Pasteur, G. (1959). La faune reptilienne récente du Maroc. *Bull. Soc. Sc. Nat. et Phys. du Maroc*, **39**, 2: 129-139.

Pasteur, G. and Bons, J. (1960). Catalogue des Reptiles actuels du Maroc (révision des formes d'Afrique, d'Europe et d'Asie). *Trav. Inst. Sc. Chérifien, sér. zool.* **21**, Rabat.

Rasmussen, J. B. (1985). A Re-evaluation of the Systematics of the African Rear-fanged Snakes of Bogerts groups. *XIII-XVI*. including a discussion of some evolutionary trends within Caenophidia. *Proc. Intern. Symp. African Vertebr.*. Bonn.

Salvador, A. (1974). *Guia de los Anfibios y Reptiles españoles.* Ed. Icona, Madrid.

Salvador, A. (1985). *Guia de Campo de los Anfibios y Reptiles de la Peninsula Iberica, Islas Baleares y Canairias,* Santiago Garcia.

Schneider, B. (1969). Zur Herpetofauna des Galita — Archipels. *D.A.T.Z.*. **22(8)**, pp.249-251.

Steward, J. W. (1971). *The Snakes of Europe.* David & Charles: Newton Abbot, 238pp.

Sura, P. (1983). Preliminary results of a collecting trip to Algeria — Amphibians and Reptiles, *Bull. B.H.S.* **6**, pp.27-35.

Werner, F. (1929). Wissenschaftliche Ergebnisseeiner zoologischen Forschungreise nach Westalgerien und Marokko. *Sitz. der Akad. d. Wiss. in Wien, math. - naturw. kl.*, Abt. I 138 Bd.

Werner, Y. L. (1982). Herpetofaunal Survey of the Sinai Peninsula (1967-77), with Emphasis on the Saharan Sand Community. From N. J. Scott, Jr., ed. *Herpetological communities: a symposium of the Society for the Study of Amphibians and Reptiles and the Herpetologists League,* August 1977, *U.S. Fish and Wildlife Service, Wildl. Res.* Rep. 13.

Zulueta, A. de (1909). Nota Sobre reptiles de Melilla (Marruecos). *Bol. Soc. R. Esp. Hist. Nat. IX* pp.351-354.

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SHORT NOTE:

ON THE TYPE LOCALITY OF *CHTHONERPETON CORRUGATUM* TAYLOR (AMPHIBIA: GYMNOPHIONA)

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Chthonerpeton corrugatum Taylor is known only from the holotype, No. A00265 in the Zoologische Museum, Hambuig, and the paratype, a specimen without data in the Academy of Natural Sciences of Philadelphia (No. 13948). When Taylor described *C. corrugatum*, he suggested that the type locality was erroneous (Taylor 1968:289-292). Two labels are associated with the holotype, one, in the specimen jar, indicated 'Kamerun', a second, attached to the specimen indicated 'Tedda b. Mekka'.

On a map of Africa dated 1912, Taylor found a territory marked 'Teda' in what is now Chad, almost directly west of Mecca, but he considered this interpretation to be unlikely because all other species of *Chthonerpeton* are known only from South America. No genus of caecilians is known with certainty from both land masses.

Recent examination by us of another caecilian from the Hamburg Museum, No. A00252, proved illuminating. It is clearly a specimen of *Herpele squalostoma* (Stutchbury), a species known to occur widely in Equatorial West Africa, including Cameroon. The locality data accompanying this specimen is Brazil. It also seems most unlikely that *Herpele squalostoma* occurs in South America.

The records of the Zoologische Museum reveal an interesting history for the specimen of *Herpele squalostoma*. The original determination is recorded as *Chthonerpeton indistinctum* (Reinhardt and Lütken). Dunn (1942) examined the animal and erroneously identified it as *Caecilia tentaculata* Linnaeus. He also erroneously identified the holotype of *Chthonerpeton corrugatum* as a species of *Bdellophis* (= *Scolecomorphus*), an African genus, probably being mislead in both instances by the locality data. Dunn (1942) wrongly described the range of *Caecilia tentaculata* as including Brazil based on his misidentification.

One interpretation of these facts is that the locality data associated with these two specimens were switched after the original determination of the Brazilian specimen as *Chthonerpeton indistinctum* and before Dunn (1942) mistakenly determined the then erroneously labelled *Herpele squalostoma* as

Caecilia tentaculata. Sometime before Dunn's examination, the two specimens probably found their way into each others containers. The tag attached to the holotype of *Chthonerpeton corrugatum* remains anomolous, and there seems no way to be sure when it was attached or to what it refers. We have searched for a 'Tedda b. Mekka' in Brazil and other South American countries without success.

If this scenario is correct then two anomolous distribution records are explained and a type locality, Brazil, can be assigned to *Chthonerpeton corrugatum*.

