

Kratom Use Is on the Rise

Be On The Lookout

For Immediate Release

The MEDTOX DAR Hotline has experienced a surge in inquiries about Kratom abuse. The DARS Journal has previously reported on the emergence of this drug as an abused substance. Kratom is a medicinal plant that is grown and harvested in Southeast Asia. Thailand and Malaysia are principle sources for this drug; Bali is the genesis for the most potent Kratom in the world. Processed like marijuana, Kratom leaves are plucked and then dried before being prepared as a powder or oily resin. Kratom crushed leaves or powder can be prepared as a tea or warm beverage, or can also be in capsule form. The drug can be sour tasting, and as a result, Kratom tea drinkers must add flavoring to the beverage to offset the bitterness. The effects of Kratom are dose dependent; with 3 to 5 grams of crushed Kratom leaf (or ½ teaspoon of Kratom 15X powdered extract) needed to get high. Some Kratom users choose to smoke the crushed leaf material in a hand-rolled cigarette. Burning Kratom smells similar to burning marijuana. A Kratom high will last some 2-3 hours with the euphoric effects coming in waves. The initial effects from Kratom are exhilarating and motivational; a later phase is more sedating and relaxing. The drug has qualities as a social lubricant. Some users cite Kratom as having aphrodisiac powers as well.



Kratom's biochemistry is unique. As a member of the *Mitragyna* plant family, Kratom is believed to exert its effects through interaction with *delta* and *mu* opiate receptor sites. To that extent, Kratom displays pharmacological similarities to *Salvia divinorum*, but the ultimate psychoactive effects are noticeably different. *Mitragynine* is the major alkaloid found in Kratom, 7-hydroxymitragynine is a minor alkaloid in Kratom that exhibits opiate-like analgesic effects that are similar or greater than morphine. The effects described as relaxing, anxiety reducing, and euphoric are most likely attributable to Kratom's activity at the *delta* and *mu* opiate receptors. In fact, there are anecdotal reports from many users that Kratom is an effective therapy for treating the symptoms of opiate withdrawal. Many users have successfully weaned themselves off of prescription opiates through the use of Kratom. It stands to reason however that if Kratom is effective in ameliorating the effects of opiate withdrawal, then it is likely to cause opiate dependency if it is used over an extended period of time. Although there have been sporadic reports of users who have developed Kratom addictions, it is unclear whether or not true opioid mediated dependencies have occurred.

For DAR and DRE trained readers, symptoms of Kratom intoxication include the following:

- Pulse- **near normal**
- Blood pressure- **near normal**
- Body temperature- **near normal**
- Romberg internal clock- **distorted**
- Pupil size- **near normal (constriction in high doses)**
- Pupil reaction to light- **slow**

Kratom's effect on pupil size is difficult to gauge. In lower doses of 1-3 grams there appears to be little impact on pupil size. But when the dose of the drug reaches 5 or more grams, it is possible for there to be a noticeable slowing of the pupil's reaction to direct light. These effects are probably attributable to Kratom's interaction with *delta* and *mu* opiate receptor sites.

Like *Salvia divinorum*, Kratom is considered a dietary supplement. It is not a controlled substance; it is legal to possess. Head shops and Internet Kratom stores are experiencing brisk sales of its various Kratom products. Kratom is exhibitiv of an emerging trend that transcends methods of modern toxicological monitoring. Kratom has been around for nearly 10 years, but only in the last year or two has it attracted widespread attention. With the emergence of K2 and Spice, bath salts, and plant food as drugs of abuse, Kratom's popularity has surged. And because it is viewed as a legal, safer alternative to other more caustic designer drugs, Kratom use will continue to grow and spread.