June 2,3, 2013). <a href="http://www.guggenheim.org/new-york/calendar-and-events/2013/06/02/the-new-york-botanical-gardengarden-of-good-and-evil-harmful-and-healing-properties-of-plants/1257">http://www.guggenheim.org/new-york/calendar-and-events/2013/06/02/the-new-york-botanical-gardengarden-of-good-and-evil-harmful-and-healing-properties-of-plants/1257</a>

"Learning the Lore of far-Flung Flora." Wall Street Journal Interview by Lisa Bannon September 15, 2012

http://www.nybg.org/files/scientists/mbalick/Wall%20Street%20Journal%20Balick%20091512.pdf

"Chocolate: Good for your Heart and you Brain." Fox News, The Medicine Hunter, October 11, 2011 <a href="http://www.foxnews.com/health/2011/10/11/chocolate-good-for-your-heart-and-your-brain/">http://www.foxnews.com/health/2011/10/11/chocolate-good-for-your-heart-and-your-brain/</a>

"Surgery Has Use for Poisonous Plants." Fox News, The Medicine Hunter, October 10, 2011 <a href="http://www.foxnews.com/health/2011/10/10/surgery-has-use-for-poisonous-plant/">http://www.foxnews.com/health/2011/10/10/surgery-has-use-for-poisonous-plant/</a>

"A Cure for Dry Mouth." Fox News, The Medicine Hunter, October 3, 2011 <a href="http://video.foxnews.com/v/1197779104001/a-cure-for-dry-mouth/#sp=show-clips&v=1197779104001">http://video.foxnews.com/v/1197779104001/a-cure-for-dry-mouth/#sp=show-clips&v=1197779104001</a>

"The Relaxing Power of Kava." Fox News, The Medicine Hunter, September 29, 2011 http://www.foxnews.com/health/2011/09/29/relaxing-power-kava/

"Natural Solution for Sleep." Fox News, The Medicine Hunter, September 12, 2011 <a href="http://video.foxnews.com/v/1155848763001/natural-solution-for-sleep/?playlist\_id=164264#sp=show-clips&v=1155848763001">http://video.foxnews.com/v/1155848763001/natural-solution-for-sleep/?playlist\_id=164264#sp=show-clips&v=1155848763001</a>

"Beauty in Botany" The Scientist, April 15, 2011 http://www.the-scientist.com/?articles.view/articleNo/29655/title/Beauty-in-botany/

The Leonard Lopate Show, Please Explain: Poisonous Plants Show WNYC, July 09, 2010 <a href="http://www.wnyc.org/story/70327-please-explain-poisonous-plants/">http://www.wnyc.org/story/70327-please-explain-poisonous-plants/</a>

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Public Garden Association American Botanical Council Linnean Society of London

#### SCIENTIFIC PUBLICATIONS

### BOOKS AND MONOGRAPHS AUTHORED OR EDITED

- M. J. Balick (Ed.). 1986. <u>Botanical Gardens and Arboreta: Future Directions</u>. Contributions from the International Working Meeting held at The New York Botanical Garden, October 6-8, 1980. Published by The New York Botanical Garden and The American Association of Botanical Gardens and Arboreta. 109 pp.
- M. J. Balick. 1986. **Systematics and Economic Botany of the** *Oenocarpus -Jessenia* (**Palmae**) **Complex**. Advances in Economic Botany 3. 140 pp.
- Claudio Urbano B. Pinheiro and M. J. Balick. 1987. **Brazilian Palms. Notes on Their Uses and Vernacular Names, Compiled and Translated from Pio Corrêa's "Dicionário das Plantas Uteis do Brasil e das Exóticas Cultivadas," with Updated Nomenclature and Added Illustrations.** Contributions from The New York Botanical Garden 17. 63 pp.
- M. J. Balick (Ed). 1988. The Palm—Tree of Life. Proceedings of a Symposium on the Biology, Conservation and Utilization of Palms. Advances in Economic Botany 6. 282 pp.
- M. J. Balick. 1988. *Jessenia* and *Oenocarpus*: Neotropical Oil Palms Worthy of Domestication. FAO Plant Production and Protection Paper. Rome. 191 pp.
- M. J. Balick and H. T. Beck. 1989. <u>Useful Palms of the World--A Synoptic Bibliography</u>. Columbia University Press, New York. 724 pp.
- G. T. Prance and M. J. Balick (Eds). 1990. **New Directions in the Study of Plants and People: Research Contributions from the Institute of Economic Botany**. Advances in Economic Botany 8. 1-278.
- A. B. Anderson, P. H. May and M. J. Balick. 1991. <u>The Subsidy from Nature: Palm Forests</u>, <u>Peasantry and Development on an Amazonian Frontier</u>. Columbia University Press, New York. 233 pp.
- R. Arvigo and M. J. Balick. 1993. <u>Rainforest Remedies: One Hundred Healing Herbs of Belize</u>. Lotus Press, Twin Lakes, Wisconsin. 221 pp.
- M.J. Balick, E. Elisabetsky, S. Laird. 1995. <u>Medicinal Resources of the Tropical Forest:</u>
  <u>Biodiversity and Its Importance to Human Health</u>. Columbia University Press, New York. 440 pp.
- M.J. Balick and P.A. Cox. 1996. <u>Plants, People, and Culture: The Science of Ethnobotany</u>. W.H. Freeman, Scientific American Library. 228 pp. Reprint paperback edition 2005.
- J.W. Sheldon, M.J. Balick and S.A. Laird. 1997. **Medicinal Plants: Can Utilization and Conservation Coexist?** Advances in Economic Botany 12:1-104.
- R. Arvigo and M. J. Balick. 1998. **Rainforest Remedies One Hundred Healing Herbs of Belize**. Lotus Press, Twin Lakes, Wisconsin. 283 pp. Second Edition.
- M.J. Balick, M.H. Nee, and D.E. Atha. 2000. **Checklist of the Vascular Plants of Belize, With Common Names and Uses**. Memoirs of The New York Botanical Garden Press, Bronx, N.Y. 246 pp.

- D.A. Posey and Michael J. Balick (Eds). 2006. <u>Human Impacts on Amazonia: The Role of Traditional Ecological Knowledge in Conservation and Development</u>. Columbia University Press, New York. 368 pp.
- Nelson, L., R. Shih, M. J. Balick, 2007. <u>Handbook of Poisonous and Injurious Plants</u>, Second Edition. Springer/The New York Botanical Garden, New York. 340 pp.
- M.J. Balick and Collaborators. 2009. <u>Ethnobotany of Pohnpei: Plants, People and Island Culture</u>. University of Hawaii Press/The New York Botanical Garden, Honolulu. 585 pp.
- R. Ocampo and M. J. Balick, with R. Goldstein and K. Herrera (Eds). 2009. <u>Plants of Semillas</u>
  <u>Sagradas: An Ethnomedicinal Garden in Costa Rica</u>. Finca Luna Nueva, San Jose, Costa Rica. 109 pp.
- Yukes, J. and M.J. Balick. 2009. <u>Dominican Medicinal Plants: A Guide for Health Care Providers</u>. New York Botanical Garden. 467 pp.
- Lee, R., N. Shere, M.J. Balick, F. Sohl, A.S. Roberts, K. Herrera, S. Dahmer, M. Lieskovsky, A. Dores, W. Raynor, P. Raynor, E. Albert, M. Hunt, C. Trauernicht, L. Offringa, I. Adam, and W. Law. 2010. **Pohnpei Primary Health Care Manual: Health Care in Pohnpei,**Micronesia, Traditional Uses of Plants for Health and Healing. The New York Botanical Garden, The Nature Conservancy, Continuum Center for Health and Healing and The Conservation Society of Pohnpei, Charleston SC. 178 pp.
- Herrera, K., D.H. Lorence, T. Flynn and M.J. Balick. 2010. <u>Checklist of the Vascular Plants of Pohnpei, Federated States of Micronesia with Local Names and Uses</u>. <u>Allertonia</u> 10:1-204.
- Arvigo, R. and M.J. Balick. 2012. <u>Remedios de la Selva Tropical: Cien Hierbas Curativas de Belice,</u> 2nd ed. Lotus Press, Twin Lakes, WI.
- Dahmer, S., M.J. Balick, A. Hillman Kitalong, C. Kitalong, K. Herrera, W. Law, R. Lee, V.R. Tadao, F. Rehuher, S. Hanser, K. Soaladaob, G. Ngirchobong, M. Besebes, F. Wasisang, D. Kulakowski and I. Adam. 2012. <a href="Palau Primary Health Care Manual: Health Care in Palau, Combining Conventional Treatments and Traditional Uses of Plants for Health and Healing</a>. The New York Botanical Garden, Ministry of Health, Republic of Palau, The Continuum Center for Health and Healing and Belau National Museum. Charleston SC. 216 pp. Revised Edition 2018.
- Balick, M.J. 2014. 21st Century Herbal: A Practical Guide for Healthy Living Using Nature's Most Powerful Plants. Rodale Press, Emmaus, PA. 512 pp.
- Balick, M.J. and R.Arvigo. 2015. <u>Messages from the Gods: A Guide to the Useful Plants of Belize.</u> Oxford University Press/The New York Botanical Garden, New York, NY. 539 pp.
- Dahmer, S., M.J. Balick, A. Hillman Kitalong, C. Kitalong, K. Herrera, W. Law, R. Lee, V.R. Tadao, F. Rehuher, S. Hanser, K. Soaladaob, G. Ngirchobong, M. Besebes, F. Wasisang, D. Kulakowski and I. Adam. 2018 (revised edition). Palau Primary Health Care Manual: Health Care in Palau, Combining Conventional Treatments and Traditional Uses of Plants for Health and Healing. The New York Botanical Garden, Ministry of Health, Republic of Palau, The Continuum Center for Health and Healing and Belau National Museum. Charleston SC. 220 pp.
- Nelson, L. and M. J. Balick, 2020. <u>Handbook of Poisonous and Injurious Plants</u>, Third Edition. Springer/The New York Botanical Garden, New York. 333 pp.
- Balick, M.J. and A. Hillmann-Kitalong. 2020. Ethnobotany of Palau: Plants, People and Island

