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UBERSETZUNG/TRANSLATION

Catalogue of the African Sand Lizards (Reptilia: Sauria: Eremiainae: Lampreremias, Pseuderemias, Taenieremias, Mesalina, Meroles) *

Katalog der afrikanischen Wüstenrenner (Reptilia: Sauria: Eremiainae: Lampreremias, Pseuderemias, Taenieremias, Mesalina, Meroles) **

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KEYWORDS: Lacertidae, Eremiainae, Lampreremias, Pseuderemias, Taenieremias, Mesalina, Meroles, Africa

INTRODUCTION

A systematic revision of the genus *Eremias* published in a preceding paper (SZCZERBAK 1971) showed that this arbitrarily formed cluster of preliminary nature is doubtlessly of polyphyletic origin. The author considered the African centre of speciation to be autonomous. Thus, only the representatives of the Asiatic species were ranked with the genus *Eremias*

^{*} The present paper of N. N. SZCZERBAK was originally published in Russian as "Katalog afrikanskih Jascurok" by the Academy of Sciences, Institute of Zoology, Museum of Zoology, USSR, Kiev (83 pp., 30 maps) in 1975. Lists of synonyms, bibliography, maps and table of contents - all being parts of the original paper - have not been included in this translation which was carried out with the consent of the author by R. GÜNTHER (Berlin) and H. GRIL-LITSCH (Vienna). The English summary was taken over as provided in the original version. As a SHORT NOTE in this issue of HERPETOZOA subsequent to the translation comments and updated addenda by W. MAYER are provided indicated by [aa* bb* etc.] in the text.

^{**} Das Original der vorliegenden Arbeit von N. N. SZCZERBAK ist bereits 1975 als "Katalog afrikanskih Jascurok" von der Akademie der Wissenschaften, Institut für Zoologie, Museum für Zoologie, USSR, Kiev (83 pp., 30 Karten) in russischer Sprache veröffentlicht worden. Synonymielisten, Literaturverzeichnis, Karten und Inhaltsverzeichnis der Originalpublikation wurden in die hier wiedergegebene Fassung nicht aufgenommen. Die Übersetzung erfolgte mit Zustimmung des Autors durch R. GÜNTHER (Berlin) und H. GRILLITSCH (Wien). Die englische Zusammenfassung wurde im Original übernommen. Im Anschluß an die Übersetzung folgen als KURZE MITTEILUNG in dieser Ausgabe der HERPETOZOA Anmerkungen bzw. aktualisierende Zusätze von W. MAYER, auf die im Text durch [aa* bb* etc.] verwiesen wird.

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and treated in a separate monography (SZCZERBAK 1974). In the present paper the species of African origin are arranged in five genera: Lampreremias, Pseuderemias, Taenieremias, Mesalina and Meroles [aa*, bb*].

Similar attempts were already made in former times: BOULENGER (1887, 1921) for instance suggested subdividing the Sand Lizards into "sections". But, despite insufficient arguments, this classification was not accepted by the specialists (TERENT'EV 1961). However, such kind of grouping is absolutely justified both from morphological and geographic points of view, as will be shown later by means of tables for identification and distribution maps. The deserts of Northeast and Southwest Africa are separated from each other by vast belts of tropical rain forests which do not provide suitable habitats for Sand Lizards but harbour peculiar groups of related species.

MERTENS (1955) pointed out the formal nature of the generic names in their old meaning and separated the West African Sand Lizards by creating an individual genus named *Meroles*. Nevertheless the Sand Lizards of the Asiatic and African continent also have a lot of characters in common. As is typical of the whole species-complex the nares are bordered by 3 to 4 nasals and are not in contact with the supralabials. It is just possible that many of the characters are adaptive, since the majority of the Sand Lizards inhabits arid areas, mainly steppes and deserts. As it is generally known, characters of the pholidosis, which are important criteria in reptile systematics, are taken into consideration. This method turned out to be correct. For that reason it is possible to unite the closely related genera into the individual subfamily Eremiainae [cc*].

