

Herbert Becker

Twinning in *Cuora galbinifrons* (BOURRET, 1939)

Preliminaries

Twinning in chelonians is still a relatively rare phenomenon, and incidents of this character are therefore usually reported on when they occur. As a result of Mediterranean tortoises being propagated most commonly, the majority of these reports refer to the genus *Testudo* (AUER *et. al.* 2004, BEYER 2005, CONRADI 2005, BUDISCHEK 2006).

PHILIPPEN (2009) reported on twins hatching in the European Pond turtle (*Emys orbicularis*) and used this opportunity to provide a bibliographic overview of twinning.

It was only in recent times that twinning was also reported from Southeast Asian pond turtle and tropical tortoise species (BECKER 2007, 2010, IPSER 2007, SCHOLDEI 2011). As the keeping of these species has intensified in the past years, information on their husbandry and captive breeding has also become more readily available. This also includes information on twinning in these chelonians.

Twinning in *Cuora galbinifrons*

Keeping species of the genus *Cuora* has become more widespread in recent years for which reason their captive propagation has also become more commonplace. In 2008 alone, several works were published on this genus: BECKER & PHILIPPEN (2008) reported on its variability, and NIESSEN (2008; *Cuora picturata*), HILLER & HILLER (2008; *Cuora galbinifrons*), as well as JANSSEN & JANSSEN (2008; *Cuora bourreti*) did so on captive breeding.

In the present case, a very light coloured female (see BECKER & PHILIPPEN 2008) deposited two eggs on 2. May 2012. The eggs weighed 29.92 and 30.82 g, respectively, and thus fell within the commonly observed range of variability. They were transferred to moist vermiculite and placed in a home-made incubator where they were stored at 26 ± 1 °C.

On 24. Jul. 2012, i.e., after 83 days, a baby hatched from the first egg, weighing 22.34 g. It was followed on the next day by another juve-



Fig. 1.
A light-coloured female of *Cuora galbinifrons*.



Fig. 2. Viable twin of *Cuora galbinifrons* with a hatching weight of 22.34 g.



Fig. 3. The twin of the specimen shown in Fig. 2 that perished during its development inside the egg in dorsal view.

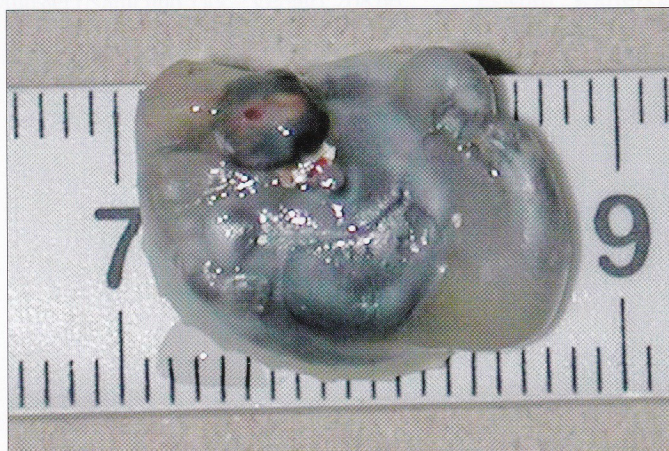


Fig. 4. The twin of the specimen shown in Fig. 2 that perished during its development inside the egg in ventral view.

nile, weighing 19.89 g, from the second egg. A very small, dead embryo was found lying next to this second egg; it weighed a mere 0.96 g.

The hatching of the surviving twin was without incidents, whereas the smaller embryo had evidently perished at an early stage of development. The two siblings were no longer connected via an umbilical cord. The surviving twin commenced feeding readily on small earthworms a few days later.

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Author & Photos

Herbert Becker
 Bahnhofstraße 97
 65795 Hattersheim
 Germany
 E-Mail: herb.becker@t-online.de