  <u>Culture</u>. Volume I. Belau National Museum/The New York Botanical Garden, Koror, Palau. 240 pp.

- Balick, M.J. and A. Hillmann-Kitalong. 2020. Ethnobotany of Palau: Plants, People and Island

  <u>Culture</u>. Volume II. Belau National Museum/The New York Botanical Garden, Koror, Palau. 374 pp.
- Balick, M.J. and Paul Alan Cox. 2020. <u>Plants, People and Culture: The Science of Ethnobotany,</u>

  <u>2<sup>nd</sup> edition</u> (an undergraduate/graduate level textbook). Taylor and Francis Group/CRC Press.

  Boca Raton, Florida. 218 pp.
- Balick, M.J. and Andrew J. Henderson. 2022. **A Field Guide to the Palms of Belize.** New York Botanical Garden Press. 153 pp.
- Balick, M.J. G.M. Plunkett, J.-P. Wahe, P. Dovo, M. Wahe, T.A. Ranker, D.M. Ramík, T. Doro, K. David Harrison, with C. Sam, R, Neriam, T. Keith, W. Nasauman, W. Nasauman, T.J. Lalep, K. B. Matai, K. Kausei, N. Ramík and J. Ure. 2025. Plants, People and Culture in Tafea Province, Vanuatu: Ol Plant, Pipol, mo Kalja blong Tafea. NYBG Press, Bronx, NY. 921 pp. In press.

#### **SCIENTIFIC PAPERS**

- M. J. Balick. 1976. The palm heart as a new commercial crop from Tropical America. <u>Principes</u> 20(1): 24-28.
- M. J. Balick. 1976. Oleaginous palms with potential for commercial exploitation in Amazon regions. Report prepared for the Centro "Las Gaviotas," Bogota, Colombia, as a background to their oil studies program.
- M. J. Balick, D. G. Furth and G. A. Cooper-Driver. 1978. Biochemical and evolutionary aspects of arthropod predation on ferns. Oecologia 35: 55-89.
- M. J. Balick and G. A. Cooper-Driver. 1978. Effects of field preservation on the flavonoid content of *Jessenia bataua*. Botanical Museum Leaflets of Harvard University 26 (8): 257-265.
- M. J. Balick. 1979. Notes on the foraging behavior of a leaf-cutting Ant on *Oenocarpus bacaba* in the Northwest Amazon of Colombia. <u>Principes</u> 23(1): 26-31.
- M. J. Balick. 1979. Amazonian oil palms of promise. Economic Botany 33(1): 11-28.
- M. J. Balick. 1979. Economic botany of the Guahibo. I. Palmae. Economic Botany 33(4): 361-376.
- M. J. Balick. 1980. The current importance of the palm herbarium at Berlin-Dahlem. <u>Principes</u> 24: 33-36.
- M. J. Balick. 1980. Wallace, Spruce and <u>Palm Trees of the Amazon</u>: an historical perspective. <u>Botanical Museum Leaflets of Harvard University</u> 28: 263-269.
- M.J. Balick. 1981. *Jessenia bataua* and *Oenocarpus* species: native Amazonian palms as new sources of edible oil. New Sources of Fats and Oils, pp. 141-155. In Pryde, E. H., L. H. Princen and K. D. Mukherjee (eds.). American Oil Chemists Society, Champaign.
- M.J. Balick and S. N. Gershoff. 1981. Nutritional evaluation of *Jessenia bataua*: source of high quality protein and oil from Tropical America. <u>Economic Botany</u> 35(3): 261-271.
- M. J. Balick. 1981. Une huile comestible de haute qualite en provenance des especes *Jessenia* et *Oenocarpus*. <u>Oleagineux</u> 36(6): 319-326.
- M.J. Balick. 1981. Mauritiella (Palmae) Reconsidered. Brittonia 33(3): 459-460. .
- M. Zethelius and M. J. Balick. 1982. Modern medicine and shamanistic ritual: a case of positive synergistic response in the treatment of a snakebite. <u>Journal of Ethnopharmacology</u> 5(2): 181-185.

- M. J. Balick. 1982. Palmas Neotropicales: nuevas fuentes de aceites comestibles. <u>Interciencia</u>. 7:25-29.
- M. J. Balick, A. B. Anderson and M. Frietas da Silva. 1982. Palm taxonomy in Brazilian Amazonia: an evaluation of the state of systematic collections in regional herbaria. <u>Brittonia</u> 34: 463-477.
- M. J. Balick, L. Rivier and T. Plowman. 1983. The effects of field preservation on alkaloid content of fresh coca leaves (<u>Erythroxylum</u> spp.) <u>Journal of Ethnopharmacology</u> 6: 287-291. Reprinted in: proceedings of the 2nd International Meeting on Medicinal and Aromatic Plants, Città di Castello, 11-13 September 1981.
- M. J. Balick. 1983. Introduction to: Anotaciones sobre bibliografia seleccionada del complejo *Jessenia-Oenocarpus* (Palmae) (by L. E. Forero P.). <u>Cespedesia</u> 12: 21-49.
- M.J. Plotkin and M J. Balick. 1984. Medicinal uses of South American palms. <u>Journal of Ethnopharmacology</u> 10: 157-179.
- M.J. Balick. Ethnobotany of palms in the Neotropics. Advances in Economic Botany 1: 9-23. 1984.
- M.J. Balick. (contributing author). Palmeras poco utilizadas de América Tropical. Report of a workshop on little-known useful palms of Tropical America, CATIE, Turrialba, Costa Rica. Published by the Food and Agriculture Organization of the United Nations. 168 pp. 1984.
- M.J. Balick. Methods for evaluating tropical forest and woodland plants to indicate their potential as resources, 72 pp. A commissioned paper for: Office of Technology Assessment, Study on Technologies to Sustain Tropical Forest Resources, Congress of the United States, Washington, D.C. 1984.
- M.J. Balick. Useful plants of Amazonia: A resource of global importance. pp. 339-368. In: <a href="mailto:Amazonia"><u>Amazonia</u></a>, Key Environments Series, G. T. Prance and T. Lovejoy (eds.), Pergamon Press, Ltd., pp. 339-368. 1985.
- M. J. Balick. Current status of Amazonian oil palms. In: <u>Oil Palms and Other Oilseeds of the Amazon</u>, by C. Pesce, updated and translated by D. Johnson, Reference Publications, Inc. pp. 172-182. 1985.
- M. J. Balick, A. B. Anderson and M. Frietas da Silva. Preliminary checklist of palms in the Brasilian Amazon region. In: Oil Palms and Other Oilseeds of the Amazon, by C. Pesce, updated and translated by D. Johnson, Reference Publications, Inc. pp. 188-191. 1985.
- P. H. May, A. B. Anderson, M. J. Balick, and J. M. F. Frazão. Subsistence benefits from the Babassu palm (*Orbignya martiana*). Economic Botany 39(2)113-129. 1985.
- P. H. May, A. B. Anderson, M. J. Balick, and J. M. F. Frazão. Babassu palm agroforestry systems in Brazil's Mid-North Region. <u>Agroforestry Systems</u>. 3: 275-295. 1985.
- M.J. Balick. The indigenous palm flora of "Las Gaviotas," Colombia including observations on local names and uses. <u>Botanical Museum Leaflets of Harvard University</u>. 30(3)1-34. 1985.
- M.J. Balick. Taxonomy of the *Oenocarpus-Jessenia* (Palmae) complex in Brazil. <u>Acta Amazonica</u> (Special Supplement), 15(1-2)87-113. 1985.
- Andrew Henderson and M.J. Balick. Notes on the palms of Amazônia Legal. <u>Principes</u> 31(3)116-122. 1987.
- M. J. Balick, C. U. B. Pinheiro and A. B. Anderson. Hybridization in the Babassu palm complex. I. *Orbignya phalerata* Mart. x *O. eichleri* Drude. <u>American Journal of Botany</u>. 74(7)1013-1032. 1987.
- M. J. Balick, A. B. Anderson and J. T. de Medeiros-Costa. Hybridization in the Babassu palm complex. II. *Attalea compta* x *Orbignya oleifera*. Brittonia. 39(1)26-36. 1987.

