Mitragyna speciosa or locally known as ketum in Malaysia is traditionally popular in the northern parts of Peninsular Malaysia and Thailand. The leaves are chewed or boiled and taken daily as a popular tonic by farmers to endure the sun, fatigue, and hard work. The truth is that ketum cheats the brain into believing that you are stronger than you thought.

It was not known to be detrimental to the health of the old rice farmers for decades. Lately, however, the consumption of ketum in Peninsular Malaysia took a turn for the worse. Having learned that ketum has an opiod-like effect, drug addicts found it as a cheap drug substitute for other drugs found in the country. The active ingredient mitragynine gives a good sense of euphoria. This can be simply explained by the psychotropic action of mitragynine in the brain.

Healthy prefrontal cortex neurons of a brain have round cells with normal cytoplasm. However, long term usage of mitragynine causes morphological changes of the prefrontal cortex neurones in the brain characterised by shrunken and spindle–shaped cells with dark cytoplasm. These changes will eventually cause the primary function of the prefrontal cortex as an executive centre of the brain not to function optimally in decision making, induce personality changes and related addictive symptoms such as aching bones and muscles, hostility, jerky movements of limbs, inability to work, insomnia, anorexia, and weight loss as shown by past scientific studies.