## Greenhouse effects

It isn't easy being green. But Dr Michael Balick may be able to convince women to contribute to ecological causes via a new range of botanical-based skincare. By Sharon Eldridge

r Michael Balick is so intimately acquainted with the healing properties of plants that revel in names such as Rabbit's Paw (Sphagneticola trilobata), Trumpet Tree (Cecropia peltata), Hog Plum (Spondias radlkoferi) and Fiddlewood (Vitex gaumeri) that it's a wonder he doesn't walk with a staff, wear a tall, pointy hat and count Thorin Oakenshield and Frodo Baggins amongst his closest friends. He knows, for instance, that a cup of Cowfoot Vine (Bauhinia herrerae) tea, sipped before each meal during menstruation, renders a woman sterile for up to six months, that Gumbolimbo (Bursera simaruba) bark, when boiled in three quarts of water, will cure a kidney infection and that Buttonwood (Piper amalago), mashed into a poultice and applied to the gum, can alleviate toothache. And yet his area of expertise is even more esoteric - if that were possible - than the realm of magic. For Dr Balick, whose default expression seems to be one of a quiet, studied appreciation of the world around him, is an ethnobotanist - and a famous one at that. Luckily, this native of Westchester County, New York, is used to explaining his occupation.

"Ethnobotany is the study of how people use plants," he says without so much as a hint of here-we-go-again. "Everybody remembers how, when they were young and had stomach-ache, their mother would give them something for the pain. In India, it might have been fennel; in Europe, it might have been parsley. We all come from a culture of using plants. Unfortunately, we've started to forget all of that: we're living in a virtual world right now. The job of the ethnobotanist is to capture and record as much of the ancient wisdom pertaining to the use of plants as possible." He speaks using the gentle cadences of one who is used to bringing infinite amounts of patience to bear on unusual situations.

But then unusual situations are the bread and butter of the ethnobotanist. For the past 15 years, for example, Balick has been living in Belize, a state in Central America that used to be called British Honduras, working with Maya Indian traditional healers to collect and document the use of plant ethnomedicines. He punctuates his Belizean studies with annual trips to Micronesia – specifically, the island of Pohnpei – where, again collaborating with traditional healers, the Nature Conservancy and local organisations, he devotes his days to the cataloguing and preserving of information relating to the names, uses and cultural roles of both native and exotic plant species. Balick tells me that he has just spent the summer commuting between two golf course-sized atolls in Micronesia that support small populations of between 200 and 400 people. "These islands are fascinating to me because they are so small and remote that the people there still practise a lot of their cultural traditions," he says, his articulate, unhurried way of speaking reminding me irresistibly of Jack Nicholson's. "But, at the same time, you can see that knowledge is still being lost at a tremendous rate. The people were delighted to have us there recording their traditional practices."

But Dr Balick hasn't dedicated 40-odd years of his life to a science as arcane as ethnobotany merely out of a need to appear eccentric or to write the kind of books that the average urbanite finds useful only as doorstops. Quite the reverse. He is motivated, before anything else, by the desire to apply the fruits of his learning – "The power of a plant in a community is not something I discover," he is fond of pointing out, "I simply learn from people who know" – to a relevant, modern-day context. Seven years ago, he launched a study, in association with the Center for Alternative and Complimentary Medicine at the Columbia College of Physicians and Surgeons, of the use of plants in health care – this time, far, far away from the rainforests of Belize in the urban environment of New York City.

"We are working with physicians who are interested in integrative medicine – that is, integrating traditional ethnomedical knowledge with modern, allopathic-driven medicine and coming up with a hybrid," he explains. "If you're hit by a car, for instance, you're going to go to the ER not a shaman, but if you're suffering from anxiety, you might prefer to try a plant rather than run the

JANUARY 2003



"I call Force
For Good an
environmental
999. As a
scientist, it's
fascinating
to be able to
pay back
the cultures
that have
essentially
built my

career."



Above: Ethnobotanist Michael Balick, who is bringing unusual botanical beauty products to a bedside table near you ...

Far left: Be kind to your skin, the earth, and indigenous peoples with the Epoch range.

risk of becoming addicted to valium. Hundreds of thousands of immigrants from the Dominican Republic live in New York. Among them are traditional healers. We present patients who are suffering from fibroids or hot flashes, for example, since Western medicine has declared these conditions pretty hard to treat. These healers know how to use the plants that can help."

As a result, 160 classes of physicians each year undergo a one-week course at Columbia on how to use botanicals – at least, those whose benefits have been scientifically proven – in clinical medicine. More and more whitecoats, says Balick, are now starting to put on green ones. "Their patients want it," he shrugs, "and physicians are saying, 'Gosh, I didn't learn about this in med school, but I'll look into it.' Now younger doctors realise that to carve out a niche in medicine, you need skills other than being a good prescriber or diagnoser."

Another partnership Balick is eager to talk about is the one he currently shares with Nu Skin, the American cosmetics company with a conscience. For the past seven years, he has been on the brand's scientific advisory board, helping to develop a range of personal-care items that manage to combine natural ingredients, which have been in use in indigenous cultures for millennia, with advanced scientific formulae. The result is Epoch, an "honest" line of products, which includes Icedancer, a Native American solution for tired, aching legs; Firewalker, a foot cream made with Hawaiian ti plant extract, and Ava puhi moni haircare products which contain extract from the ava puhi plant, an ingredient favoured by the luxuriantly maned women of Polynesia. It sounds a little like The Body Shop all over again except that, this time, US\$0.25 from the sale of each Epoch product goes to The Force For Good Foundation, a philanthropic endeavour within the Nu Skin organisation that was set up in 1996 specifically to help preserve the fragile environments and lifestyles of indigenous peoples all over the world.

"I call Force For Good an environmental 999," says Balick, his cobalt-blue eyes sparking at mention of one of his favourite projects. "And, as a scientist, it's fascinating to be able to pay back the cultures that have essentially built my career. On the Western Samoan island of Savii, for instance, tens of thousands of acres of the Tafua Rain Forest have been saved from the encroachments of Pacific Rim logging companies; in La Serre, Haiti, where water supply is inadequate, a US\$15,000 donation has enabled a solar-powered well to be built; in Brazil, a women's cooperative received a grant of US\$40,000 to build a factory in which to more efficiently produce their goods – oils – for sale." Balick pauses.

"So, why would I take time out of a busy year to help launch a range of personal-care products? Because I think this distributor [Nu Skin] has the potential to do more for conservation through these kinds of contributions in one year or two years than an individual scientist can do in a lifetime. If I can help make people understand that this is the new business model for the 21st century, then that will have been a very important accomplishment."

Balick, as well as being one of the world's leading authorities on plants – he calls the 250 acres of the New York Botanical Garden in the Bronx, at which he is currently director and philecology curator of economic botany, his "amazing garden" – is an extremely likeable man who exudes an almost palpable aura of serenity. I ask him to share with me his favourite herbal antidote to the rigours of modern living. His eyes narrow slightly as if contemplating a secret, faraway idyll and, just for a minute, I think he really is going to metamorphose into Gandalf. "Meditation," he almost whispers, finally, "a sauna and a good massage followed by a cup of green tea and a relaxing meal with a good friend – or two or three or four. And re-establish contact with the community. You know, we kick grandparents into old-age homes and go off to work leaving television and computers to babyit our children; why wouldn't anyone be insane?"

The Epoch range of personal-care items is available from Nu Skin Enterprises Singapore. US\$0.25 from the sale of each product goes to The Force For Good Foundation. For more information, log on to forceforgood.com.

JANUARY 2003