

Myiasis bei der Erdkröte (*Bufo bufo*) verursacht durch die Schmeißfliege *Lucilia ampullacea*

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Myiasis of the common toad (*Bufo bufo*) caused by the blowfly *Lucilia ampullacea*

Parasitism of common toads (*Bufo bufo*) by the calliphorid blowfly *Lucilia bufonivora* is well-known, yet little information is available on other blowflies infesting living toads or other amphibians in central Europe. In this paper we describe an infestation of an adult female *Bufo bufo* by *Lucilia ampullacea* which appears to be the first record of amphibian myiasis caused by this species. This blowfly was unambiguously identified by both morphology and DNA barcoding. The toad was discovered in Munich (Bavaria, Germany) on 4 September 2012 when crossing a path in the afternoon. Its dorsal surface was covered with at least 480 white eggs, which were concentrated in the neck and on the flanks. A large skin patch covering the head and anterior back was pathologically darkened, but otherwise the toad appeared healthy. The next morning most larvae were hatched and concentrated in the darkened skin area. The toad was remarkably quiet, neither displaying any defense behaviour nor releasing poison from the parotid glands. Few hours later the toad was dead, not obviously caused by the fly larvae. In the late afternoon, the fly larvae had destroyed the left eye, but no larvae were observed searching or entering the nostrils. The following morning the lower jaw of the toad had fallen down providing the larvae much more opportunity to enter the body. Five days after hatching, all larvae had left the cadaver and moved into the earth. The first puparia were found nine days after the hatching of the larvae and another ten days later the first flies appeared. The described case is considered a facultative wound myiasis. The infestation of *L. ampullacea* strongly differed from myiasis caused by *L. bufonivora*, e. g. by unaffected nostrils and very rapid mortality of the toad. Another species (*Lucilia silvarum*) well-known to cause myiasis in North American anurans, is widespread in Europe and Germany. However, myiasis of anurans by this species in Europe is poorly documented and might at least partly refer to misidentifications. We discuss the potential of DNA barcoding as an efficient tool to gain significant progress in the understanding of myiasis of amphibians and other vertebrates.

Key words: *Lucilia ampullacea*, *L. bufonivora*, *L. silvarum*, myiasis, *Bufo bufo*, Bavaria, Germany, DNA barcoding.

Zusammenfassung

Schmeißfliegenbefall bei der Erdkröte (*Bufo bufo*) durch *Lucilia bufonivora* (Calliphoridae) wird relativ häufig beobachtet, es ist allerdings noch unzureichend geklärt, ob auch andere Fliegenarten in Mitteleuropa lebende Amphibien befallen. In dieser Ar-