



National Symposium on

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Invited Speakers and abstracts of their Talk

III. Medical & Veterinary Entomology

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Title of the talk

"Medical Entomology - a great discipline promising innovations, inventions and entrepreneurship"

Abstract

Medical Entomology is a highly fascinating and enterprising discipline with infinite possibilities of generating novel knowledge, on one hand, and innovative entrepreneurship, on the other. Insects, being spectacular, abundant and diverse group, are also most prodigious arthropods. They are important in the functions and processes of most ecosystems. Insects, arachnids, and other terrestrial arthropods comprise at least 75% of all the species of animals in the world. A great deal of scientific information on life come mostly from insects. Their dominance is a fundamental scientific insight yet not widely acknowledged. On one hand, some of these insects, especially hematophagous, are serious pests and vectors of serious diseases to both humans and animals. Such diseases warrant discovery of new insecticides, drugs, vaccines and tools for their management. The 2021 Nobel Prize to Dr Wu Tutu has been awarded for her discovery of a novel antimalarial, Artemisinin. On the other hand, a large number of insects and other arthropods are highly beneficial to humans as they are (i) sources for new protein molecules to be used in medicine, industry or insecticide production; (ii) saliva of certain insects, such as mosquitoes, is now being explored for producing anaesthesia; (iii) the flour-mite gene has a solution to epilepsy and (iv) certain carrion insects deserve a special attention for correctly pinpointing the post-mortem time interval (PMTI) of a dead-body. Medical entomology has thus earned a commensurate sobriquet, "employment & trade discipline of future."