

An amelanistic Hermann's Tortoise (*Testudo hermanni hermanni*) from the Balearic Islands (Spain)

A. Martínez Silvestre & J. Soler
Catalonian Reptile and Amphibian Rehabilitation Center (C.R.A.R.C.)
08783 Masquefa, Barcelona, SPAIN
Phone: 34937726396
Fax: 34937725311

An amelanistic female Hermann's tortoise (*Testudo hermanni hermanni*) was admitted to the C.R.A.R.C. (Catalonian Reptile and Amphibian Rehabilitation Center) after it had been confiscated with other tortoises from a trafficker by the authorities. The tortoises, originaries from the Balearic Islands, were maintained in captivity two years ago. Tortoise was hospitalized in the CRARC dependences. Fluids and parenteral nutritional complex were administered. The tortoise died after two weeks of hospitalization. Necropsy showed that it was in poor condition, with absence of fat reserves.

Hermann's tortoise has a Mediterranean distribution. Nowadays, its presence in Spain is reduced to a few areas: the Mountains of L'Albera, the Mountains of Garraf, the Ebro Delta, Mallorca and Menorca Islands (Fèlix *et al.*, 1989; Bertolero and Martínez-Vilalta, 1994; Martínez Silvestre and Soler, 1998). Reintroduction projects are planned for the Mountain of Montserrat and the Mountains of Cadiretes (Catalonia) and Desert of Palmas (Valencia). Isolated individuals are being monitored in other locations. Their presence at these sites is associated from captive individuals escaping from gardens or zoological collections.



Figure 1. Aspect of amelanistic tortoise in comparison with another phenotypically normal animal of the same species.

Only few anomalies have only been described in European tortoises. They include the incised edge of carapace (typical of *Testudo marginata*, Reichenback and Elkan, 1965), the anomalous division of the supracaudal scute (Highfield, 1989), an unpaired supracaudal scale (typical of *Testudo graeca*, Highfield, 1990a), prenatal death by embryonic anoxia (Highfield, 1990b) and polydactyly (Martínez Silvestre et al., 1998). This is the first record of leucistic coloration in a Hermann's tortoise.

The irises of tes tortoise were pale brown. For this reason it was classified as an amelanism instead of an albinism. A true albino would be expected to possess colourless iris, although these may appear pink because of the erythrocytes within ocular vessels and tissues.

Although many anomalies are associated with contaminants, radiation or changes in temperature or osmotic pression during incubation (Frye, 1991), pigmentation traits appear to be genetically linked and do not appear to be induced by epigenetic influences during embryonic development. The absence of melanic-black pigment appears to be the reason for the anomaly in this case.

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