



# UNVEIL THE HIDDEN DANGER OF MOSQUITO COIL: A THREAT TO HEALTH AND ENVIRONMENT

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What if, in our fight against mosquitoes, we unknowingly invite harm by bringing a silent killer into our homes? While mosquito coils promise to shield us from bites, their smoky embrace conceals a toxic reality polluting the air we breathe and silently harming our health and environment. The mosquito repellent coil is widely used in numerous parts of the world like in Asia, Africa and South America, especially during the winter season to repel the mosquitos to prevent diseases like- Malaria, Yellow Fever, Chikungunya and dengue. According to the WHO Report in 1996, the usage of Mosquito Repellent coils across the globe was around 29 billion units. This data shows how these chemical-based mosquito repellent coils are inherent in our practice. Epidemiologist says that "Burning a Single Mosquito coil in a closed room is equivalent to smoking roughly 100 cigarettes" Now you can imagine how badly we are torturing our bodies, moreover with long-term exposure will ultimately lead us to a very Chronic and severe lung diseases, even it can be fatal. The Mosquito Incense is often used

overnight in sleeping quarters, which ultimately increases indoor air pollution to above the threshold level. In the winter season, the particulate matter stays longer in the air due to the cold environment and fewer mosquito repellent coils are commonly utilized in India, However Long-term use of mosquito repellent incense causes neurotoxic and immunotoxin effects, skin allergies, seizures, eye irritation, insomnia, sneezing, dizziness, headache, asthma, and bronchial irritation. Burning the Mosquito coil produces toxic particulate matter (PM 2.5), metal fumes & Vapors which may reach the alveolar region of the lung and cause uncountable devastating respiratory disorders. The impact on most vulnerable groups is more chronic like children, pregnant women and persons who have already suffered from respiratory and cardiovascular Ailment. The leftover ash content is also a big concern because without proper disposal it will affect the soil health. Recent studies have also proven that the smoke of mosquito incense is carcinogenic.

In Taiwan, people frequently use mosquito coils in their households. A case study shows that the number of lung cancer patients who utilized the mosquito repellent coil in their homes is higher. This proves that now we must avoid using these synthetic mosquito's coils to sustain our good health and stop suffocating ourselves with this toxic smoke. Otherwise, it will become a very alarming issue and a serious health concern.

We required an eco-friendly approach to minimize the hazardous consequences on Health and indoor pollution by completely replacing the chemical-based mosquito coils with Herbal Coils. *Sphagneticola trilobate* is a native weed to the northern part of South America and the West Indies. It possesses excellent insecticidal property to protect us from mosquito bites. We can utilize a leaf of this weed to make herbal mosquito-repellent coils. We do need to adapt safer alternatives like: Mosquito nets.

Essential oil-based repellents (citronella, neem). Ultrasonic mosquito repellents. We must come up with new innovative ideas to resolve this Enigma. Meanwhile, it will become a very alarming issue in the coming years. It also opens the door for innovations and ideas to resolve this crisis. It gives an immense opportunity for new startups to grow with eco-friendly mindsets. Which obeys the ESG norms without harming the mother nature. This is the need for the hour to act before the danger of mosquito coils becomes an unmanageable crisis.

## MOSQUITO-BORNE DISEASES

