G54 The Developmental Studies of The Green Bottle Fly, *Phaenicia coeruleiviridis* (Diptera: Calliphoridae)

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After attending this presentation, attendees will learn the developmental growth times of Phaenicia coeruleiviridis in this preliminary study of this species.

Insects collected at crime scenes are often used to estimate PMI (Postmortem Interval). Developmental growth curves of individual species are used in these estimations. To date, there is very little information on the species Phaenicia coeruleiviridis. This presentation will impact the forensic community and/or humanity by helping in creating a more accurate PMI estimate when Phaenicia coeruleiviridis is used.

Despite its obvious presence and abundance in the south and southeastern parts of the United States, there is little information on the growth and development of the green bottle fly, *Phaenicia coeruleiviridis* (Macquart). Growth curves were determined for the egg, larva, and pupa stage of this species under constant temperatures of 21.1, 23.8, and 26.6°C. Development from egg to adult under all temperatures ranged from 608 to 844h. Length and mass measurements for each development stage at each temperature regime were reported, giving investigators an option for analysis of age and postmortem interval estimations using *P.coeruleiviridis*. Although the genus *Phaenicia* (=*Lucilia*) is small and the species appear similar, developmental data varies greatly within this genus, indicating a need for further study.

Developmental Growth Curve, Forensic Entomology, *Phaenicia coeruleiviridis*

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