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EDITORIAL

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Entomology

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This issue includes 10 articles dealing with forensic entomology which mainly have their origin in lectures presented at the first meeting of the European Association for Forensic Entomology held in Frankfurt/Main in April 2003. The editors have decided on this strategy because forensic entomology has become increasingly important for the elucidation of criminal cases (Grassberger et al. 2003; Amendt et al. 2004).

It is an attempt to provide a scientific basis for forensic entomology such as implementation of DNA analysis for the identification of forensically relevant insects (Zehner et al. 2004). Insect succession experiments performed on animal cadavers (Arnaldos et al. 2001, 2004; Anderson and Hobischak 2004) might enable us in the near future to extrapolate to even longer periods of time since death. But the need for this kind of examination is also illustrated by exceptional cases, where a solution depends on the knowledge of the fauna at the scene of death (Anderson 2004). More experimentation is being carried out to investigate the influence of corpse-related parameters such as nutrition, drugs and also the type of organ, on the developmental rate of the various stages of the colonising insects (Campobasso et al. 2004; Kaneshrajah and Turner 2004; O'Brien and Turner 2004; Pien et al. 2004; Tracqui et al. 2004). Last but not least Bourel et al. (2004) demonstrate the importance of a close connection between legal medicine and forensic entomology: only the regular examination of human corpses infested by maggots can improve our knowledge of necrophagous insects and their use in forensic investigations.

The number of scientists working in this field and the degree of international cooperation between the various groups are increasing. In Europe there are at least 10 countries with groups of researchers concentrating on entomology (http://www.eafe.org). There are international attempts at standardisation and quality assessment of the techniques and methodologies. It can therefore be hoped that in future forensic entomology will play an even more important role in the elucidation of acts of crime.

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