the Stranger

April 11, 2012
**FEATURES**

# The Rush to Prohibit Kratom

A leaf that might be able to wean people off opiates without serious withdrawal symptoms has entered the market. So why are officials who haven't studied the science yet scrambling to ban it?

*by* BRENDAN KILEY

Kratom is a leaf from Southeast Asia that produces opiatelike effects, though it is not itself an opiate. It has been chewed or brewed into a tea for generations, and in the past five years, it's broken into the US market. When you find it at head shops in Seattle, it looks like loose-leaf tea or powder (sold either in a plastic bag or packed into capsules). The common wisdom is that snorting it and smoking it don't work as well as oral ingestion, though some people have been known to inject the extract, too.

Kratom was first documented as an opiate substitute—a kind of herbal methadone—in Asia in the early 1800s. It's often used by people who want an alternative to opiates, either because they're trying to break an addiction or because they want some way to manage chronic pain without opiate-based drugs.

Every few months, a new intoxicant that isn't technically covered by US drug-prohibition laws pops up on the market and policymakers, acting on very little information, freak out over it. Unfortunately for kratom, it has appeared in the immediate wake of the "bath salts" hysteria. (The hysteria was not entirely unjustified, as the active ingredient of "bath salts," a chemical called MDPV, was held responsible for long-term psychiatric damage and several deaths.) Kratom is already in the early stages of the same cycle.

That cycle goes like this: Clever entrepreneurs find an intoxicant not covered under current law and begin selling it. People get excited about it and chatter online. Some user winds up in the emergency room—for reasons that may or may not be serious—and says its name to a doctor who's never heard of it. The doctor calls the poison control center, and the public-health bureaucracy scrambles to figure out what this exotic new drug is. Someone talks to a reporter, and soon newspapers and TV stations are all over it, breathlessly warning parents about a "dangerous new high" threatening their children. Lawmakers see a chance to score some points by being tough on drugs and ban it. The drug fades away. A clever new entrepreneur finds a new drug, and the whack-a-mole cycle begins again.

Enter kratom, stage right.

In the fall of 2006, a 43-year-old computer programmer in Massachusetts (let's call him Jeff) wound up in his local emergency room after having a five-minute seizure. Jeff had been taking kratom on a daily basis for three and a half years. That day, he had also taken a pharmaceutical stimulant called modafinil. Apparently, the combination didn't agree with his neurological system. (Though doctors never figured out what, exactly, caused the seizure.)

The hospital staff had no idea what kratom was, but a resident working with the poison control center had heard of a physician named Dr. Edward Boyer who was interested in the plant. Boyer is a medical toxicologist at Children's Hospital Boston, a teaching hospital for Harvard Medical School. He became interested in kratom after reading websites where, he says, some of the 40 million Americans who self-medicate for chronic pain were posting messages. They had been able to buy their pharmaceuticals online for years but, according to Boyer, "around 2006, the government shut down all these internet pharmacies, and all these people who were self-medicating for chronic pain had nothing. They were looking for a way to deal with opioid withdrawal." They stumbled across kratom, and vendors began meeting the demand.

Boyer was just beginning to look into kratom when he got the call about Jeff and went to interview him.

Jeff is a "high-functioning" man, Boyer says, who'd made a lot of money as a computer programmer and was married to a Pulitzer Prize–winning writer. Jeff used to be addicted to hydromorphone, getting pills and cooking them so he could shoot up. (Jeff had reportedly studied chemistry in college and knew what he was doing.) One day, Jeff dropped his baby on the floor. "When he dropped the baby, his wife said, 'Either the opiates go or I do,'" Boyer says. Jeff had tried to quit several times but couldn't because of the pain of withdrawal. So he turned to kratom. At the time of his seizure, he'd been taking kratom for more than three years, spending more than $15,000 a year on the plant.

After the seizure, Jeff quit taking kratom. "He stopped the kratom cold turkey and only had a runny nose," Boyer says—a surprising lack of withdrawal symptoms. "To go from injection drug use to nothing, with only a runny nose, is impressive." Boyer coauthored a paper about Jeff, titled "Self-Treatment of Opioid Withdrawal Using Kratom (*Mitragynia speciosa korth*)," for the medical journal *Addiction*.

Finding an inexpensive, naturally occurring way to wean people off of heroin and prescription opiates without serious withdrawal symptoms would be a silver bullet for public health—and a gold mine for any entrepreneurs who discovered it.