- A. B. Anderson and M. J. Balick. Taxonomy of the Babassu complex (*Orbignya* spp.; Palmae). Systematic Botany 13(1)32-50. 1988.
- M. J. Balick and A. B. Anderson. Dry matter allocation in *Jessenia bataua* (Palmae). <u>Acta</u> Amazonica 16-17:135-140. 1986/87.
- M.J. Balick. Palms and Development in the humid tropics. In: <u>Proceedings of the First Symposium on the Humid Tropics</u>, Belém, Brazil. IV:121-140. 1986.
- M. J. Balick. The use of palms by the Apinayé and Guajajara Indians of Northeastern Brazil. In: M.J. Balick (ed.), <u>The Palm—Tree of Life, Proceedings of a Symposium on the Biology, Utilization and Conservation of Palms</u>. <u>Advances in Economic Botany</u>. 6:65-90. 1988.
- M.J. Balick. The economic utilization of the babassu palm: A conservation strategy for sustaining tropical forest resources. <u>Journal of the Washington Academy of Sciences</u>. 77(4)215-223. 1987.
- M. J. Balick and J. Beitel. Lycopodium spores found in condom dusting agent. Nature 322:591. 1988.
- M.J. Balick. Chapter 22: Palmeiras, in G. T. Prance: Manual <u>de Botânica Econômica de Maranhão</u>. Univ. Federal de Maranhão, São Luis. 1988.
- M.J. Balick. Native neotropical oil palms. In: <u>Oil Crops of the World</u>, G. Robbelen, R. K. Doney and A. Ashri (eds.), McGraw-Hill Publishing Co. 1989.
- M.J. Balick. The importance of making good palm collections. In: <u>Floristic Inventory of Tropical Countries</u>, D. G. Campbell and H. D. Hammond (eds.). The New York Botanical Garden. 1989.
- M.J. Balick. Collecting tropical plant germplasm. In: <u>Floristic Inventory of Tropical Countries</u>, D. G. Campbell and H. D. Hammond (eds.). The New York Botanical Garden. 1989.
- M.J. Balick. Native neotropical palms: a resource of global interest. New Crops for Food and Industry, G. Wickens and N. Haq and P. Day (eds.), pp. 323-332. Chapman and Hall. 1989.
- M. J. Balick and J. Beitel. Lycopodium spores used in condom manufacture and associated health hazards. <u>Economic Botany</u>. 43(3)373-377. 1989.
- C. M. Peters, M. J. Balick, F. Kahn and A. B. Anderson. Oligarchic forests of economic plants in Amazonia: utilization and conservation of an important tropical resource. <u>Conservation</u> Biology. 3(4)341-349. 1989.
- M.J. Balick and S.N. Gershoff. A Nutritional study of *Aiphanes caryotifolia* (Palmae) fruit, an exceptional source of vitamin A and high quality protein from tropical America. <u>Advances in Economic Botany</u> Vol. 8, pp. 35-40. 1990.
- M.J. Balick. Production of Coyol wine from <u>Acrocomia mexicana</u> (Arecaceae) in Honduras. <u>Economic Botany</u> 44(1)84-93. 1990.
- M. J. Balick. Conservation status of Haitian palms. Principes, 34(3)134-142. 1990.
- M.J. Balick. Ethnobotany and the identification of therapeutic agents from the rainforest. In:

  <u>Bioactive Compounds from Plants</u>, D. C. Chadwick and J. Marsh (eds.), pp. 22-39. J. Wiley and Sons. 1990.
- A. Henderson and M. J. Balick<u>Attalea crassispatha</u>, a rare and endemic Haitian palm. <u>Brittonia</u> 43(3) 181-194. 1991.
- R. Mendelsohn and M. J. Balick. Assessing the economic value of traditional medicines from tropical rain forests. <u>Conservation Biology</u>. 6(1)128-130. 1992.
- J. B. Dickey, M. J. Balick and I. M. Linington. Experimental investigations into the feasibility of <u>ex</u> <u>situ</u> preservation of palm seeds; an alternative strategy for biological conservation of this economically important plant family. <u>Biodiversity and Conservation</u> 1(2)112-119. 1992.

- H. Hadrys, M. Balick and B. Schierwater. Applications of random amplified polymorphic DNA (RAPD) in molecular ecology. <u>Molecular Ecology</u> 1:55-63. 1992.
- M.J. Balick. 1991. A new hybrid palm from Amazonian Brazil, *Oenocarpus* x *andersonii*. <u>Boletim</u> do Museu Paraense Emilio Goeldi, Serie Botanica 7(2). Issued in 1993.
- J.B. Dickie, M. Balick and I. Linington. Studies on the practicality of ex situ preservation of palm seeds. <u>Principes</u> 37(2)94-98. 1993.
- M.J. Balick. The diversity of use of neotropical palms. Ceiba. 30(1)22-46. 1993.
- P.C. Tabora, M. Balick, M.L.A. Bovi and M.P. Guerra. Hearts of palm (<u>Bactris</u>, <u>Euterpe</u> and others), pp. 193-218, J. T. Williams (ed.) <u>Underutilized Crops</u>, Chapman and Hall, London. 1993.
- M.J. Balick. Patauá (*Jessenia bataua*), pp. 81-91, in, J.W. Clay and C.R. Clement (eds.), <u>Selected Species and Strategies to Enhance Income Generation from Amazonian Forests</u>, Food and Agriculture Organization of the United Nations, Rome. 1993.
- M.J. Balick and C.U.B. Pinheiro. Babassu (<u>Orbignya phalerata</u>), pp. 177-187. In: J. W. Clay and C.
   R. Clement (eds.), <u>Selected Species and strategies to Enhance Income Generation from Amazonian Forests</u>. Food and Agriculture Organization of the United Nations, Rome. 1993.
- M.J. Balick J. Friedman, D. Bolotin, M. Rios, D. Mendosa, Y. Cohen. A novel method for identification and domestication of indigenous useful plants in Amazonian Ecuador. pp. 167-174. In: J. Janick and J.E. Simon (eds.) New Crops, John Wiley and Sons, Inc., New York. 1993.
- M. J. Balick and D. Johnson. The conservation status of <u>Schippia concolor</u> in Belize. <u>Principes</u> 38(3)124-128. 1994.
- P. A. Cox and M. J. Balick. The ethnobotanical approach to drug discovery. <u>Scientific American</u> 270(6)82-87. 1994.
- M. Salvtore, O. Hensens, D. Zink, J. Liesch, C. Dufresne, J. Ondeyka, T. Jurgens, R. Borris, S. Raghoobar, E. McCauley, L. Kong, S. Gartner, G. Koch, F. Pelaez, M. Diez, C. Cascales, I. Martin, J. Polishook, M. Balick, H. Beck, S. King, A. Hsu, R. Lingham. L-741,494, A fungal metabolite that is an inhibitor of interleukin-1B converting enzyme. <u>Journal of Natural</u> Products 37(6)755-760. 1994.
- M.J. Balick, R. Arvigo, and L. Romero. The development of an ethnobiomedical forest reserve in Belize: its role in the preservation of biological and cultural diversity. <u>Conservation Biology</u>. 8(1)316-317. 1994.
- T.M. Jurgens, E.G. Frazier, J.M. Schaeffer, T. E. Jones, D. L. Zink, R. P. Borris, H.T. Beck, M.J. Balick. Novel nematocidal agents from *Curcuma comosa*. <u>Journal of Natural Products</u>, Vol. 57, No. 22, pp. 230-235. February 1994
- M.J. Balick. Ethnobotany, drug development and biodiversity conservation—exploring the linkages. Pp. 18-24. In: Ethnobotany and the search for new drugs. Ciba Foundation Symposium 185. Chadwick, Derek J. and Joan Marsh (eds.) Chichester: John Wiley & Sons Ltd. 1994.
- Grimes, A., Loomis, S., Jahnige, P., Burnham, M., Onthank, K., Alarcon, R., Cuenca, W.P., Martinez, C.C., Neill, D., Balick, M., Bennett, B., and Mendelsohn, R. Valuing the rain forest: The economic value of non-timber forest products in Ecuador. Ambio Vol. 23 No.7. Nov. 1994.
- R. Mendelsohn and M.J. Balick. The value of undiscovered pharmaceuticals in tropical forests. <u>Economic Botany</u> 49(2)223-228. 1995.
- R. Mendelsohn and M. Balick. Private property and rainforest conservation. <u>Conservation Biology</u>, Vol. 9, No. 5, pp. 1-3. 1995.
- M.J. Balick. Ethnobotany and plant germplasm. pp. 195-199. In: <u>Ethnobotany Today</u>, R. E. Schultes and S. von Reis (eds.). Dioscorides Press, Portland. 1995.

