EXPLORING THE HEALING PROMISE OF PLANT MEDICINES IN A GLOBAL INDUSTRY

The Business *of* Botanicals

ANN ARMBRECHT

PRAISE FOR *THE BUSINESS OF BOTANICALS*

"In *The Business of Botanicals*, Ann Armbrecht brings readers along on a wholly engaging exploration of her questions and hard learnings about whether the healing power of plants can truly make it into the factory-sealed supplement bottles on our grocery shelves."

—Kate Williams, CEO of 1% for the Planet

"Ann Armbrecht establishes herself as a gifted storyteller, weaving the practical aspects of the global botanical industry with the lesser explored and more nuanced threads that make up the tapestry of sourcing, producing, and selling herbal products. The result is a riveting journey, one that tackles hard questions not explored by most. For those who loved *Braiding Sweetgrass*, this book is a perfect opportunity to go deeper into understanding the complex and co-evolutionary journey of plants and people in creating the herbal products we love."

—Angela McElwee, president and CEO of Gaia Herbs

"*The Business of Botanicals* is a chronicle of the modern-day global herb trade, peppered with historical context, anecdotes, and wisdom from modern pioneers of the herb industry. The quality of the technical information is lovingly translated with practical examples into interesting and relevant guidance for small growers and herb users. And beyond the technical narrative, the author poses philosophical questions about the ethics, authenticity, and sustainability of the modern herb market."

—Cindy Angerhofer, executive fellow of Botanical Research, Aveda Corporation

"I read this brilliant book from cover to cover like a story I couldn't tear myself away from. Like herbs themselves, *The Business of Botanicals* is rich in colors, scents, and flavors and is rooted in the earth—exquisite and messy, beautiful and dirty all at the same time."

—Anne McIntyre, MAPA, MCPP, fellow of the National Institute of Medical Herbalists, author of *Dispensing with Tradition* and *The Ayurveda Bible*

"The high-quality organic herbs in your teacup, tincture, or supplement did not materialize out of thin air. More than fifty years ago, the seeds of an industry were planted by a few unique and talented individuals—farmers, herbalists, and entrepreneurs who have dedicated their lives to improving planetary, human, and animal well-being. This well-researched and fascinating book tells their stories and lays out a clear path for a healthier sustainable future."

—David Winston, RH (AHG), dean of David Winston's Center for Herbal Studies; founder of Herbal Therapeutics Research Library

"Ann Armbrecht acknowledges the racist, imperialist roots of the international trade in botanicals and examines the impressive progress being made to transform this legacy of economic oppression. The evolving supply chain acknowledges the ecology of issues beyond profit. Armbrecht introduces these holistic, ecological perspectives as a sign of great hope for the future and celebrates the rich diversity of people and backgrounds that make the planet's herbal abundance accessible to the West."

—David Hoffmann, RH (AHG), fellow of the National Institute of Medical Herbalists, chief formulator for Traditional Medicinals

"Ann Armbrecht has looked under the bonnet and found that the engine of herbal healing is in need of repair. Even well-intentioned conflicts of interest in this industry too often get in the way of quality and sustainability. Ann concludes that the answer here, as ever, is about nurturing relationships and supporting the interests of everyone in the herbal web. Everyone who loves herbs needs to read this book!"

—Simon Mills, herbal clinician and elder, author of *Out of the Earth*, coauthor of *Principles and Practice of Phytotherapy*

"*The Business of Botanicals* is a thoroughly engaging, must-read book for all herbalists, herbal medicine makers, herb growers, and anyone who turns to herbs for their health. I was immediately drawn into the story of botanical medicines and the complexities within each bottle of herbal tincture on store shelves."

—Rosalee de la Forêt, herbalist and author of *Alchemy of Herbs*, coauthor of *Wild Remedies*

"Ann Armbrecht writes with deep respect for the essence of plants and their capacity to heal, seeking to reconcile the spirit of botanicals with the realm of brands and tradeshows."

—Judith D. Schwartz, author of *The Reindeer Chronicles* and *Water in Plain Sight*

"Ann Armbrecht's engaging book provides perceptive and important insights into what is too often an invisible trade despite its immense importance to the livelihoods, traditions, and interests of a great many people around the world."

—Steven Broad, executive director of TRAFFIC and member of the Board of the FairWild Foundation

"A vastly important and enlightening dive into the complexities of the botanical industry that is a must read for conscious consumers and industry professionals alike."

