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H27 Insects Attached to Vehicles Traveling on Roads in Mexico

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The goal of this presentation is to provide information regarding insect data that may be attached to vehicles traveling on different roads in Mexico during various climatic seasons of the year; this information can be used when necessary to establish probable routes taken by a vehicle involved in an investigation.

This presentation will impact the forensic science community by explaining how the information generated will be highly supportive for research that requires establishing probable routes taken by a vehicle involved in an investigation.

Forensic entomology is a discipline that greatly supports the field of legal medicine due to the different manners in which it contributes, such as: the establishment of the postmortem interval or period of insect activity, possible circumstances of death, determination of toxic agents in the body, determination of a possible postmortem move of the body, and assisting in the establishment of possible roads on which a vehicle could have traveled (the latter being the focus of this research).

In Mexico, efforts are being made by researchers to make forensic entomology known and applied in the legal system; thus, it is necessary to generate scientific information that can be available for use when required by experts or researchers, since most of the information available comes from abroad and cannot always be applied to Mexico.

This research was conducted in the south/southeast area of Mexico and covered a large region that stretches from the Gulf of Mexico to the Pacific Ocean. Currently, different insects have been collected from vehicles that travel a 1.130km section of road that begins at the border city of Tapachula, Chiapas, and continues to Mérida, Yucatán. This route consists of different ecosystems, such as wet forest, cloud forest, rivers and lakes, and grasslands, and there is a great diversity of insects that are associated with these ecosystems.

This study will continue on the main roads of the country during different climatic seasons. The information obtained will be shared on the web through a georeferencing database of forensically important insects that researchers have been working on and can be consulted by experts who require this information.

Forensic Entomology, Ecosystems in Mexico, Insect Biodiversity in Mexico