

Technology Transfer

Area of Technology: Bio-Technology

Title of the Innovation: LOW-COST PATCH COMPRISING HERBAL MOSQUITO REPELLANT

Brief About Innovation

Vector-borne diseases are mostly transmitted to humans and animals through the bites of arthropods, such as mosquitoes and ticks, infected with one or more pathogens. Arthropod transmitted diseases cause serious problems for humans and domesticated animals in much of the habitable world. Lone star ticks such as *Amblyomma americanum* (L.) as nuisance biters, are increasingly recognized as vectors of pathogens that are harmful to humans and domesticated animals (Childs & Paddock 2003; Mixson et al. 2006; Stafford 2007; Goddard & VarelaStokes 2009; Stromdahl & Hickling 2012). They exhibit a hunting type of hostseeking behaviour (Waladde & Rice 1982) and where present are readily noticeable to the public (Armstrong et al. 2001). The widespread yellow fever mosquito, *Aedes aegypti* (L.), is recognized as a health hazard and nuisance biter (Cimmino et al. 2015). Personal protection against tick and mosquito bites can be obtained by proper use of repellents, and their use has been recommended in worldwide.

Salient Features:

- The present invention relates to a low-cost patch as herbal mosquito repellent and more particular, to a composition for patch having a thymol as a main ingredient.
- The composition contains active phytoconstituent which is the thymol, hence the quality of the product is monitored, controlled and assured. The extended release of thymol from the patch of the present invention provides long lasting repellent effect.
- The prime objective of the present invention is to provide a low-cost patch as herbal mosquito repellent.
- Another objective of the present invention is to provide the composition contains active phytoconstituent, hence the quality of the product is monitored, controlled and assured.