- J.W. Sheldon and M.J. Balick. Ethnobotany and the search for balance between use and conservation. In: <u>Intellectual Property Rights and Biodiversity Conservation: An Interdisciplinary Analysis</u> of Medicinal Plants. T. Swanson (ed.). Cambridge University Press. pp. 45-65. 1995.
- J.A. Glinski, E. David, T.C. Warren, G. Hansen, S.F. Leonard, P. Pitner, S. Pav, R. Arvigo, M.J. Balick, E. Panti, and P.M. Grob. Inactivation of cell surface receptors by Pheophorbide a, a green pigment isolated from *Psychotria acuminata*. <u>Photochemistry and Photobiology</u>, Vol. 62, No. 1, pp. 144-150. 1995.
- M.J. Balick, R. Arvigo, G. Shropshire and R. Mendelsohn. Ethnopharmacological studies and biological conservation in Belize. pp. 535-536. <u>Medicinal Resources of the Tropical Forest: Biodiversity and Its Importance to Human Health</u>. Balick, M.J., E. Elisabetsky, S.A. Laird (eds.), 440 pp. Columbia University Press, New York. 1996.
- M.J. Balick. Transforming ethnobotany for the new millennium. <u>Ann. Missouri Bot. Gard.</u> 83: 58-66. 1996.
- C.U.B. Pinheiro, M.J. Balick, and J.M.F. Frazão. Branching in *Syagrus cocoides* (Arecaceae) in Maranhão, northeastern Brazil. Brittonia, 48(4), pp.556-565. 1996.
- J.R. Kloppenburg Jr. and M. J. Balick. Property rights and genetic resources: a framework for analysis. Pp. 174-190. In: <a href="Medicinal Resources of the Tropical Forest: Biodiversity and Its Importance to Human Health">Medicinal Resources of the Tropical Forest: Biodiversity and Its Importance to Human Health</a>. M.J. Balick, E. Elisabetsky, S.A. Laird (eds.). 440 pp. Columbia University Press, New York. 1996.
- M.J. Balick. Collecting palm specimens: In: M.N. Alexiades and J.W. Sheldon (eds.). <u>Selected Guidelines for Ethnobotanical Research: A Field Manual</u>. <u>Advances in Economic Botany</u> 10:127-133. 1996.
- A. Sendl, J.L. Chen, S. D. Jolad, C. Stoddart, E. Rozhon, M. Kernan, W. Nanakorn and M. Balick. Two new naphthoquinones with antiviral activity from *Rhinacanthus nasutus*. <u>J. Nat. Prod.</u> 59, 808-811. 1996.
- Elbrecht, A., Chen, Y., Jurgens, T., Hensens, O.D., Zink, D.L., Beck, H.T., Balick, M.J. & Borris, R. 8-0-Acetylharpagide is a nonsteroidal ecdysteroid agonist. <u>Insect Biochem. Molec. Biol.</u> 26(6):519-523. 1996.
- M.J. Balick. Ethnobotany: linking health and environmental conservation. In: J. Chesworth (ed.). <u>The Ecology of Health: Identifying Issues and Alternatives</u>. Sage Publications, Inc., Thousand Oaks, CA. 1996.
- M.R. Kernan, A. Sendl, J.L. Chen, S.D. Jolad, P. Blanc, J.T. Murphy, C.A. Stoddart, W. Nanakorn, M.J. Balick, and E.J. Rozhon. Two new nignans with nctivity against influenza virus from the medicinal plant *Rhinacanthus nasutus*. J. Nat. Prod. 60, 635-637. 1997.
- M. J.Balick, R. Mendelsohn, R. Arvigo, and G. Shropshire. Valuation of extractive medicines in tropical forests. In: G.K. Meffe, C.R. Carroll et al, <u>Principles of Conservation Biology</u>, Second Edition, Sinauer Associates, Sunderland, MA. pp. 535-536. 1997.
- M.J. Balick, and P.A. Cox. Ethnobotanical research and traditional health care in developing countries. In: G. Bodeker, K.K.S. Bhat, J. Burley and P. Vantomme (eds.) <u>Medicinal Plants for Forest Conservation and Health Care</u>. Food and Agriculture Organization of the United National, Rome. 1997.
- R. Mendelsohn, and M. Balick. Valuing undiscovered pharmaceuticals in tropical rarinforests. <u>Economic Botany</u> 51(3) p. 328. 1997.
- M.J. Balick. Linking ethnopharmacology and tropical forest: conservation in Belize. From Tomlinson, T.R. & O. Akerele. (eds.), <u>Medicinal Plants: Their Role in Health & Biodiversity</u>, University of Pennsylvania Press. pp. 71-81, 1998.

- D.F. Slish, H. Ueda, R. Arvigo, and M.J. Balick. Ethnobotany in the search for vasoactive herbal medicines. <u>Journal of Ethnopharmacology</u> 66:159-165. 1999.
- M.J. Balick. Good botanical practices. In: D. Eskinazi, M. Blumenthal, N. Farnsworth, and C.
   Riggins. (eds.). Botanical Medicine: <u>Efficacy, Quality Assurance, and Regulation</u>, pp. 121-125. 1999. Mary Ann Liebert, Inc., Larchmont, NY.
- M.J. Balick, R. Arvigo, G. Shropshire, and R. Mendelsohn. <u>Ethnopharmacological studies and biological conservation in Belize: valuation studies.</u> pp. 275-277. In: D.A. Posey (ed.). <u>Cultural and Spiritual Values of Biodiversity</u>. United Nations Environment Program, Nairobi, Kenya. 1999.
- M.J. Balick, and C.U.B. Pinheiro. Babaçu. In: J. W. Clay, P. de T.B. Sampao, and C.R. Clement (eds.), *Biodiversidade Amazonia*, pp. 254—265. Manaus, Brazil: Instituto Nacional de Pesquisas da Amazonia. 1999.
- M.J. Balick.. Patauá. In: J.W. Clay, P. de T.B. Sampao, and C.R. Clement (eds.), *Biodiversidade Amazonia*, pp. 70-79. Manaus, Brazil: Instituto Nacional de Pesquisas da Amazonia.
- M.J. Balick, F. Kronenberg, A.L. Ososki, M. Reiff, A. Fugh-Berman, B. O'Connor, M. Roble, P. Lohr, and D. Atha. Medicinal plants used by Latino healers for women's health conditions in New York City. Economic Botany 54(3), pp. 344-357. 2000.
- H. Jayasuriya, D. L. Zink, S. B. Singh, R. P. Borris, W. Nanakorn, H. T. Beck, M. J. Balick, M. A. Goetz, L. Slayton, L. Gregory, M. Zakson-Aien, W. Shoop, and S. B. Singh. Structure and streochemistry of rediocide A, a highly modified daphnane from *Trigonostemon reidiodes* exhibiting potent insecticidal activity. <u>Journal of American Chemical Society</u> Vol. 122, No. 20, pp 4998-4999. 2000.
- S. Khan, and M. J. Balick. Therapeutic plants of Ayurveda: a review of selected clinical and other studies for 166 species. <u>The Journal of Alternative and Complementary Medicine</u> Volume 7, Number 5, pp. 405-515. 2001.
- M. J. Balick, R. Lee, D. Ling, F. Sohl, B. Brosi, and W. Raynor. Cultural dynamism and change—an example from the Federated States of Micronesia. <u>Economic Botany</u> 55(1), pp. 9-13. 2001. The New York Botanical Garden Press, Bronx, N.Y.
- R. Lee and M. J. Balick. Ethnomedicine: ancient wisdom for contemporary healing. <u>Alternative Therapies in Health and Medicine</u>, Vol. 7, No. 3, pp. 28-30. May/June 2001.
- M.J. Balick and R. Lee. Looking within: urban ethnomedicine and ethnobotany. <u>Alternative Therapies in Health and Medicine</u>, Vol. 7, No. 4, pp. 114-115. July/Aug 2001.
- R. Lee and M.J. Balick. Chocolate: healing 'food of the Gods'? <u>Alternative Therapies in Health and Medicine</u>, Vol. 7, No. 5, pp. 120-122. Sept/Oct 2001.
- M.J. Balick and R. Lee. Expanding the frontiers of traditional medicine: A case in investigating a prospective therapy. <u>Journal of Tropical Medicinal Plants</u>, Vol. 2, No. 2, pp. 205-207. Dec 2001.
- M.J. Balick and R. Lee. Digging in the herb garden: responding to a patient's query about Thunder God vine. <u>Alternative Therapies in Health and Medicine</u>, Vol. 7, No. 6, pp. 100-103. Nov/Dec 2001.
- R. Lee and M.J. Balick. Without sugar, would the holidays be as sweet? exploring ethnobotanical alternatives to sucrose. <u>Alternative Therapies in Health and Medicine</u>, Vol. 8, No. 1, pp. 98-99. Jan/Feb 2002.
- M.J. Balick and R. Lee. Maca: from traditional food crop to energy and libido stimulant. <u>Alternative Therapies in Health and Medicine</u>, Vol. 8, No. 2, pp. 96-98. Mar/Apr 2002.

