The Application of Insects in Forensic Investigations

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Abstract: Forensic entomology is the science of study and analysis of insects evidences to aid in criminal investigation. Being aware of the distribution, biology, ecology and behavior of insects, which are founded at crime scene can provide information about when, where and how the crime has been committed. It has many application in criminal investigations. Its main use is estimation of the minimum time after death in suspicious death. The close association between insects and corpses and the use of insects in criminal investigations is the subject of forensic entomology. Because insects attack to the decomposing corpse and spawning on it from the initial stages. Forensic scientists can estimate the postmortem index by studying the insects population and the developing larval stages. In addition, toxicological and molecular studies of these insects can reveal the cause of death or even the identity of a victim. It also be used to detect drugs and poisons, and determination of incident location. Gathering robust entomological evidences is made possible for experts by recent Techniques. They can provide vital information about death, corpse movement or burial, submersion interval, time of decapitation, identification of specific sites of trauma, post-mortem artefacts on the body, use of drugs, linking a suspect to the scene of a crime, sexual molestations and the identification of suspects.

Keywords: Forensic entomology, post mortem interval, insects, larvae

Conference Title: ICFS 2015: International Conference on Forensic Sciences

Conference Location: Paris, France

Conference Dates: August 27-28, 2015