Relative to opiates, kratom seems reasonably safe, at least in the short-term. (There have been a handful of deaths associated with kratom, but they all involved other drugs: one 20-year-old man whose toxicology results also showed he had morphine and "stovetop speed" made from nasal decongestants in his system; nine people in Sweden who died from taking a brand of kratom called Krypton that had been laced with pharmaceuticals.)

The anecdotal evidence on message boards from people who have used it to wean themselves off of opiates is encouraging. Still, Dr. Boyer is cautious: "To suggest it's a panacea for all opioid use would be irresponsible."

For some people, kratom is addictive and leads to compulsive use. Dr. Howard Kornfeld, a pain and addiction specialist in California, has treated two patients for kratom addiction. One of them, he says, "kicked hard... we have quite a bit of medication to make it easier, but it was a hard withdrawal." And some people, Boyer says, "are injecting kratom extracts—you can get pretty deep into this stuff." Some people have an easy time quitting kratom and some do not. Some use it as a recreational drug, some are addicted to it, and others use it as medicine. But because it's legal, there's no black market, so people aren't murdering each other over it.

The bottom line, according to Boyer's paper in *Addiction*: "The natural history of kratom use, including its clinical pharmacology and toxicology, are poorly understood."

Only a handful of scientific papers in English have been written about kratom, its effects, and its centuries-long history. The stack of papers on my desk, everything I could find with the help of a research librarian at the University of Washington, measures barely half an inch.

Here's what we do know: The kratom tree was first formally documented by a Dutch botanist named Pieter Korthals, who noticed it while he was recording plant life in Southeast Asia for the Dutch East India Company. He called it "mitragyna speciosa," because—according to Wikipedia—"the stigmas in the first species he examined resembled the shape of a bishop's mitre."

A Thai study from 1975, by Dr. Sangun Suwanlert, tells us this:

> Kratom is indigenous to Thailand. Market gardeners, peasants, and labourers often become addicted to kratom leaf use. In certain respects, kratom addiction resembles addiction to a drug with narcotic properties, except that long-term kratom addicts develop a dark skin, particularly on the cheeks... In Thai folk medicine, the leaf is used for the treatment of diarrhoea and as a substitute in cases of opium addiction. Some villagers use it as an ingredient for cooking. Market gardeners, peasants, and labourers become easily addicted to the use of the leaf; they reason that it helps them to overcome the burden of their hard work and meager existence.

None of the contemporary experts I talked to could explain Suwanlert's skin-darkening comment. They weren't aware of anything about kratom's chemical composition that would do that. Some suggested that Suwanlert was seeing dark skin because he was talking about people who worked outdoors—but then again, kratom is "poorly understood."

In 1943, the Thai government began enforcing the Kratom Act, prohibiting the planting of new kratom trees and calling for existing ones to be cut down. It didn't work—there are news stories about its continued use, as well as drug busts that turn up packets of kratom leaves—and many brands of kratom available in the United States claim to be from Thailand. One apocryphal story making the rounds among kratom people claims that an American in Thailand has cornered the market for kratom shipped to the United States and Canada.

Boyer and his coauthors noticed online mentions of kratom at low levels starting in late 2004 and spiking in April of 2005. A current Google search for kratom will pick up almost three million hits—oxycodone, by contrast, picks up 22.2 million—and pages of online vendors. And, over the past few years, the new-drug cycle has begun to unfold.

The Drug Enforcement Administration (DEA) began putting out warning bulletins about kratom as early as 2005, saying it's used "by young Thai militants... to make them 'more bold and fearless and easy to control.'" The DEA warning also mentions "several cases of kratom psychosis" where kratom users "exhibited psychotic symptoms of hallucinations, delusions, and confusion." The bulletin doesn't cite its sources, but its key data on addiction rates is identical to Dr. Suwanlert's seven-page gloss from 1975. (Suwanlert's study is also the only mention I have found in the scientific literature of "kratom psychosis." He says he observed psychiatric disturbance in five kratom users who wound up in an outpatient hospital: One was a 55-year-old who'd been using kratom for 30 years and was experiencing "clouding of consciousness," and two of the others were schizophrenics.)

Suffice it to say, the DEA's claims aren't based on robust research.