- M.J. Balick and R. Lee. Snakebite, shamanism, and modern medicine: exploring the power of the mind–body relationship in healing. <u>Alternative Therapies in Health and Medicine</u>, Vol. 8, No. 3, pp. 118-121. May/June 2002.
- M.J. Balick, R. Arvigo, G. Shropshire, J. Walker, D. Campbell, and L. Romero. Belize ethnobotany project: safeguarding medicinal plants and traditional knowledge in Belize. In: M. Iwu and J. Wootten (eds.), Ethnomedicine and Drug Discovery, pp. 267-281. 2002.
- S. Sosa, M.J. Balick, R. Arvigo, R.G. Esposito, C. Pizza, and G. Altinier. Screening of the topical anti-inflammatory activity of some Central American plants. <u>Journal of Ethnopharmacology</u> Vo. 81, No. 2, pp. 211-215. July 2002.
- A. Ososki, P. Lohr, M. Reiff, M.J Balick, F. Kronenberg, A. Fugh-Berman, and B. O'Connor. Ethnobotanical literature survey of medicinal plants in the Dominican Republic used for women's health conditions. Journal of Ethnopharmacology 79, pp. 285-298. 2002.
- M.J. Balick, D. E. Atha, S. Canham and L. Romero. Capoche—rediscovery of a forgotten febrifuge (*Ocotea veraguensis* [Meisn.] Mez) from Belize, Central America, including a new floristic record. Economic Botany 56(1), pp. 89-94. 2002.
- M.J. Balick and R. Lee . Traditional use of sakau (Kava) in Pohnpei: lessons for integrative medicine. <u>Alternative Therapies in Health and Medicine</u>, Vol.8, No. 4, pp. 96-98. July/Aug 2002.
- R. Lee and M.J. Balick. Micronesian massage and massage oils: ancient practice and contemporary medical therapy. <u>Alternative Therapies in Health and Medicine</u>, Vol. 8, No. 5, pp. 107-110. Sept/Oct 2002.
- M.J. Balick and R. Lee. The power of community. <u>Alternative Therapies in Health and Medicine</u>, Vol. 9, No. 1, pp. 100-103. Jan/Feb 2003.
- M.J. Balick and R. Lee. The power of sound: ethnomedical tradition and modern science.

  <u>Alternative Therapies in Health and Medicine</u>, Vol. 9, No. 2, pp. 96-99. Mar/Apr 2003.
- M.J. Balick, M. Reiff, B. O'Connor, F. Kronenberg, P. Lohr, M. Roble, A. Fugh-Berman, and K.D. Johnson. Ethnomedicine in the urban environment: Dominican healers in New York City. Human Organization, Vol. 62, No. 1, pp. 12-26. 2003.
- M.J. Balick and R. Lee. Stealing the soul, *Soumwahu en Naniak*, and *Susto*: understanding culturally-specific illnesses, their origins and treatment. <u>Alternative Therapies in Health and Medicine</u>, May/June Vol. 9, No. 3, pp. 106-109. 2003.
- M.J. Balick and R. Lee. The Role of laughter in traditional medicine and its relevance to the clinical setting: healing with ha! <u>Alternative Therapies in Health and Medicine</u>, Vol. 9, No. 4, pp. 88-91. July/Aug 2003.
- Alfredo Gomez-Beloz, James C. Rucinski, Michael J. Balick, and Camille Tipton. Double incision wound healing bioassay using *Hamelia patens* from El Salvador. <u>Journal of</u> Ethnopharmacology 88, 169-173. 2003.
- A. Camporese, M.J. Balick, R. Arvigo, R.G. Esposito, N. Morsellino, F. De Simone, and A. Tubaro. Screening of anti-bacterial activity of medicinal plants from Belize (Central America). <u>Journal of Ethnopharmacology</u>, Vo. 87, No. 1, pp. 103-107. July 2003.
- M.J. Balick and R. Lee. Poison or Medicine? A Note from the Forest. <u>Alternative Therapies in Health and Medicine</u>, Vol. 10, No. 1, pp. 74-77. Jan/Feb 2004.
- Hiranthi Jayasuriya, Deborah L. Zink, Robert P. Borris, Weerachai Nanakorn, Hans T. Beck, Michael J. Balick, Michael A. Goetz, Lynn Gregory, Wesley L. Shoop, and Sheo B. Singh. Rediocides B—E, Potent Insecticides from *Trigonostemon reidioides*. <u>Journal of Natural Products</u> Vol. 67, No. 2, pp. 228-231. 2004.

- Donald F. Slish, Rosita Arvigo, and Michael J. Balick. *Alseis yucatanensis*: a natural product from Belize that exhibits multiple mechanisms of vasorelaxation. <u>Journal of Ethnopharmacology</u>, Vol. 92, pp.297-302. 2004.
- Adriane Fugh-Berman, Michael J. Balick, Fredi Kronenberg, Andreana L. Ososki, Bonnie O'Connor, Marian Reiff, Maria Roble, Patricia Lohr, Berry J. Brosi, and Roberta Lee. Treatment of fibroids: the use of beets (*Beta vulgaris*) and molasses (*Saccharum officinarum*) as an herbal therapy by Dominican healers in New York City. <u>Journal of Ethnopharmacology</u> Vol, 92, pp. 337-339. 2004.
- King, S.R., Chinnock, J.A., Balick, M.J., Sanchez, S.C., Moran, K. and Limbach, C. Traditional Knowledge, Biological Resources and Drug Development: Building Equitable Partnerships to Conserve, Develop and Respect Biocultural Diversity. In: Intellectual Property and Biological Resources. (ed) B. Ong. Marshall Cavendish International. Pp. 284-321. 2004.
- M. J. Balick and H. O'Brien. Ethnobotanical and Floristic Research in Belize: Accomplishments, Challenges and Lessons Learned. 2004. <a href="https://www.ethnobtanyjournal.org/vol2/i1547-3465-02-077.pdf">www.ethnobtanyjournal.org/vol2/i1547-3465-02-077.pdf</a>.
- B. Jiang, H. Yang, P. Nuntanakorn, M.J. Balick, F. Kronenberg and E.J. Kennelly. The value of plant collections in ethnopharmacology: a case study of an 85-year-old black cohosh (*Actaea racemosa* L.) sample. Journal of Ethnopharmacology 96, pp. 521-528. 2005.
- J.G. Onkeykal, K.B.Hearath, H. Jayasuriya, J.D. Polishook, G.F. Bills, A. W. Dombrowski, M. Mojena, G. Koch, J. Di Salvo, J. DeMartino, Z. Guan, W. Nanakorn, C. M. Morenberg, M.J. Balick, D.W. Stevenson, M.Slattery, R. Borris. S. Singh. Discovery of structurally diverse natural product antagonists of chemokine receptor CXCR3. <u>Molecular Diversity</u> 9(1-3)123-129. 2005.
- R. A. Lee and M. J. Balick. Sweet Wood—Cinnamon and Its Importance as a Spice and Medicine. Explore: The Journal of Science and Healing. 1(1)61-64. January 2005.
- R. A. Lee and M. J. Balick. Rx: Chocolate. <u>Explore: The Journal of Science and Healing</u>. 1(2)136-139. March 2005
- R. A. Lee and M. J. Balick. Absinthe: La Fée Vert. <u>Explore: The Journal of Science and Healing</u>. 1(3)217-219. May 2005.
- M.J. Balick and R.A. Lee. . Inflammation and Ethnomedicine: Looking to Our Past. <u>Explore: The Journal of Science and Healing</u>. 1(5)389-392. September 2005
- Kurt A. Reynertson, Michael J. Balick, Roberta Lee, William Raynor, Yosio Pelep, and Edward J. Kennelly. A traditional method of *Cinnamomum carolinense* preparation eliminates safrole from a therapeutic Pohnpean tea. <u>Journal of Ethnopharmacology</u> 102, pp. 269-274. 2005.
- Pinheiro, C.U.B., J.M.F. Frazão, and M.J. Balick. Coleta de germoplasma de palmeiras do complexo babaçu (*Orbignya e Attalea*),pp. 550-572, 2006. in Walter, B.M.T. and T.B. Calvalcanti (eds) <u>Fundametos para a Coleta de Germoplasma Vegetal</u>, Embrapa Recursos Genéticos e Biotecnologia, Brasilia, DF.
- Lee, R.A. and M.J. Balick. January 2006. *Rx*: Caffeine. Explore: The Journal of Science and Healing 2(1)55-59.
- Lee, R.A. and M.J. Balick. May 2006. In response. Explore: The Journal of Science and Healing 2(3)194.
- M.J. Balick May 2006. Ethnomedicine: Ancient Wisdom and Modern Science. Explore: <u>The Journal</u> of Science and Healing 2(3)238-248.
- Lee, R.A. and M.J. Balick May 2006. Flu for You? The Common Cold, Influenza and traditional medicine. Explore: The Journal of Science and Healing 2(3)252-255.

