

REVIEW



MICHAEL BALICK inside a greenhouse at the New York Botanical Garden, Bronx, N.Y.

Philip Montgomery for The Wall Street Journal (3)

Learning the Lore of Far-Flung Flora

CREATING:
MICHAEL BALICK,
ETHNOBOTANIST

BY LISA BANNON

eigner came in on the wings of a bird and landed on our island and taught our children that their inheritance should not be forgotten," Dr. Balick recalled the king saying. "You are that man. You are free to settle among us and begin to work."

Dr. Balick, vice president and director at the Institute of Economic Botany at the New York Botanical Garden, has made a career out of swooping in on indigenous cultures, living with the local people and documenting their unique relationship with plants. Over the past 40 years he's made about 75 trips, of up to a year at a time, to remote areas of the Amazon, South and Central America, the Middle East, Asia and the South Pacific. He's written, co-written or edited 22 books about the relationship between people, culture and plants in traditional settings.

As an ethnobotanist, Dr. Balick likens his efforts to understand local plant-based healing systems to the way an archaeologist tries to piece together an ancient broken urn: With only a few remaining pieces, he must try to imagine

how the larger healing system worked. Dr. Balick, 60, said his mission is to preserve the use of traditional plant remedies and diets that are at risk of extinction because of globalization and environmental change.

He discovered on the island of Palau that raw, unbleached coconut oil is a great mosquito repellent.

"Our knowledge of how people have used these plants for so many generations is being forgotten," he said.

When he first arrived in Pohnpei in 1997, for example, Dr. Balick said he found that local people had abandoned their island diet of taro, bananas and fish in favor of American foods—soda, canned foods, white rice and alcohol. Young islanders had lost interest in learning how to use plants for food and medicines. Western diseases, from obe-

sity to heart disease and diabetes, soon followed.

Over the next 10 years, Dr. Balick and his team trained 25 local people to create an inventory of plants and describe their uses. They interviewed more than 150 people and recorded traditional plant remedies such as taro juice (to heal cuts and open wounds); drops from the roots of a local flower (to treat conjunctivitis) and the juice of a sakau plant (to treat chronic anxiety).

When he and his team set out to interview local people, they take notes and record the sessions on video. "If you look at an important interview on video over and over again, I've found the messages people are conveying become clearer," Dr. Balick said. The research team also collects plant specimens of all the species they collect. They are curated at the New York Botanical Garden's herbarium, which now has over seven million specimens, the largest collection in the Western Hemisphere.

Dr. Balick, who grew up in Pennsylvania, fell in love with plants at age 4

when he was smitten by the rapid growth of cucumbers. After getting his Ph.D. at Harvard University, he focused on nutrition, food plants and economics, writing his thesis on an Amazonian palm tree that yields an edible oil rich in protein. "I was always fascinated by why we are consuming only a handful of the 3,000 recorded edible species," he said.

In many cases, Dr. Balick said, traditional plant remedies can be more effective than the Western drugs that have replaced them. Raw, unbleached coconut oil rubbed on the body is a great mosquito repellent, he discovered in the island of Palau. Likewise, tea made by the people of Pohnpei from a guava plant is an effective treatment for diarrhea.

He often tests the remedies he discovers, including plants that heal upset stomachs and those that reduce swelling from insect bites. Recently he rubbed a stem of stinging nettle against his arm in front of a group of doctors, prompting a rash to develop. After crushing the stem of a jewelweed onto the rash, the pain and burning stopped within a minute. "I suspect they'll remember this herbal remedy," he said.

After finishing up another plant inventory this summer on the island of Palau, Dr. Balick and his team plan to move on to Melanesia and other parts of the world. He's in a hurry. Out of 400,000 plant species world-wide, as many as 80,000 have yet to be discovered by botanists. Many of those, he said, are threatened by endangered habitats.

"The plants as well as the knowledge of how people use them are both at risk of being lost," Dr. Balick said. "This work is a race against time."

TO GET PERMISSION to catalog the plant life of Pohnpei, a tiny island in Micronesia, Michael Balick lived among the local people for months, trying to explain how such an inventory could preserve the island's rapidly disappearing culture.

After two years, the King of Nett, a small kingdom of 5,000 people, finally called the ethnobotanist for a meeting. On a rocky outcrop overlooking the waters of the Pacific, the king rendered his decision: "I had a dream that a for-

BACK TO NATURE



TAKE INVENTORY Michael Balick displays field notes and various collected plants in his office at the New York Botanical Garden, left. His team collects specimens of all the species they collect.



BOTTLE IT UP Bottles of collected plant specimens sit on shelves in a storage closet at the New York Botanical Garden.