

Pathology & Biology Section – 2005

G68 The Role of Forensic Insects in Deposition of Pollen at a Death Scene

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The goal of this presentation is to investigate the importance of pollen transfer by insect visitors to a death scene.

This presentation will impact the forensic community and/or humanity by demonstrating the effect, if any, of forensically important insects on the deposition of both anemophilous and zoogamous pollen at a death scene. The importance of the findings could be critical in showing whether pollen evidence is subject to the uncertainty of insect visitors at a crime scene.

This poster will present the evidence of pollen deposition at mock crime death scenes with and without insect involvement. Pollen can be transferred to the death scene by wind (anemophilous) and by animals (zoogamous), particularly insects. It was the original purpose of the experiment to document the normal pollen assemblage in mock crime scenes. This pollen assemblage at these mock crime studies was compared with the resident pollen on the pigs which were not local.

For over five years, one of the courses in the forensic biology program at Ferris State University has used pigs in a mock crime setting to teach students techniques associated with death scenes, including forensic entomology, botany, and anthropology. These mock crime settings are done under strict animal rights protocols. During these mock crime scenes, pollen collections have been done for baseline data on the pollen assemblages found during different times of the year.

In a series of insect inclusion and exclusion experiments, the pollen assemblages were collected at the mock crime scene. The original question attempting to be answered was the effect, if any, of the insects visiting the mock crime scene and deposition of both anemophilous and zoogamous pollen. The importance of the finding could be critical in showing whether pollen evidence is local or is subject to the uncertainty of insect visitors at a crime scene.

Insect, Pollen, Palynology