- Lee, R.A. and M.J. Balick September 2006. Chronobiology: It's about time. Explore: The Journal of Science and Healing 2(5)442-445.
- Jiang, B.; Kronenberg, F, Balick, M.J., Kennelly, E.J. 2006. Analysis of formononetin from black cohosh (*Cimicifuga racemosa*). Phytomedicine, 13:477-486.
- Bridgewater, S.G.M., Harris, D.J., Whitefoord, C., Monro, A.K., Penn, M.G., Suttun, D.A., Sayer, B., Adams, B., Balick, M.J., Atha, D.H., Solomon, J. & Holst, B.K. 2006. A Preliminary Checklist of the Vascular Plants of the Chiquibul Forest, Belize. <u>Edinburgh Journal of Botany</u> 63 (2&3): 269-321.
- Brosi, Berry J., Michael J. Balick, Robert Wolkow, Roberta Lee, Mark Kostka, William Raynor, Robert Gallen, Ally Raynor, Pelihter Raynor & Dana Lee Ling 2007. Cultural Erosion and Biodiversity: Canoe-Making Knowledge in Pohnpei, Micronesia. Conservation Biology 21(3)875-879.
- Lee, R. A. and M. J. Balick. March 2007. The Value of Museum Collections in the 21<sup>st</sup> Century. Explore: The Journal of Science and Healing 3(2)145-148.
- Lee, R. A. and M. J. Balick. July 2007. Indigenous Use of <u>Hoodia gordonii</u> and Appetite Suppression. <u>Explore: The Journal of Science and Healing</u> 3(4)404-406.
- Ososki, A. L., M. J. Balick & D. C. Daly 2007. Medicinal plants and cultural variation across Dominican rural, urban, and transnational landscapes. *In:* A. Pieroni & I. Vandebroek, eds., <a href="mailto:Traveling Cultures">Traveling Cultures and Plants: The Ethnobiology and Ethnopharmacy of Human Migrations</a>. Bergahn Books, New York, pp. 14-38.
- Vandebroek, I., M.J. Balick, J. Yukes, L. Duran, F. Kronenberg, C. Wade, A.L. Ososki, L. Cushman, R. Lantigua, M. Mejia & L. Robineau 2007. Use of medicinal plants by Dominican immigrants in New York City for the treatment of common health conditions. A comparative analysis with literature data from the Dominican Republic *In:* A. Pieroni & I. Vandebroek, eds., <u>Traveling Cultures and Plants: The Ethnobiology and Ethnopharmacy of Human</u> Migrations. Bergahn Books, New York, pp. 39-63
- M. J. Balick 2007. Chapter 19: Traditional Knowledge: Lessons from the Past, Lessons for the Future. pp. 280-297. In: C. R. McManis (ed.) Biodiversity & The Law Intellectual Property. Biotechnology & Traditional Knowledge. Earthscan, London. 484 pp.
- Lee, R. A. and M. J. Balick. January/February 2008. Palms, People, and Health. <u>Explore: The Journal of Science and Healing</u> 4(1)59-62.
- Balick, M.J., J. M. De Gezelle, R. Arvigo. March 2008. Feeling the Pulse in Maya Medicine: An Endangered Traditional Tool for Diagnosis, Therapy, and Tracking Patients' Progress. Explore: The Journal of Science and Healing 4(2)113-119.
- Bennett, Bradley C., M. J. Balick. 2008. Phytomedicine 101: Plant Taxonomy for Preclinical and Clinical Medicinal Plant Researchers. <u>Journal of the Society for Integrative Oncology</u>, 6(4) 150-157.
- Nelson, L. S., M. J. Balick, N. Shere. September 2008. Brief Toxicology Communications: What is this plant and why is this Japanese artist eating it? <u>Journal of Medical Toxicology</u>, 4(3)201
- Amy C. Keller, Ina Vandebroek, Youping Liu, Michael J. Balick, Fredi Kronenberg, Edward J. Kennelly, Anne-Marie B. Brillantes. 2009. *Costus spicatus* tea failed to improve diabetic progression in C57BLKS/J db/db mice, a model of type 2 diabetes mellitus. <u>Journal of Ethnopharmacology</u>, 121:248-254
- Balick, M.J. 2009. The sense of wonder: Distinguished Economic Botanist lecture. <u>Economic Botany</u> 63(4) 333-339.

- Maldini, M. S. Sousa, P. Montoro, A. Giangaspero, M.J. Balick, C. Pizza, and R. Della Loggia. 2009. Screening of the topical anti-inflammatory activity of the bark of *Acacia cornigera* Willdenow, *Byrsonima crassifolia* Kunth, *Sweetia panamensis* Yakovlev and the leaves of *Sphagneticola trilobata* Hitchcock. <u>Journal of Ethnopharmacology</u>, 122: 430-433.
- Ian B. Cole, Michael J. Balick. 2010. Lunar Influence: Understanding Chemical Variation and Seasonal Impacts on Botanicals. <u>Herbalgram The Journal of the American Botanical Council</u>, 85 (February – April 2010) 50-56
- Ina Vandebroek, Michael J. Balick, Andreana Ososki, Fredi Kronenberg, Jolene Yukes, Christine Wade, Francisco Jiménez, Brígido Peguero, Daisy Castillo. 2010. The importance of botellas and other plant mixtures in Dominican traditional medicine. <u>Journal of Ethnopharmacology</u>, 128: 20-41
- Li, S., W. Yuan, P. Yang, M.D. Antoun, M.J.Balick, G.M.Cragg. 2010. Pharmaceutical Crops: An Overview. <u>Journal of Pharmaceutical Crops</u>. 1:1-17.
- Ann Hillmann Kitalong, A., M. J. Balick, F. Rehuher, M. Besebes, S. Hanser, K. Soaladaob, G. Ngirchobong, F. Wasisang, W. Law, R. Lee, V. R. Tadeo, C. Kitalong and C. Kitalong. 2011. Plants, people and culture in the villages of Oikull and Ibobang, Republic of Palau, pp. 63-84, in, Liston, J. G. Clark and D. Alexander (eds.). 2011. Pacific Island Heritage: Archaeology, Identity & Community. Terra Australis 35. Australian National University, Canberra.
- Balick, M. J. 2011. Bioprospecting in the Cragg Era: Accomplishments and the Road Ahead, pp. 71-79, in B. E. Ponman and J. S. Miller (eds.). 2011. <u>Realizing Nature's Potential</u>, Proceeding of the William L. Brown Symposium Honoring Dr. Gordon Cragg. Missouri Botanical Garden.
- Ferrier, Jonathan, Cal, F., Cal, V., Balick, M. J., & Arnason, J.T. 2011. <u>A Q'eqchi' Maya Diabetes Treatment Guide</u>. Ottawa, New York City: The Q'eqchi' Healers Association and the Belize Indigenous Training Institute. 70 pp.
- Vandebroek, I. & M. J. Balick 2012. Globalization and loss of plant knowledge: Challenging the paradigm. PloS ONE 7: 5, <a href="http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0037643">http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0037643</a>
- Ferrier, J., Djeffal, S., Porter-Morgan, H., Vander Kloet, S., Redzic, S., Cuerrier, A., Balick, M.J., and Arnason, J.T. 2012. Anti-glycation activity of *Vaccinium* spp. (Ericaceae) from the Sam Vander Kloet Collection for the treatment of type II diabetes. <u>Botany</u>, **90**(5): 401–406. doi:10.1139/B2012-026.
- Balick, M.J. 2012. Reflections on Richard Evans Schultes, the Society for Economic Botany, and the Trajectory of Ethnobotanical Research, pp. 3-11, in B.E. Ponman and R.W. Bussman (eds.), Medicinal Plants and the Legacy of Richard E. Schultes. William L. Brown Center, St. Louis, Missouri.
- Balick, M.J., K. Herrera, F. Sohl Obispo, W. Law, R.A. Lee, and W.C. Raynor. 2012. Using plants and traditional ethnomedical knowledge to improve public health and conservation programs in Micronesia. pp. 493-502, in Aguirre, A.A., R.S. Ostfeld and P. Daszak (eds.), New Directions in Conservation Medicine, Applied Cases of Ecological Health. Oxford University Press, New York.
- Henderson, F., I. Vandebroek, M. J. Balick and E. J. Kennelly. 2012. Ethnobotanical Research Skills for Students of Underrepresented Minorities in STEM Disciplines. <u>Ethnobotany Research & Applications</u> 10:389-402. September 13, 2012. <u>www.ethnobotanyjournal.org/vol10/i1547-3465-10-389.pdf</u>
- Jiang, B. F. Kronenberg, M.J. Balick, E.J. Kennelly. 2013. Stability of black cohosh triterpene glycosides and polyphenols: potential clinical relevance. *Phytomedicine* Apr.15:20(6)564-569.

