

## Comments on SZCZERBAK's (1975) catalogue of the African Sand Lizards (Reptilia: Sauria: Eremiinae)

Kommentare zu SZCZERBAKs (1975) Katalog der afrikanischen Wüstenrenner (Reptilia: Sauria: Eremiinae)

WERNER MAYER

**ABSTRACT:** Taxonomic changes and new findings concerning the subfamily Eremiinae in Africa are summarized to update SZCZERBAK's (1975) catalogue of the African Sand Lizards. Furthermore, a key to the species and subspecies of the genus *Pedioplanis* is provided.

**KEYWORDS:** Lacertidae: Eremiinae: *Acanthodactylus*, *Aporosaura*, *Eremias*, *Heliobolus*, *Lamproeremias*, *Meroles*, *Mesalina*, *Pedioplanis*, Africa

Since SZCZERBAK's (1975) catalogue of the African Sand Lizards was issued during the past 13 years several taxonomic changes and new findings have been published concerning this subfamily and are summarized in the following comments to update SZCZERBAK's comprehensive work. The paragraphs below (indicated by aa\*, bb\* etc.) refer to corresponding symbols fitted in the translation of SZCZERBAK's (1989) original paper.

aa\* Incomprehensibly and without giving any reasons WELCH (1982) assigned all African Sand Lizards to the genus *Mesalina* excepting those of the genus *Meroles*.

bb\* LANZA & POGGESI (1975) described a new species, *Eremias ercolinii*, from Bud Bud, central Somalia. About its taxonomic status they said: "The Bud Bud lizard shows some peculiarities that might justify creating a new genus for it " - and - " Superficially *E. ercolinii* most resembles the South African forms of the subgenus *Pedioplanis*, but this may be due to convergence". Restriction of the generic name *Eremias* to East European species would necessitate a different generic classification of this species, but apparently this has not yet been done (with the exception of WELCH 1982 aa\*).

cc\* BÖHME (1981) comments on the formal establishment of the subfamily Eremiinae: ... subfamily Eremiinae (sensu SZCZERBAK 1975) which

does not consider the doubtlessly close relationship between the palearctic genera *Eremias* and *Acanthodactylus*. Moreover, the genus *Aporosaura* being extremely closely related to *Meroles* was not included. It remains to be seen whether there will be further evidence proving the validity of a taxon comprising the palearctic and ethiopic species-groups, or whether there are independent radiations in these two regions....

dd\* BALLETO (1968) pointed out that the name *Heliobolus* FITZINGER (in BALLETO: *Heliobotus* ex errore) has priority over *Lampreremias* BOULENGER.

ee\* BALLETO (1968) proposed to assign the South African species of the genus *Mesalina* (sensu SZCZERBAK) - the group bearing a straight collar - to the subgenus *Pedioplanis* FITZINGER (ad *Eremias*) (species typica: *Pedioplanis burchelli*). On a generic level the name *Pedioplanis* is largely recognized today.

ff\* SALVADOR (1982) considers the name *Taenieremias* to be a synonym of *Acanthodactylus*.

gg\* ARNOLD (1980) described a new species from Oman, *Mesalina ayunensis*.

hh\* ARNOLD (1986 a, b) revised the genus *Mesalina* s. str. (species with curved or angular collar) by means of conclusions drawn from examinations of the hemipenal structure. He considered some subspecies of *M. olivieri* and *M. guttulata* to be individual species and proposed the following grouping of the species:

1. *M. brevisrostris*
2. *M. rubropunctata*
3. *M. adramitana*, *M. ayunensis*
4. *M. olivieri*, *M. simoni*, *M. pasteuri*, *M. martini*

*M. balfouri* - not included in this list - is also considered to be an individual species by ARNOLD, who drew the attention to the similar genital morphology of *M. balfouri* and *M. adramitana*.

ii\* MAYER & BERGER-DELL'MOUR (1987) considered *Pedioplanis undata* to be a complex of the following parapatric species and subspecies:  
*P. undata undata* (SMITH)

*P. undata inornata* (ROUX)

*P. (undata) gaerdesi* (MERTENS)

*P. (undata) rubens* (MERTENS)

*P.* "Mt. Husab" (= *P. husabensis* BERGER-DELL'MOUR & MAYER, 1989)

It appeared that in the key provided by SZCZERBAK (1975) there are two misleading points:

1. *Pedioplanis breviceps* which often shows a small tympanic shield could wrongly be determined as *P. namaquensis*, and
2. *Pedioplanis (undata) gaerdesi* would be determined as *P. benguelensis*.

Therefore, and because of the discovery of the new species *P. husabensis*, it seems to be necessary to provide an altered key to the genus *Pedioplanis* replacing the paragraphs 13-24 of SZCZERBAK's key to the species of the genus *Mesalina*.

Key to the species and subspecies of the genus *Pedioplanis*

1. Ventral plates in 10 - 14 longitudinal series ..... 2
- 1a. Ventral plates in 16 - 20 longitudinal series ..... 11
2. Lower eyelid with 1 or 2 greatly enlarged, black edged transparent scales, forming a disk ("brille") ..... 3
- 2a. Lower eyelid opaque to semitransparent with 7 - 12 slightly enlarged scales across the middle ..... 9
3. Tympanic shield present, ventral plates in 10 - 12 longitudinal series ..... 4
- 3a. Tympanic shield absent, ventral plates in 12 -14 longitudinal series ..... 7
4. 4 or 5 longitudinal stripes on back and flanks..... 5
- 4a. No longitudinal stripes but scattered black speckles.....6
- 4b. Uniform brick-red with a weak greyish band on the flanks .....  
..... *P. (undata) rubens*
5. Lower eyelid with 1 transparent scale only; usually 4 supralabials in front of subocular shield ..... *P. benguelensis*
- 5a. Lower eyelid with 2 transparent scales; usually 5 - 6 supralabials in front of subocular shield ..... *P. undata undata*
6. Lower eyelid with 1 transparent scale only ..... *P. (undata) gaerdesi*
- 6a. Lower eyelid with 2 transparent scales..... *P. undata inornata*
7. A series of colourful lateral spots present ..... 8

