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A FORENSIC ENTOMOLOGICAL CASE OF NEGLECT OF AN ELDERLY MAN IN CALABRIA, SOUTHERN ITALY

Bonacci T.¹, Vercillo V.², Benecke M.³

¹ DiBEST Department, University of Calabria, 87036 Rende (CS), Italy;

² Azienda Sanitaria Provinciale, sezione di Medicina legale di Cosenza (CS), Italy;

³ International Forensic Research & Consulting, Cologne, Germany
teresa.bonacci@unical.it

Some insect species are valuable as forensic indicators in cases of abuse and neglect. They deposit their eggs in and around clothing and skin and feed at open wounds, ulcers, natural openings, etc. (Zumpt, 1965, Sherman and Hall, 2000). In particular, immature stages of Calliphorids may give information on how long a person was neglected (Lord, 1990; Baumjohann et al., 2011) but also Muscids, Sarcophagids and other species may prove cases of neglect (Benecke et al., 2001, 2004). Here, we present a case of neglect of an 80-year-old incontinent, elderly man with a psychiatric illness in the urban area of Aciri (Cosenza), Calabria, Italy. The colonization with Diptera larvae before his death (myiasis sensu strictu) shed a light on his suffering and to prove the neglect before death. In the apartment, garbage, feces and urine were scattered around. The window was closed. Cause of death was hypertrophic cardiomyopathy and chronic active hepatitis. The temperature in Aciri city before the discovery of the corpse was $23.9 \pm 1.35^{\circ}\text{C}$. On the corpse and near anal genital area, few mature larvae of *Musca domestica* Linnaeus, 1758 and *Fannia scalaris* (Fabricius, 1794) were found; also, dead adults of *M. domestica* were collected from the room (July 9, 2016). Both species are attracted to feces and urine. Also, 2nd and 3rd instar larvae of *Lucilia sericata* were found (but no dead Calliphorids). On the floor, dead adult *Musca domestica* L. and *Fannia scalaris* and many active and empty puparia of both species were found spread on the floor near the corpse and near the closed window of the room where was found the corpse. Some larvae were put in hot water first, then stored in 90% ethanol; some specimens were reared to adult stage. External examination of the corpse also revealed multiple irregular, brown injuries (1–4 mm) on the skin, typical of ant action (Bonacci and Vercillo, 2015). However, no Formicidae were found on the corpse and inside the apartment. Since the larvae of *Lucilia sericata* take 3.5 (25°C) to 4.5 days (22°C) to reach end of L3 (data from Austria; Grassberger & Reiter, 2001), and 10 (25°C) to 13 (20°C) days to reach the end of postfeeding state (data from Pakistan; El-Kady et al., 1999), we discuss the possibility that the family of the man neglected him over the course of at least one week.

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