—Erin Smith, director of Herbal Science & Research, Banyan Botanicals; co-chair of the Sustainability Committee at the American Herbal Products Association

"This well-written and well-researched book provides fascinating and important insights into how herbal remedies make it into our homes. Ann Armbrecht's passion for the subject shines through."

—Susan Curtis, director of Natural Health, Neal's Yard Remedies

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Introduction

I have never liked shopping of any kind, but especially not shopping for food. As I walk down an aisle and put a can of beans into my cart, I imagine farmworkers and factory workers tumbling in as well, pulled by invisible threads attached to my hand. It is worse in the supplement aisle, even the supplement aisle of my local food cooperative. I stare at shelves lined with brown glass bottles and white plastic containers. Most, though not all, bear an image of the plant, a flower or leaf. While some list only the plant name, many also claim to be the best quality, the most sustainable, the most fair. I wonder which product will live up to its promises. I worry about the people and places behind those products. By putting this box of tea instead of that one into my cart, am I actually keeping pesticides out of the water? Am I really helping a wild harvester earn a fair wage? Or is it all simply trick mirrors of feel-good marketing, letting me pat myself on the back for being an enlightened consumer? Do my choices, in fact, change nothing?

Perhaps the best thing is to choose nothing, to simply walk away. But I recall what nature writer Barry Lopez said when describing Pacific Northwest landscapes destroyed by clear-cut logging in the mid-1990s. Unless our hands were doing something to stop that logging, Lopez said, we were part of that destruction. Inaction, in other words, is also action.

The global dietary supplement industry has grown significantly over the last few decades, reaching a little over $143 billion in annual sales in 2019, increasing 5.7 percent from 2018.[1] Due to COVID-19, *Nutrition Business Journal* projects that supplement sales will reach the highest level in 20 years, surpassing $50 billion at a growth of 12 percent.[2] The United States is a major player in this industry, representing $46 billion: 34 percent of total sales. Asia's market is nearly equal in size, making up 33.9 percent of the global market in 2018.[3] The global market for herbs and botanicals, a subset of the broader dietary supplement category, in 2019 was estimated to be $37.2 billion with a 5.7 percent growth. Herbal supplement sales in the US were a total $9.6 billion, an 8.6 percent

increase from 2018, slightly down from a 9.4 percent increase in 2017. This represents the strongest growth in US sales of herbal supplements since 1998.[4]

In a 2019 study, Natural Marketing Institute (NMI), a strategic consulting firm specializing in natural health and sustainability, found that approximately seven out of ten US consumers reported using supplements in the past thirty days, a percentage that has remained relatively stable for the past five years.[5] Market researchers study these users extensively, dividing them into segments—Well Beings (26 percent), Magic Bullets (20 percent), Eat, Drink & Be Merrys (17 percent), Food Actives (14 percent), and Fence Sitters (23 percent)—based on their shopping choices. Studies indicate that purchase decisions are moving toward what the NMI calls a "whole health" perspective in which individual health concerns merge with concerns about the health of the planet. NMI found that 69 percent of herbal supplement users "embrace a healthy and sustainable lifestyle"; 86 percent of these users prefer supplements made by an environmentally friendly brand. Not only do consumers care about socially responsible business practices, they want evidence that a company is truly walking the talk and not just greenwashing.[6] In their 2019 sustainability report, the Hartman Group, a consumer marketing firm focused on the American food and beverage culture, found that in 2019, 51 percent of consumers reported purchasing sustainable products because they were better for the earth and the environment, up from 32 percent in 2017. The report also found that 26 percent of consumers say they will pay more to support companies that support a worthy cause. And 28 percent say they will pay more to support companies that share their values.[7]

Despite this data, conversations in the herbal products industry about the crucial connections among quality, traceability, and sustainable and ethical sourcing are still in the early stages compared with changes that have already been initiated in the food industry. Because of the way the herbal supplements industry has developed, it is very difficult to find accurate information about the numerous supply chains or about the human and environmental costs of producing a specific product. Companies increasingly claim to be ethical and sustainable. Yet for the most

part, consumers are asked to trust those claims even though companies reveal little information about how their sourcing decisions and manufacturing processes affect the people and environments involved in and impacted by that production.