- 7a. No series of colourful lateral spots present .....  
..... *P. lineocellata inocellata*
8. Dorsal scales on posterior part of back rhombic, subimbricate and distinctly keeled, subequal in size to scales on tibia .....  
..... *P. lineocellata lineocellata*
- 8a. Dorsal scales on posterior part of back granular, juxtaposed, not or feebly keeled and much smaller than scales on tibia .....  
..... *P. lineocellata pulchella*
9. Usually 4 upper labials anterior to subocular shield; 5 more or less distinct longitudinal stripes on back and flanks; if uniform then no reddish coloration discernable..... 10
- 9a. Usually 5 or 6 upper labials anterior to subocular shield; head dorsally and anterior part of back greyish, posterior part and tail russet to brick-red; no longitudinal stripes but scattered black speckles ....  
..... *P. husabensis*
10. 5 more or less distinct longitudinal stripes in both sexes, the dorso-lateral stripe being broadest; size of tympanic shield moderate to large; scales on tibia large and distinctly keeled..... *P. namaquensis*
- 10a. 5 more or less distinct longitudinal stripes in juveniles and females only, the lateral stripe being broadest; males lightbrown to bluish-grey dorsally, with irregular white mottles; tympanic shield small or absent; scales on tibia small, smooth or feebly keeled *P. breviceps*
11. 48 - 62 scales across middle of dorsum; nasals usually not in contact behind rostral ..... *P. laticeps*
- 11a. 62 - 75 scales across middle of dorsum; nasals usually in contact behind rostral ..... *P. burchelli*

jj\* MERTENS (1971, p. 61) refers to HAACKE (without reference), to whose opinion the name *Meroles knoxii pequensis* is no longer valid according to present knowledge.

#### REFERENCES

- ARNOLD, E. N. (1980): The reptiles and amphibians of Dhofar, Southern Arabia.- J. Oman Studies, Sult. of Oman; 2: 273-332.
- ARNOLD, E. N. (1986 a): The hemipenis of lacertid lizards (Reptilia: Lacertidae): structure, variation and systematic implications.- J. Nat. Hist., London; 20: 1221-1257.
- ARNOLD, E. N. (1986 b): Why copulatory organs provide so many useful taxonomic characters: the origin and maintenance of hemipenal differences in lacertid lizards (Reptilia: Lacertidae).-

## Comments on SZCZERBAK's catalogue

Biol. J. Linn. Soc., London; 29: 263-281.

BALLETTO, E. (1968): Contributo alla Biogeografia della Somalia.- Boll. Mus. Ist. Biol., Genova; 26: 191-280.

BERGER-DELL'MOUR, H. A. E. & MAYER, W. (1989): On parapatric existence of two species of the *Pedioplanis undata* group (Reptilia: Sauria: Lacertidae) in the central Namib desert (Namibia, Southwest Africa) with description of the new species *Pedioplanis husabensis*. - Herpetozoa, Wien; 1(3/4): 83-95.

BÖHME, W. (1981): *Eremias* - Wüstenrenner; In: BÖHME (Ed.): Handbuch der Reptilien und Amphibien Europas. Band 1, Echsen (Sauria) I; Wiesbaden (Akad. Verlagsges.)

LANZA, B. & POGGESI, M. (1975): On a new *Eremias* from Central Somalia.- Monitore Zoologico Italiano, Firenze; 16: 305-312.

MAYER, W. & BERGER-DELL'MOUR, H. (1987): The *Pedioplanis undata* complex (Sauria, Lacertidae) in Namibia. A system of parapatric species and subspecies.- Proc. 4. Ordinary Meeting S. E. H., Nijmegen; p. 275-278.

MERTENS, R. (1971): Die Herpetofauna Südwest-Afrikas.- Abh. Senckenberg. Naturforsch. Ges., Frankfurt a. M.; 529: 1-110.

SALVADOR, A. (1982): A revision of the lizards of the genus *Acanthodactylus* (Sauria: Lacertidae).- Bonner Zoologische Monographien; Vol. 16; Bonn.

SZCZERBAK, N. N. (1975): Katalog afrikanskikh Jascurok; Kiev (Akad. Nauk.); pp. 83.

SZCZERBAK, N. N. (1989): Catalogue of the African Sand Lizards (Reptilia: Sauria: Eremiinae: *Lampremerias Pseuderemias*, *Taenieremias*, *Mesalina*, *Meroles*).- Herpetozoa, Wien; 1(3/4): 119-132.

WELCH, K. (1982): Herpetology of Africa.- Malabar, Florida (Krieger); 293 pp.

DATE OF SUBMISSION: October 1, 1988

AUTHOR: Dr. Werner MAYER, Naturhistorisches Museum Wien, Burgring 7, A-1014 Vienna, Austria.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Herpetozoa](#)

Jahr/Year: 1989

Band/Volume: [1](#) [3](#) [4](#)

Autor(en)/Author(s): Mayer Werner

Artikel/Article: [Comments on Szczerbak's \(1975\) catalogue of the African Sand Lizards \(Reptilia: Sauria: Eremiainae\) 133-137](#)