A catalogue - this is laconic and operative information concerning systematics, a comfortable guide for the expert and a reference book to specialists in other groups of animals. The preparation of a catalogue requires fair knowledge and is usually the result of the accumulation of information about these or those taxa. For our country a catalogue of the recent vertebrates is not yet available. The ornithologists and mammalogists of the Institute of Zoology of the Academy of Sciences of the USSR are just about to compile catalogues of the animals they are working on concerning the USSR. In this respect the present catalogue is the first one in this manner in our country.

In the last 50 years after the publication of BOULENGER's (1921) well known catalogue, new species and forms of Sand Lizards were described by the explorers of the African fauna and new data on systematics and range were obtained. In the present paper the current opinions concerning taxonomy and distributive patterns of the African Sand Lizards (situation Jan. 1, 1974) are reviewed; furthermore the synonyma of their names are listed and bibliography, tables for identification and short diagnoses of the particular taxa are published for the first time in the Soviet literature.

The present work was prepared between 1971 and 1974 in the laboratories of the Zoological Museum of the Institute of Zoology of the Academy of Sciences in USSR. Apart from evaluation of hardly accessible literature there was the opportunity to become acquainted with specimens from many foreign and Soviet Union museums, first of all the rich collections of the Institute of Zoology of the Academy of Sciences in the USSR. The author is obliged to the director of the Department of Herpetology of the Institute of Zoology of the Academy of Sciences of the USSR, Dr. I. S. DAREVSKI and his colleagues for their help in preparing the present paper.

Class - Reptilia Subclass - Squamata Order - Sauria Family - Lacertidae Subfamily - Eremiainae

Key to the genera of the African Sand Lizards (Lacertidae: Eremiainae) [cc*]

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Genus Mesalina GRAY [ee*]

1838, Mesalina, GRAY, Ann. N. H. p. 280; 1845, Cat. Liz. p. 42.

Species typica: Mesalina rubropunctata

3 nasals. The lower in contact with the rostral and the first (very rarely first and second) upper labial. Ventral plates in 10 - 18 (exceptionally 8) straight longitudinal series, rarely irregular or tessellated. Occipital usually distinct. Toes feebly depressed, with bi- or tricarinate lamellae inferiorly. This genus seems to be composed of several groups and includes 6 species from northern Africa, some of which are found also in southwestern Asia, and 7 species from southern Africa.

Key to the species of the genus Mesalina GRAY

- 16. Lower eyelid with large transparent disk, formed of 1-6 black-edged

scales. The area in front of the first supraocular is covered by 5 - 1 small scales or granules
17. Lower eyelid with a transparent disk formed of a single scale
18. Lower eyelid with large transparent disk, formed of 2-6 black-edge
scales and 2-6 smaller scales below
19. Lower eyelid with 10 - 20 semitransparent scales 2
20. Lower eyelid with large transparent disk, formed of 2 black-edge
scales
21. Ventral plates in 12 longitudinal series
22. Ventral plates in 16 - 18 longitudinal series
23. 48 - 62 scales across middle of dorsum. Nasals usually not in contact
behind rostral
24. 62 - 75 scales across middle of dorsum. Nasals usually in contact
hehind rostral M. hurchel

Mesalina guttulata (LICHTENSTEIN), 1823 [hh*]

Terra typica: Egypt

Range: North Africa, Near East (from Algeria to Pakistan, in the north to Tshardshou in the Turkmenian SSR, in the south to the Peninsula of Somalia and Baluchistan)

Mesalina guttulata guttulata (LICHTENSTEIN), 1823 [hh*]

Terra typica: Egypt

Range: North Africa, Saudi Arabia, Senegal, Libya, Syria, Niger, Aden

Mesalina guttulata watsonana (STOLICZKA), 1872 [hh*]

Terra typica: Sind, between Karachi and Sukkur Range: Pakistan, Afghanistan, Iran and Turkmenia

Mesalina guttulata susana (BOULENGER), 1918

Terra typica: Susa, Tunisia

(no data concerning range are provided by SZCZERBAK)

Mesalina olivieri (AUDOIN), 1829 [hh*]