Meanwhile, predictably, overhyped news stories about kratom are beginning to appear. One recent headline on

KITV.com in Honolulu is typical: "New Herb Adds to Drug Trend Fears: Kraytom Already Illegal in Thailand." The story frets about "this 'Wild West' of drug use that doctors say could be deadly" and relies on quotes from a doctor who gravely warns of the dangers of kratom abuse, though that doctor's hospital "hasn't seen cases of kratom so far."

A story last month on MSNBC.com claims "Asian Leaf 'Kratom' Making Presence Felt in U.S. Emergency Rooms" and quotes a medical director in Phoenix who says he saw "six emergencies involving kratom" in 2011. Those "emergencies," it turns out, were people suffering from the discomfort of withdrawal symptoms. "They usually get medication for nausea and Valium to ease the paranoia," the doctor says, and are sent home.

The same medical director also claims, "When we see people who take this, they sometimes get respiratory depression," but this is simply false. Dr. Boyer, who has at least studied it, says in our interview: "There have been no human case reports in which respiratory depression has occurred following a large dose—*any* dose, really—of kratom use. That makes it different from opioids, which makes it a plus."

In the wake of these DEA warnings and overheated news stories, US legislators have begun toying with the idea of banning kratom. This year, Louisiana state senator A. G. Crowe is sponsoring a bill that would add kratom to the list of schedule-one drugs, or drugs that are legally classified as having no recognized medical value. That would put kratom in the company of marijuana, LSD, ecstasy, peyote, and heroin.

A story last month in the Baton Rouge *Advocate* reported that "the committee advanced [Crowe's] legislation without objection despite several committee members' unfamiliarity with kratom... Sen. Robert Adley, R-Benton, scanned the committee room for law enforcement officials with knowledge of how much of a problem the substance is becoming. Adley's search came up empty." (Senator Crowe's office did not respond to requests for comment for this story. Incidentally, the *Washington Post* reported last week that Senator Crowe is also backing a bill to allow discrimination against gays and lesbians in charter schools.)

In Iowa, state representative Clel Baudler began moving to ban kratom just two hours after he first heard of it. "We have to get ahead of this thing before it gets out of hand," he was quoted as saying in a story on WOI-TV.com, which reported that kratom is "a hallucinogen, addictive, and can be life-threatening."

In a telephone interview with *The Stranger*, Representative Baudler said he first heard about kratom on a radio show where he'd heard from a medical examiner that "the effects were not good—not good at all." He said his push to ban it, via an amendment to another bill, had passed the state house "unanimously" but was now in the senate, where it was sitting in a committee run by "an ultra-liberal," and that he'd been working hard all week to make sure it passed.

When asked why he was describing kratom as "a hallucinogen" and "life-threatening" when researchers and the medical literature directly contradicted these claims, he responded: "I absolutely disagree with you. It is banned in the two countries where it's grown and banned in a whole bunch of European countries, like Australia [*sic*]. And it has absolutely no medical value."

But kratom *has* been considered of medical value—for treating problems as small as diarrhea and as huge as drug epidemics—since the 19th century. As we were talking, I was sitting inches away from studies contemplating its medical value. (And an atlas.) And once a drug is banished into schedule one—i.e., is legally

considered to have no medical value—it's much more difficult to secure grant funding to research it. (According to Sanho Tree, a drug-policy expert at the Institute for Policy Studies in Washington, DC, once a drug becomes schedule one, there are "infinitely more hoops you have to jump through and you're basically at the mercy of the DEA" to do any research.) And research is precisely what kratom needs.

Given all that, could Representative Baudler point to any actual scientific studies supporting his charge that kratom is a "life-threatening" "hallucinogen" with "absolutely no medical value"?

"No," he said. "They're all at my office in Des Moines, and I'm at home." Could he remember even one study? Or the name of the medical examiner he'd heard on the radio who'd instantaneously inspired his crusade? "No."

The campaigns of Representative Baudler and Senator Crowe to shove kratom into the schedule-one category are not based on reason or research. But they are telling. The next time you wonder why drug-prohibition laws in this country are such a destructive mess, just think of all those politicians who hear "drug" on the radio and rush toward prohibition without knowing the basic facts—just to score easy political points. Saying something has "no medical value" before looking into it is not rational. It's knee-jerk prohibitionism. And the facts have proven knee-jerk prohibitionism to be a catastrophe across the western hemisphere.