I began studying herbal medicine in the late 1990s, shortly after returning to the United States from an eighteen-month sojourn conducting ethnographic research on the connections between people and the land in Hedangna, a village in northeastern Nepal. Even though I was back at home, I felt "homesick" for Nepal. I missed the simplicity of living in a remote village, life pared down to the essentials. Like many returning from living overseas, I felt a profound sense of culture shock on returning to a culture and society so driven by consumption. In herbal medicine I found something that filled my yearning for the way of being I had discovered in Hedangna—a sense of reciprocity with the natural world, an understanding of the earth as something more than a resource to exploit, a recognition of the spiritual and cultural dimensions of healing. I signed up for an apprenticeship with Rosemary Gladstar, the "godmother" of the American herbal medicine renaissance, and immersed myself in the study of what felt like the indigenous knowledge of my home.

Yet as I learned more, I realized that the primary places in which medicinal plants entered mainstream American culture were the supplement aisle and the herbal tea section (and today, thousands of internet sites). To most people, herbal medicine was a product to consume, not a set of practices to follow. This commercialization seemed to threaten the heart of herbal medicine, and I wanted to bring the values and practices behind the products into the public eye. And so my husband, Terry Youk, a filmmaker, and I co-produced a documentary celebrating the philosophy of traditional Western herbalism. We called the film *Numen*, a Latin term that means "the animating force in all things living." To us, this concept expresses what is most important about herbal medicine in any tradition—that it is a way to encounter the mystery of nature, an encounter that is healing not just for ourselves, but for the world.

We began screening the film across the country in 2010, and the audience response was striking. Viewers either immediately understood the film's message about the healing power of plants, or they didn't. They either were open to the idea that they could make herbal medicines themselves, or were not. It was a time when many people were beginning to question everything about how food was grown and processed, but far fewer were asking those questions about the medicines they ingested. Parents who would not feed their children anything other than organic food had never questioned the wisdom of giving them Tylenol or Advil, or considered how those medicines were made and with what ingredients. And although they shopped at local farmers markets, those conscientious parents never asked whether "medicine" could be found there as well. Medicine was what you bought at a drug store, not something you could learn to prepare in your own kitchen with plants you had grown yourself, the way I had been taught to do by Rosemary Gladstar. During the screening tour of *Numen*, I came to realize that one small documentary film was not going to change that consciousness on the broader scale. In order to reach people who couldn't conceive of medicine as something other than a pill or powder, I needed to meet them on their ground—in the supplement aisle.

The Importance of Intention

Most herbalists believe that the efficacy of herbal medicine depends on more than the chemical constituents in the plants. Whether and how plant medicine works also depends on what herbalists refer to as the *spirit* of the plant and the relationship of a healer to that spirit. *Intention* matters, too—the intention felt by those who grow, harvest, and process herbs; the intention of the people who make the medicine from those herbs; even the intention of the person who ingests or applies the medicine. Many of these herbalists expressed ambivalence about the commercialization of herbal products, yet they still recommended those products to their clients. They often got around this seeming contradiction by recommending specific companies to buy from, implying that these companies brought intention to their products. Still, as I learned more, I saw it was almost impossible for a company to bring that quality

of intention and attention to each step of the process when producing products on a larger scale.

Moreover, much of that production was invisible to the end user. During herb classes, my teachers talked about the uses of chamomile or nettles or echinacea, but they didn't mention any potential differences in the effectiveness of herbs as medicine based on where plants had been sourced and how they had been cared for along the supply chain. Yet, I wondered, in what ways were certified organic nettles grown on a thirty-acre farm in Vermont different from those wild-harvested in places such as Bulgaria or Romania, where the collectors are paid pennies for their labor? Would it change the quality of the medicine if those harvesters were paid a more equitable rate for their work or I could be assured that the plants had been sustainably harvested? And how would you even measure these differences?

At the Watershed Gathering in 1996, writer and farmer Wendell Berry said, "As a nation we are struggling with a profound lack of imagination. We don't see the forests being cut down to build our homes, the lakes being drained as we fill our tub. We live on the far side of a broken connection." Not seeing the people and places on the other side, not seeing the moral and ecological consequences of producing these products, he continued, makes it easier to consume them. "Healing this broken connection," Berry concluded, "begins with seeing beyond what the market wants us to see."[8] This begins with an act of imagination.