Terra typica: Egypt

Range: Morocco, Algeria, Tunisia, West Sahara, Mauritania, Senegal, Saudi Arabia, Aden, Somalia, Ethiopia, Sudan, Peninsula of Sinai and Socotra Island

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Mesalina olivieri olivieri (AUDOIN), 1829 [hh*]

Terra typica: Egypt

Range: Saudi Arabia, Algeria, Tunisia and Peninsula of Sinai

Mesalina olivieri simoni (BOETTGER), 1881 [hh*]

Terra typica: Casablanca, western Atlas

Range: Morocco

Mesalina olivieri martini (BOULENGER), 1897 [hh*]

Terra typica: Obok, coast of the Red Sea

Range: Sinai Peninsula, Aden, Somalia, western coast of the Red Sea from

Sudan to French Territory of Afar and Issa

Mesalina olivieri schmidtii (HAAS), 1951

Terra typica: Israel, Wadi Nefk

Range: Israel

Mesalina olivieri balfouri (BLANFORD), 1881 [hh*]

Terra typica: Socotra Island

Range: known only from Socotra Island (Gulf of Aden)

Mesalina olivieri latasti (BOULENGER), 1918

Terra typica: near Aumale

Range: Algeria

Mesalina adramitana (BOULENGER), 1917 Terra typica: southern Arabia, Hadramaut

Range: southern and eastern Arabia

Mesalina brevirostris BLANFORD, 1874

Terra typica: Punjab, Kalabag

Range: northern Arabia from the West coast of the Gulf of Persia, Sinai

Peninsula and Syria eastwards to Baluchistan and Punjab

Mesalina brevirostris brevirostris BLANFORD, 1874

Terra typica: Punjab, Kalabag

Range: Pakistan, Iran, Syria, Iraq, Saudi Arabia and Sinai Peninsula

Mesalina brevirostris microlepis (ANGEL), 1936 Terra typica: Haouarino, 55 km SE of Homs, Syria

Range: Syria

Mesalina pasteuri (BONS), 1960 Terra typica: Amguit (Ahaggar)

Range: north-western, central and southern Sahara

Mesalina rubropunctata (LICHTENSTEIN), 1823

Terra typica: Egypt and Nubia

Range: Morocco, Algeria, Niger, northern parts of Libya, Sudan, Mali and

Saudi Arabia

Mesalina namaquensis (DUMERIL & BIBRON), 1839

Terra typica: Namaqualand

Range: from South Angola, South West Africa, Namaqualand and Cape

Province, eastwards to Botswana

Mesalina breviceps (STERNFELD), 1911

Terra typica: Walvis Bay, Namibia

Range: Namibia

Mesalina undata (A. SMITH), 1838 [ee*, ii*]

Terra typica: northern and western parts of Cape Colony

Range: Namibia and western parts of Republic of South Africa

Mesalina undata undata (A. SMITH), 1838 [ee*, ii*]

Terra typica: northern and western parts of Cape Colony

Range: Namibia and northwestern parts of Republic of South Africa

Mesalina undata gaerdesi (MERTENS), 1954 [ee*, ii*]

Terra typica: Tsisab Canyon, Brandberg, Damaraland, Southwest Africa

Range: Namibia

Mesalina undata rubens (MERTENS), 1954 [ee*, ii*]

Terra typica: Okatjikona Farm, Waterberges, Southwest Africa

Range: Namibia

Mesalina benguelensis (BOCAGE), 1867 [ee*, ii*]

Terra typica: Benguela, Angola Range: western districts of Angola

Mesalina laticeps (A. SMITH), 1838 [ee*] Terra typica: arid areas of Cape Colony

Range: Republic of South Africa and southern parts of Namibia

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MERTENS (1955) drew the attention to the fact that the name *Lacenta capensis* A. SMITH, 1938, was preoccupied by *Lacenta capensis* SPARR-MANN, 1783 (= *Varanus n. niloticus*). Thus, the species must be named "*laticeps*" in accordance to a later synonym by the same author.