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REFERENCES

Dunn, E. R. (1942). The American caecilians. *Bull. Mus. Comp. Zool. Harvard* **91(6)**, 439-540.

Taylor, E. H. (1968). *The caecilians of the world: a taxonomic review*. Univ. Kansas Press, Lawrence.

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SHORT NOTE:

ALLOMETRY IN *TESTUDO SULCATA*: A REAPPRAISAL

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INTRODUCTION

In a recent paper published in this Journal. Mahmoud, Naiem and Hamad (1986) described the relationship between selected shell dimensions and body mass in the desert tortoise, *Testudo sulcata* from Sudan. After transforming their data into logarithmic form they presented their results for the relationship between carapace length and body mass as model 1 allometric equations of the form,

$$y = ax^b$$

where carapace length y is related to body mass x by the intercept a and exponent b (b describes the slope of the log transformed data). Their analysis for two groups of captive *T. sulcata* produced exponents of 0.81 and 1.66. In addition, they quantified a set of measurements of carapace length and body mass given by Cloudsley-Thompson (1970) for *T. sulcata* and calculated an exponent of 0.91. Their equations for *T. sulcata* are thus significantly different from those previously described in the literature for this type of information (e.g. Meek, 1982; Iverson, 1984); indeed the differences are of such a magnitude that they prompted us to re-examine Cloudsley-Thompson's (1970) data.

METHOD

Model 1 allometric equations were obtained from the data by least squares regression after transformation to logarithmic form (Bailey, 1981). As in Mahmoud *et al.* (1986) carapace length has been treated as the dependent variable y and body mass the independent variable x. Model 2 regression would be a more appropriate analysis for this data since body mass may be subject to error (Sokal & Rohlf, 1981) but the correlation coefficients (r) for the data are high and thus there would be no difference in the exponents between the two methods (Alexander, Jayes, Maloiy & Wathuta, 1979). The t-distribution has been used to calculate 95 per cent confidence intervals for the exponents (Bailey, 1981).

RESULTS AND DISCUSSION

Fig. 1 shows the measurements of carapace length (mm) and body mass (g) from Table 1 of Cloudsley-Thompson's (1970) paper plotted on logarithmic coordinates, with an additional data point taken from a juvenile *T. sulcata* mentioned on page 19 of his paper. The line taken through the data is derived from the equation.

$$y = 13.5X^{0.36\pm0.01} \qquad (r = 0.99,\ n = 8) \qquad [1]$$

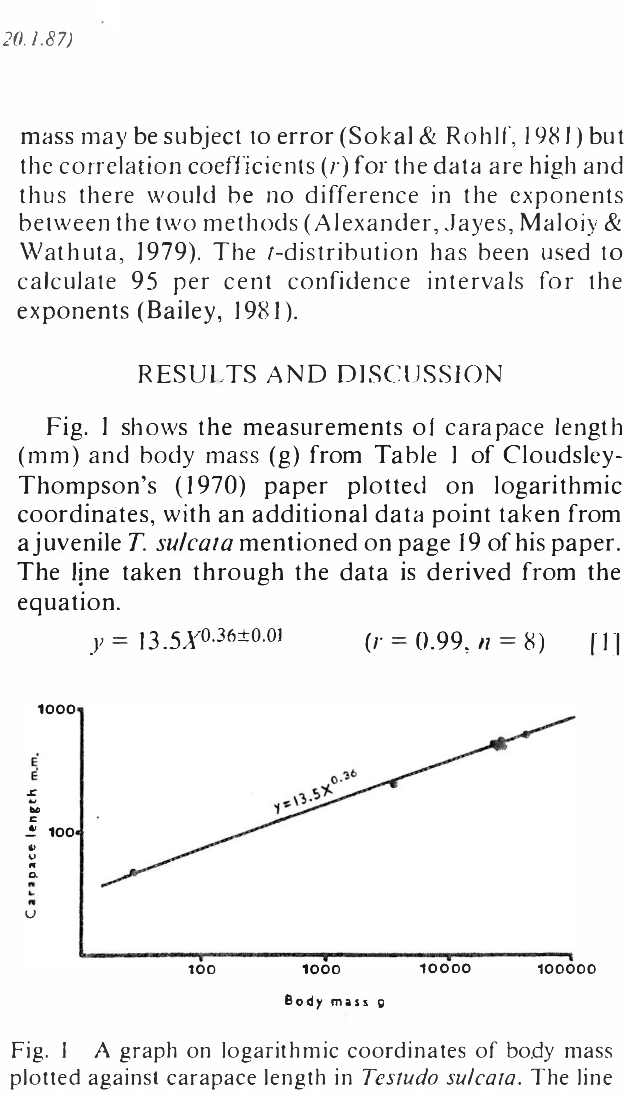

Fig. 1 A graph on logarithmic coordinates of body mass plotted against carapace length in *Testudo sulcata*. The line taken through the data was calculated using equation [1] as shown.