Inspired by Wendell Berry and haunted by my shopping experiences, I decided to follow medicinal plants through the supply chain, from the woods and fields where they grew to the facilities and warehouses where they were processed and stored to the factories where they were heated, treated, and packaged. I wanted to tell the stories of the people and places that feed the supply chain, especially those on the far end from the supplement aisle. I wanted to see whether I could find intention in a global supply chain (which I later learned is really more of a network than a linear chain) and, if so, what I might discover in the process. And I wanted to understand how knowing the stories of the people involved in growing, harvesting, and producing these products and those working to source herbs responsibly might make a difference.

Like most commodities, plants are complex entities that have different meanings and values, especially to different stakeholders. They can be a source of healing or of profit, an item of trade, or a foundation for biodiversity. Yet unlike most commodities bought and sold in an international market, plants are alive. They are not simply inert objects to use as we please but rather have adapted to grow in particular habitats and are used in specific ways in systems of medicine around the world. They are embedded in cultural and ecological frameworks of meaning that include guidelines about how to harvest plant parts and prepare medicines from them in ways that respect the plants and their ecosystems. Can connecting these plants with these cultural and ecological worlds, with the people and places that came tumbling into my grocery store cart, lay the foundation for building structures of reciprocity rather than of exploitation?

"We can't be well until the planet is well," Bioneers co-founder Kenny Ausubel told us when we interviewed him for *Numen*. In other words, herbal supplements can promote wellness and health only if the systems that produce those supplements promote health and wellness for all of the stakeholders involved. That depends, as Wendell Berry says, on reconnecting the end product with the people and places behind the production. Yet, is that even possible in an economic system based on that disconnection?

The Sustainable Herbs Project and Program

I began with a simple question: Can the life force of a plant find its way into products manufactured according to the requirements of capital? I knew that to answer this question, I would need to visit collecting sites and manufacturing centers around the world. I made a preliminary trip to eastern Europe. In February 2015 I launched a Kickstarter campaign to fund production of a series of videos that would tell the stories of the people and places on the far end of the supply chain. I decided to call it the Sustainable Herbs Project (SHP). My objective, I explained, was to educate consumers about issues of sustainability, quality, and fair trade in the botanical industry. The outpouring of grassroots support, primarily

from the herb community, was overwhelming. I raised $65,000, with an average donation of $35.

Over the next two years, Terry and I and our children, Willow and Bryce, visited farms and factories where we met and interviewed collectors, farmers, business owners, and many others from the key herb exporting regions of the world. We primarily visited producer companies, which were typically located in the country of origin of the herbs and had direct relationships with farmers and collectors from whom they purchased dried or fresh plants. Producer companies carried out minimal processing (drying, sorting, storing) of the plant material before shipping it to other companies, sometimes called secondary processing companies, that further processed the herbs for incorporation into the form in which consumers would purchase them.

Starting in the Pacific Northwest, we visited some of the first certified organic herb growers in the United States. We then headed to the United Kingdom, Germany, Bulgaria, and Poland. In what proved to be one of the most productive trips of the project, in the winter of 2016 Terry and I joined the co-founder and the sustainability manager of Pukka Herbs (a finished-product company) while they met with producer companies in Karnataka state in southern India. In particular, this trip brought into starker relief the cultural dimensions of navigating different standards of quality control as well as the importance of and challenges to developing and maintaining relationships along the supply network. We visited the manufacturing facilities of Banyan Botanicals, a company that produces Ayurvedic herbs and products, and Vitality Works, the leading certified organic contract manufacturer of liquid herbal extracts, both in Albuquerque, New Mexico. From January to June of the following year, Terry, Bryce and I spent six months following the chains of Ayurvedic herbs in India. Willow, who was eighteen at the time and traveling during a gap year before college, joined us for the last month we spent in India. I had hoped to include a trip to China, which is one of the leading suppliers of botanicals around the world. Logistically it just was too difficult and costly, however, and so I had to rely on what I could learn from published reports and by talking with those who have been to China.

Though we visited a number of different companies, I had the most access to Traditional Medicinals and Pukka Herbs. These two companies produce high-quality certified organic teas and other supplements and were both earlier adopters and advocates of the FairWild Standard. Individuals at these companies invited me to visit their supply networks, allowing me a more in-depth, behind-the-scenes view than was possible with any other firm. Other companies are also leading in this work, but because of this access, Pukka and Traditional Medicinals are more heavily featured in this book.