Mesalina lineo-ocellata (DUMERIL & BIBRON), 1839 [ee*]

Terra typica: South Africa

Range: Republic of South Africa, Namibia and Botswana

Mesalina lineo-ocellata lineo-ocellata (DUMERIL & BIBRON), 1839 [ee*]

Terra typica: South Africa

Range: Republic of South Africa, Namibia and Botswana

Mesalina lineo-ocellata inocellata (MERTENS), 1955 [ee*]

Terra typica: between Bay of Lüderitz and Aus, Great Namaqualand

Range: Namibia

Mesalina lineo-ocellata pulchella (GRAY), 1845 [ee*]

Terra typica: South Africa

Range: Namibia, Republic of South Africa, Botswana

Mesalina burchelli (DUMERIL & BIBRON), 1839 [ee*]

Terra typica: South Africa

Range: Republic of South Africa

Genus Lampreremias BOULENGER [dd*]

1918, Lampreremias, BOULENGER, Journ. Zool. Res. III, p. 2

Species typica: Lampreremias nitida (GÜNTHER), 1872

3 (rarely 4) nasals, the lower in contact with the 1. upper labial (rarely first and second) and with the rostral. Ventral plates 6 (exceptionally 8) longitudinal series. Toes not or but feebly depressed, with bi-or tricarinate lamellae inferiorly. Dorsal scales keeled. No occipital shield present. There are 3 species known to be distributed all over tropical Africa.

Key to the species of the genus Lampreremias

- 4. 65-68 scales across middle of dorsum. 26 lamellae under the 4. toe

 L. nitida quadrinasalis CHABANAUD

Lampreremias nitida (GÜNTHER), 1872

Terra typica: western Africa

Range: Togo, northern Nigeria, Republic of Chad, Dahomey, Central African Republic and northern districts of Republic of Zaire

Lampreremias nitida nitida (GÜNTHER), 1872

Terra typica: western Africa

Range: northern Nigeria, Togo and Dahomey

Lampreremias nitida garambensis (SCHMIDT), 1919

Terra typica: Garamba, Zaire

Range: Zaire and Central African Republic

Lampreremias nitida quadrinasalis (CHABANAUD), 1918

Terra typica: Fort Arschambo, Chad

Range: Republic of Chad

Lampreremias spekii (GÜNTHER), 1872

Terra typica: eastern Africa (5° 7' southern latitude, between the coast and Unjamwesi)

Range: northern Somalia, southern Ethiopia, southern Sudan, Uganda, Kenya and Tanzania

Lampreremias spekii spekii (GÜNTHER), 1872

Terra typica: East Africa (5° 7' southern latitude, between the coast and Uniamwesi)

(No data concerning range are provided in the original paper.)

Lampreremias spekii sextaeniata (STEINEGER), 1894

Terra typica: Tana River, Kenya Range: Sudan, Kenya and Somalia

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Lampreremias spekii scortecchii (ARILLO, BALLETTO & SPANO), 1965

Terra typica: Migiurtinia, Somalia

Range: Somalia

Lampreremias lugubris (SMITH), 1838

Terra typica: "District immediately beyond the northern frontier of the Colony"

Range: Namibia, Botswana, Republic South Africa, southern Rhodesia, southern Angola and Mozambique

Genus Pseuderemias BOETTGER

1883, *Pseuderemias*, BOETTGER, Abh. Senck. Ges. XIII, p. 118 Species typica: *Pseuderemias mucronata* (BLANFORD, 1870)

4 nasals. Two lower nasals are in contact with the 2 or 3 first upper labials. The anterior nasal is in contact with the rostral. Ventral plates in 5-10 longitudinal series. The toes are strongly depressed with unicarinate lamellae inferiorly. Frontal separated from the supraoculars by a row of small granular scales. Dorsal scales keeled or smooth. Occipital shield present. 7 species are known to be distributed over northeastern Africa and the Sinai Peninsula.

