Formulation of natural insect repellent at low price

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Insect repellents are prophylactic tools against a number of vector-borne diseases. Normally herbal products are free from side effects, adverse effects and they are low cost medicines beneficial for people. New strategy to have control against genetically modified mosquitoes borne such as Aedes aegypti L. (Diptera) and Culex quinquefasciatus are insect vectors responsible for the transmission of several human diseases caused by protozoans (malaria), nematodes (lymphatic filariasis) and viruses (dengue fever, yellow fever). Thermal expulsions and direct burning for selected plants were tested as alternative. These are perceived as safe and eco-friendly in comparison to synthetic repellents. Using different natural plants of Cedar oil, Tea tree oil, Fennel, Garlic, Camphor, Cinnamon, Rosemary together showing insect repellent activity which showed about 87% of repellent activity against mosquitoes at the end of 2 hours and its activity lasted up to 4 hrs in the study conducted. Natural plant extractions were analysed and the results showed the potential of essential oils and their development for an effective methods for the natural control of mosquitoes in homes and urban areas. As per WHO rules of insect repellent activity studies had been done and the oils used were safe & has potent efficacy. The essential oils were collected and mixed with the powder of benzoin (resin), saw dust and cow dung in different proportion which was subsequently moulded to form agarbati. Belonging to several species have been extensively tested to assess their repellent properties as a valuable natural resource. The essential oils whose repellent activities have been demonstrated, as well as the importance of the synergistic effects among their components are the main focus. Repellent activity of formulation are been observed during the process.

Biography

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