On returning home, I launched a multimedia website to showcase videos and photo-essays based on our travels. The following year I formed a partnership with the American Botanical Council (ABC), an international NGO dedicated to providing education using science-based and traditional information to promote the responsible use of herbal medicine. SHP became a program of ABC, and for clarity I changed the name to the Sustainable Herbs Program. SHP began as a grassroots project rooted in the herb community and the plants. This partnership with ABC brought it into an entirely different world, one where few people would consider that commercialization of herbs might not be a good thing or would ever wonder whether intention can be preserved in a global supply chain. This was not the world I knew, but it was one I needed to take part in if I truly desired changes in the industry to take hold. ABC has given me a platform to initiate and join conversations about sustainability in the herb industry happening on this much larger scale.

I conceived of SHP to inspire change in the herbal products industry. The first step of any change, however, involves understanding the system and the stakeholders involved. And so while this book is not a product of the Sustainable Herbs Program, the two are related in that in it I recount my journey to understand the challenges and issues in the industry from the perspective of those working in that industry, not simply as an outsider. I also explore the questions that drew me to herbalism in the first place. If, as I believed, herbal medicine offers insights into how to live in right relationship with the earth, can those values stand up to capitalism? Can plants be both living entities with which humans can have a sacred relationship *and* commodities governed by the laws of capital? If that is

possible, what are the conditions that allow for right relationship within a commercial enterprise?

As I stood in the grocery store many years ago, the idea of following herbs through the supply chain seemed fairly simple to me. But I soon found out that it was not. Unlike other plant commodities such as coffee, cacao, or cotton, which follow a fairly straightforward trajectory from harvest to market, sourcing medicinal plants is more like a spiderweb than a chain. A single herbal products company may source anywhere from thirty to several hundred species of plants. They may need to find roots or resins of some species, leafy parts or flowers of others, and even the bark of certain species. Roots must be handled differently from flowers or barks. Each species and plant part must be harvested at certain times of year, dried at specific temperatures, and processed in unique ways. Plants contain a particular combination of constituents based on where they grow—the soil, the weather, the altitude. Change the growing location and the constituents may change, too. All of these factors impact whether the plants being sourced have the necessary qualities to be effective. Because of this, sourcing herbs is challenging, even on the open market where there is no need to trace the plants to the source. Sourcing high-quality, sustainably harvested or certified organically grown herbs—and verifying that the workers are paid a fair wage as well—requires so much attention to detail that it boggles the mind.

Given this complexity, I rarely received simple answers when I asked questions about the issues of ensuring fairness to workers, minimizing the impact of wild-harvesting, developing sustainable methods to cultivate herbs on a commercial scale, and assessing and ensuring product quality. More often than not, I was told, the answer depended. It depended on what country I was asking about. It depended on the species of herb being harvested. It depended on what part of the plant would be used and what type of finished product it would be used for.

I originally envisioned structuring this book around each step of the journey that medicinal plants make from seed to shelf, but the reality of so much variation in that journey made it difficult to create a narrative

that held together. Instead, I discovered that the thread weaving through the stories that interested me most was relationship: a commitment by an herbal product company to establish and maintain relationships with the producer companies that in turn had direct relationships with farmers and collectors. Maintaining the relationships was essential to ensuring the plants were high quality and that people and places were well cared for. These relationships were established and preserved through one-on-one conversations in a farmer's fields, visits to processing facilities, or while negotiating price and the terms of trade at a company's display booth during a trade show. They brought in a human dimension, making it possible for a transaction to be about more than profit—a way to also care for humanity and the earth. These one-on-one connections didn't make that transformation inevitable. They simply made it possible.

"Weaving her personal experiences with careful research about the history of medicinal herbs, Armbrecht explores the booming herbal supplements trade with courage and vulnerability. . . . It's a valuable read and a *good* read, a rare find in this age of information."

KATE WILLIAMS, CEO of 1% for the Planet

"Armbrecht establishes herself as a gifted storyteller. . . . For those who loved *Braiding Sweetgrass*, this book is a perfect opportunity to go deeper into understanding the complex and co-evolutionary journey of plants and people."

ANGELA MCELWEE, president and CEO of Gaia Herbs

"A unique and valuable resource on the exceptional challenges to creating ethical, ecological, and fair herbal products, written from the perspective of a thoughtful expert."

RYAN ZINN, Regenerative Projects Manager, Dr. Bronner's

"Brilliant. . . . Like herbs themselves, *The Business of Botanicals* is rich in colors, scents, and flavors and is rooted in the earth—exquisite and messy, beautiful and dirty all at the same time."

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SUSAN CURTIS, director of Natural Health, Neal's Yard Remedies