- Bennett, B.C., M. J. Balick. 2014. Does the name really matter? The importance of botanical nomenclature and plant taxonomy in biomedical research, *Journal of Ethnopharmacology*: 152 (3) 387-392.
- Markus, M.A., J. Ferrier, S.M. Luchsinger, J. Yuk, A. Cuerrier, M.J. Balick, J. M. Hicks, K.B. Killday, C.W. Kirby, F. Berrue, R.G. Kerr, K. Knagge, T. Godecke, B. E. Ramirez, D. C. Lankin, G.F. Pauli, I. Burton, T.K. Karakach, J. T. Arnason, K.L. Colson. 2014. Distinguishing *Vaccinium* Species by Chemical Fingerprinting Based on NMR Spectra, Validated with Spectra Collected in Different Laboratories. *Planta Medica* 80: 732-739.
- Vandebroek, I. and M.J. Balick.2014. Lime for Chest Congestion, Bitter Orange for Diabetes: Foods as Medicines in the Dominican Community in New York City. <u>Economic Botany</u> 68(2):177-189.
- Ferrier, J., L. Šačiragić, E.C.JH. Chen,S. Trakic, A. Saleeem, E. Alikadic, A. Cuerrier, M.J.Balick, J.T. Arnason and S. Redzic. 2014. Ways the Lukomir Highlanders of Bosnia and Herzegovina Treat Diabetes. In A. Pieroni & C. L. Quave (Eds.), *Ethnobotany and Biocultural Diversities in the Balkans* (pp. 13–28). New York, NY: Springer New York. doi:10.1007/978-1-4939-1492-0.
- Kulakowski, D.M., S.-B. Wu, M.J. Balick, and E.J.Kennelly. 2014. Merging bioactivity with liquid chromatograph-mass spectrometry-based chemometrics to identify minor immunomodulatory compounds from a Micronesian adaptogen, *Phaleria nisidai*. <u>Journal of Chromatography A.</u> 1364:74-82.
- Kulakowski, D.M., C. Kitalong, A. Negrin, V.-R. Tadao, M.J.Balick, and E.J. Kennelly. 2015. Traditional preparation of *Phalaria nisidai*, a Palauan tea, reduces exposure to toxic daphnane-type diterpene esters while maintaining immunomodulatory activity. <u>Journal of Ethnopharmacology</u> *173:273-279*.
- Ferrier Jonathan, Saciragic Lana, Trakić Sabina, Balick Michael J., et al. 2015. An ethnobotany of the Lukomir Highlanders of Bosnia & Herzegovina. <u>Journal of Ethnobiology and Ethnomedicine</u> 11(1):81-96. Doi: 10.1186/s13002-015-0068-5.
- Sharma, V., W. Law, M. J. Balick and I. N. Sarkar. 2016. Identifying plant-human disease associations in biomedical literature: A case study. <u>AMIA Joint. Summits on Translational Science Proc.</u> 84-93. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5009952/
- Ferrier J, Saleem A, Djeffal S, Schlarb J, Haddad PS, Balick MJ, Cuerrier A., Arnason J.T. 2017. Comparison of antiglycation activity of leaves of eight traditionally used wild blueberry species (Vaccinium L.) from northern Canada and Europe with their Phytochemistry. <u>Botany</u> 95:387–94. doi:10.1139/cjb-2016-0216.
- Ferrier J, Saleem A, Carter Ramirez A, Liu R, Chen E, Pesek T, Cal V., Balick MJ, Arnason JT. 2018. Traditional medicines used by Q'eqchi' Maya to treat diabetic symptoms and their antiglycation potential. Journal of Ethnopharmacology 224:504–11. doi:10.1016/j.jep.2018.06.031.
- Sharma, V. W. Law, M.J. Balick, I.N. Sarkar. 2018. Harnessing biomedical natural language processing tools to identify medicinal plant knowledge from historical texts. <u>AMIA (American Medical Informatics Association) Annual Symposium Proceedings</u>. 2017:1537-1546. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5977595/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5977595/</a>.
- Fonseca, F.N. & M.J.Balick. 2018. Plant Knowledge Adaptation in and Urban Setting: Candomblé Ethnobotany in New York City. Economic Botany 72(1)56-70.

- Einbond, L.S., M. Soffritti, D.D. Espositi, H. Wu, M. Balick, H. Ma, S. Redenti and A. Roter. 2018. A transcriptomic analysis of black cohosh: Actein alters cholesterol biosynthesis pathways and synergizes with simvastatin. <u>Food and Chemical Toxicology</u>. 120: 356-366. https://doi.org/10.1016/j.fct.2018.06.064
- Balick, M.J., R.A.Lee, J. M. De Gezelle, R. Wolkow, G. Cohen, F. Sohl, B. Raynor and C. Trauernicht. 2019. Traditional lifestyles, transition and implications for healthy aging: An example from the remote island of Pohnpei, Micronesia. <u>PLoS ONE</u> 14(3): e0213567. <a href="https://doi.org/10.1371/journal.pone.0213567">https://doi.org/10.1371/journal.pone.0213567</a>.
- Sarkar, I.N., W. Law, M. J. Balick. 2019. Identifying phytochemicals from biomedical literature utilizing semantic knowledge sources. In, L. Ohno-Machado and B. Seroussi (eds), *MEDINFO* 2019: Health and Wellbeing, e-Networks for All. International Medical Informatics Association and IOS Press. <a href="https://doi.org/10.3233/SHTI190227">https://doi.org/10.3233/SHTI190227</a>
- Einbond, L.S., Zhou J., Wu, H., Mbazor, E., Song, G., Balick M., DeVoti, J.A., Redenti, S., & Castellanos, M.R. 2020. A novel cancer preventative botanical mixture, TriCurin, inhibits viral transcripts and the growth of W12 cervical cells harboring extrachromosomal or integrated HPV16 DNA. <a href="https://doi.org/10.1038/s41416-020-01170-3">British Journal of Cancer</a>. <a href="https://doi.org/10.1038/s41416-020-01170-3">https://doi.org/10.1038/s41416-020-01170-3</a>.
- Dahmer, S. and M. Balick. 2021. Cannabis Ethnomedicine, pp. 9-38, in *Understanding Medical Cannabis: Critical Issues and Perspectives for Human Service Professionals*, J. Levine (Ed.), Routledge, New York.
- Mery, D. E., A. J. Compadre, P. Ordonez, E. J. Selvik, V. Morocho, O.E, Malagon, P. J. Breen, D. E. Atha, M. J. Balick, F. G. Gaudio, M. L. Guzman, and C. M. Compadre. Analysis of plant-plant interactions reveals the presence of potent anti-leukemic compounds. <u>Molecules</u> 27. 2022 in press.
- Arnason, J. V. Cal, T. Pesek, R. Awad, N. Bourbonnais-Spear, S. Collins, M. Otarola-Rojas, B. Walshe-Roussel, P. Audent, C. Anh Ta, M. Balick, and J. Ferrier. 2022. A review of ethnobotany and ethnopharmacology of traditional medicines used by Q'eqchi' Maya Healers of Xna'ajeb' aj Ralch'o'och, Belize. <a href="mailto:Botany">Botany</a> (Canadian Science Publishing) 100:219-230. <a href="http://dx.doi.org/10.1139/cjb-2021-0069">http://dx.doi.org/10.1139/cjb-2021-0069</a>
- Ranker, T., M. Balick, G. Plunkett, K. D. Harrison, J. P. Wahe and M. Wahe. 2022. Ethnobotany and vernacular names of the lycophytes and ferns of Tafea Province, Vanuatu. <u>American Fern Journal</u> 112(3)143-177.
- Balick, M.J., K.D. Harrison, N. Kelso, R. Neriam, J. Noar, G.M. Plunkett, D. M. Ramik and J-P Wahe. 2022. Weather magic as environmental knowledge in southern Vanuatu. <u>Journal of</u> Ethnobiology 42(4): 383-389.
- Plunkett. G.M., T.A. Ranker, C. Sam and M.J. Balick. 2022. Towards a checklist of the Vascular Flora of Vanuatu. Candollea 77(1):105-118.
- Kelso, N., G.M. Plunkett, P. Dovo, C.B. Paul, K.D. Harrison, and M.J. Balick. 2023. The palolo worm as a cornerstone of Pacific ecological time-reckoning. Ethnobiology Letters 14(1): 24-35.
- Balick, M.J., G.M. Plunkett, K. D. Harrison, N. Kelso, M. Wahe, D. Ramík, P. Dovo, W. Nasauman,

