

## Attraction and Identification of Early Scavenger Insects on Shaded and Sunny Liver Baits in a Saharian Region of South-Central Algeria

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**Abstract :** Forensic entomology is the use of insects to aid legal investigations. The main purpose of forensic entomology is to establish the postmortem interval (PMI). In order to estimate the PMI, a forensic entomologist compares the case data with certain reference information relevant to the particular location and time of year. This reference information, including the local distribution of species, are not available in Algeria. Therefore, experiments need to be conducted to provide references for entomological evidence. The objective of this study was to identify the necrophagous flies species which arrive first to carrion using liver baits in Ghardaia, South Algeria. The study was carried out during the spring season in the palmeral of Beni Isguen, Ghardaia which is well known by its hot arid climate. The experiment site (32°28'0" N, 3°42'0" E), is situated at an altitude of about 526 metres above mean sea level. On April the 4th, 2014, a number of three replicates of liver baited traps were placed in the shade and other three baits were exposed to the sun. Flying insects and larvae were captured and identified. After few minutes, flies invaded the traps which were exposed to the sun. In contrast, no flies were observed in the other traps. A total number of forty five (45) adult specimens belonging to three taxa were identified: *Calliphora vicina* (Robineau-Desvoidy, 1830) (Diptera, Calliphoridae) (51.11 %), *Lucilia sericata* (Meigen, 1826) (Diptera, Calliphoridae) (33.33 %) and *Sarcophaga africa* (Wiedemann, 1824) (Diptera: Sarcophagidae) (15.55 %). Six hundred and three (603) maggots belonging to two taxa were identified: *Calliphora vicina* (76.28 %) and *Lucilia sericata* (23.71 %). The data obtained from this study provides baseline information regarding the carrion fauna of this area. It will also form a basis for similar studies in different geographical and climatological regions of Algeria.

**Keywords :** forensic entomology, liver baits, necrophagous fly, Ghardaia, South Algeria

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