



## Dr. Satariya Trakulsrichai

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### **Kratom: Emerging Recreational Substance, from Local to Worldwide**

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Kratom or Ketum, known botanically as *Mitragyna speciosa* (Korth.), belongs to the Rubiaceae family and is a native tree indigenous to Southeast Asia, especially in Thailand and Malaysia.

In Thailand, kratom has been used traditionally as a folk medicine, stimulant, analgesic, and treatment for opioid addiction in the past. Nowadays, it is an emerging substance abuse by coingestion with other substances for example 4 x 100 cocktail.

It is illegal in Thailand, but still legal in many countries such as some countries in Europe and most states in the United States. Recent evidence shows that kratom is being increasingly used worldwide, especially in the United States and Europe for the self-management of opioid withdrawal, pain killer or substance abuse available through special shops or the internet.

Kratom contains many alkaloids such as mitragynine which is the most abundant active alkaloid and 7-hydroxymitragynine which is more potent analgesic than morphine. Kratom possesses dose-dependent pharmacological effects, with stimulant effects in low doses and opiate-like effects in high doses with other clinical beneficial effects reported. Recent studies suggest that kratom alkaloids have potentially beneficial pharmacological activities. However, there have also been increasing numbers of reports of adverse effects and toxicities including deaths from Kratom use. This highlights the need for more scientific study of its pharmacological benefits, efficacy for various conditions and particularly the safety.

This topic covers the epidemiology, pharmacologic properties, mechanisms of action, clinical features of poisoning and withdrawal, the management of the poisoned patients. The controversies between recreational use and therapeutic aspects and continuing researches are also included.