- R. Neriam, T. Keith, T. A. Ranker and J-P. Wahe. 2023. Calendar Plants in Southern Vanuatu. <u>Economic Botany</u>. 77(3)227-242.
- Simon, J.E., D. K. Seidel, R. Govindasamy, J. Shope, E. Gnomes, E. Merchant, M. Balick, O. Schofield, L. Brindisi, N. Khanna. 2024. *Baseline Assessment in Support of Climate-resilient food security for farming households across the Federated States of Micronesia*. Technical Report to the Micronesia Conservation Trust, Federated States of Micronesia and the Green Climate Fund. Rutgers, The State University of New Jersey. 489 pages.
- Seidel, D.K., J. E. Simon, R. Govindasamy, J. Shope, M. Balick, and O. Schofield. 2024. *Agriculture and Food Security Vulnerability Assessment*. A Companion to the Baseline Assessment in Support of Climate-resilient food security for farming households across the Federated States of Micronesia. Technical Report to the Micronesia Conservation Trust, Federated States of Micronesia and the Green Climate Fund. Rutgers, The State University of New Jersey. 142 pages
- Ticktin, T., A. McGuigan, F. Alo, M.J. Balick, A. Boraks, C. Sam, T. Doro, P. Dovo, T. Ibanez, A. Naikitini, T.A. Ranker, M. Tuiwawa, J-P. Wahe, and G.M. Plunkett. 2024. High resilience of Pacific Island forests to a category-5 cyclone. Science of The Total Environment p.170973.
- Harrison, K.D., G. Plunkett, M. J. Balick, D. M. Ramík, N. Ramík, N. Kelso and M. Wahe. 2024. Wind Lore as Environmental Knowledge in Southern Vanuatu. <u>Journal of Marine and Island Cultures</u>. 13(1): 01. <a href="https://doi.org/10.21463/jmic.2024.13.1.01">https://doi.org/10.21463/jmic.2024.13.1.01</a>
- Balick, Michael J., D. M. Ramík, N. Ramík, I. K. N. Kumas, G. M. Plunkett, N. Kelson, P. Dovo and K. D. Harrison. 2024. "The Children of the Sun and Moon are the Gardens"—How People, Plants and a Living Sun Shape Life on Tanna, Vanuatu. <u>PLoS ONE</u> (19)11:e0313997. <a href="https://doi.org/10.1371/journal.pone.0313997">https://doi.org/10.1371/journal.pone.0313997</a>
- Plunkett, G.M., M. J. Balick, P. Dovo, J.P Wahe, R. Neriam, D. M. Ramík, N. Ramík, and K.D. Harrison. 2024. Message Plants of Southern Vanuatu. Sociolinguistic Studies. In press.

# HORTICULTURAL AND POPULAR PUBLICATIONS

- M.J. Balick. Longwood through the child's eye. <u>Bulletin of the American Association of Botanical Gardens and Arboreta</u> 8(3): 86-92.
- M.J. Balick. 1974. Israel's high mountain flora. American Horticulturist 53(5): 16-19.
- M.J. Balick. 1975. The Henry Foundation for botanical research—a botanical garden in Gladwyne. Green Scene Magazine 4(1): 6-8.
- M.J. Balick. 1975. Las Cruces Tropical Botanical Garden. <u>Bulletin of the American Association of Botanical Gardens and Arboreta</u> 9(3): 62-66.
- M.J. Balick. 1976. My life among the bromeliads. Horticulture 54(2): 30-39.
- M.J. Balick. 1976. Native Azaleas. Horticulture 54(8): 44-89.
- M.J. Balick. 1976. Ecology of the Holy Land. Horticulture 54(12): 28-31.
- M.J. Balick. 1979. There's oil in the Negev. Horticulture 57(1): 36.
- M.J. Balick. 1979. Cultivating biblical plants. Horticulture 57(8): 50-51.
- M.J. Balick. 1980. Rodale's <u>Encyclopedia of Indoor Gardening</u>, Halpin, A. M. (ed.). Editorial consultant and contributing author, responsible for accuracy and relevance of content. 902 pp. Rodale Press, Emmaus.

- M.J. Balick. 1980. Cultivar Registration. Horticulture 58(5): 44-49.
- M.J. Balick. 1980. Cultivar Registration. Pacific Horticulture 41(3): 51-57.
- M.J. Balick and K. Moss. 1981. Cultivar Registration. <u>Bulletin of the American Association of Botanical Gardens and Arboreta</u> 14(4): 121-126. 1980 (jointly with K. Moss).
- M.J. Balick. 1981. Directors—What are they?. <u>Bulletin of the American Association of Botanical Gardens and Arboreta</u>. 15(1): 29-31.
- M.J. Balick. 1981. "Ornamental horticulture overview," in Agribusiness Associates, Inc., <u>Agribusiness Investment Opportunities in Jamaica</u>. Prepared for the United States Department of Agriculture/Office of International Cooperation and Development and funded by the U. S. Agency for International Development. 292 pp.
- M.J. Balick. 1982. Treasure from the trees. Garden. 6(1): 8.
- M.J. Balick. 1982. International Dimensions of The New York Botanical Garden. In International Dimensions of Private Domestic Institutions, Perkins, J.A. (ed.). International Council for Educational Development.
- M.J. Balick. 1984. Palms, people and progress. Agency for International Development, <u>Horizons</u>. 3(4): 32-37.
- M.J. Balick. 1985. NYBG efforts improve palm crops. Garden. 9(6):3-4.
- M.J. Balick. 1990. Botany with a human face. Garden. 14(6)2-3.
- M. J. Balick. 1991. The Belize ethnobotany project. <u>Fairchild Tropical Garden Bulletin</u>. 46(2): 16-24.
- M. J. Balick. 1991. Ethnobotany for the nineties. The Public Garden 6(3)10-13.
- M.J. Balick. 1991. Collaboration: The hallmark of the Institute of Economic Botany's germplasm work in Latin America. <u>Diversity</u> 7(1 & 2)20-22.
- M.J. Balick. 1992. Ethnobotany revisited. Museum News 71(1)45-48.
- M.J. Balick. 1996. Don Elijio Panti 1893-1996. <u>HerbalGram: The Journal of The American Botanical Council.</u> 37:61
- Balick, M.J. and P.A. Cox. 1997. New crops from old: amaranth and hemp. <u>Healthy and Natural</u> Journal 4(2)22-24.
- M. J. Balick, and J.W. Sheldon. April 1998. Is using medicinal plants compatible with conservation? Plant Talk
- M.J. Balick. July 2001. In Gratitude Richard Evans Schultes 1915–2001. Plant Talk p. 34-35.
- M.J.Balick. 2011. Royal Oil. Organic Gardening. 58 (2) 22-23.
- M.J.Balick. 2011. Manuka Honey. Organic Gardening. June/July 58(4)32-34.
- M.J.Balick. 2013. Sacred Seed Conservationist. Organic Gardening. 60(6)22-23.
- G.M.Plunkett and M.J.Balick. 2017. Message Plants in an Age of Communication. Island Life.
- M. J. Balick and G.M.Plunkett. 2017. Calendar Plants. Island Life.
- G,M, Plunkett and M.J.Balick. 2018. Traditional Shelters, Cyclone Houses, and the Temptations of Modern Construction. <u>Island Life.</u>
- J-P. Wahe, G.M.Plukett and M. J. Balick. 2018. Plants Used in Kastom: The First Shaving Ceremony and the Cycle of Life on Tanna. Island Life
- M.J.Balick and G.M. Plunkett.2019. Tanna's First *Kastom Skul*: Helping to sustain culture and identity into the future. Island Life.
- M.J.Balick and G.M. Plunkett.2019. The Colorful Leaves of *Netsetse* (Croton) and It's Significance in Vanuatu's Culture. Island Life.
- G.M. Plunkett and M.J. Balick. 2020. *Nangaria (Cordyline fruticosa)*, A Common Plant with Some Uncommon Uses. Island Life.

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