Key to the species of the genus Pseuderemias

Pseuderemias mucronata (BLANFORD), 1870

Terra typica: Anseba Valley, Ethiopia

Range: Northwest Somalia, Eritrea, eastern Sudan, coasts of the Red Sea in

Egypt and Sinai Peninsula

Pseuderemias smithii (BOULENGER), 1895

Terra typica: Milmil, western Somalia

Range: northern parts of Somalia and also known from Kenya

Pseuderemias septemstriata (PARKER & HAMPTON), 1942

Terra typica: Somalia, Migiurtinia

Range: Somalia

Pseuderemias savagei (R. F. LAURENT & C. GANS), 1965

Terra typica: Somalia, Kandala

Range: Somalia

Pseuderemias erythrosticta (BOULENGER), 1891

Terra typica: Somalia

Range: Somalia

Pseuderemias brenneri (PETERS), 1869

Terra typica: Somalia, Brava

Range: northeastern Sudan, Ethiopia, Somalia and Kenya

Pseuderemias striata (PETERS), 1874

Terra typica: Somalia, Brava

Range: Kenya and southern Somalia

Pseuderemias striata striata (PETERS), 1874

Terra typica: Somalia, Brava

Range: southern parts of Somalia and Kenya

Pseuderemias striata gardoensis (ARILLO, BALLETTO & SPANO), 1965

Terra typica: Migiurtinia Range: southeastern Somalia

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Genus Taenieremias BOULENGER [ff*]

1918, Taenieremias, BOULENGER, Journ. Zool. Res. III, p. 2

Species typica: Taenieremias guineensis

3 nasals; the lower and the posterior resting on the 1. upper labiai. Ventral plates in 10 longitudinal series. Occipital shield absent. Toes feebly depressed, with tricarinate lamellae inferiorly. Dorsal scales smooth. One species is known. It is found in central equatorial Africa.

Taenieremias guineensis (BOULENGER), 1887

Terra typica: mouth of the river Niger

Range: southwestern Niger, Nigeria and Cameroun

Genus Meroles GRAY

1838, Meroles, GRAY, Ann. N. H., p. 282

Species typica: Meroles knoxii

3 nasals present, which are not in contact with the upper labials. The lower nasal may reach the rostral. Ventral plates in 10-18 longitudinal series, but may also be arranged in an oblique or irregular fashion. If so, the upper labials form an edge. The toes are depressed and fringed laterally in a different degree. The occipital plate is not always present. Accumulations of keeled scales may be found placed in longitudinal order along the dorsum. This genus apparently represents an arbitrary cluster. MERTENS (1955), who revised this genus, placed three closely related species (knoxii, suborbitalis and reticulata) into the subgenus Meroles GRAY and three other species (ctenodactylus, cuneirostris and micropholidotus) into the subgenus Saurites PETERS. BOULENGER (1921) delimited them all from the others by putting them into their own "sectio" Scapieira (Scaptira).

Key to the species of the genus Meroles

- 3. Toes strongly serrated laterally. Scales in the anterior part of abdomen in 16 18 longitudinal series. Lower nasal not in contact with rostral

4. Toes feebly serrated laterally. Ventral plates in 10 - 16 longitudinal	4.
rows. Lower nasal in contact with rostral5	
5. Upper nasals not in contact. Occipital plate missing or minute	5.
Meroles suborbitalis	
6. Upper nasals in contact. Occipital plate distinct, in contact with inter-	6.
parietal Meroles knoxii	
7. Posterior part of dorsum without enlarged keeled scales9	
8. Posterior part of dorsum and flanks with a band of small groups of	8.
enlarged keeled scales	
9. 3 supraoculars present. Rostral in contact with frontonasal. 90 - 110	9.
scales across middle of dorsum	
0. 2 supraoculars present. Rostral not in contact with frontonasal. 126 -	10.
138 scales across middle of dorsum Meroles micropholidotus	

Meroles ctenodactylus (SMITH), 1938

Terra typica: sandy regions of Little Namaqualand

Range: Republic of South Africa, western parts of Namibia

Meroles knoxii (MILNE-EDWARDS), 1829 [jj*]

Terra typica: Cape of Good Hope

Range: Republic of South Africa, Namibia

Meroles knoxii knoxii (MILNE-EDWARDS), 1829 [jj*]

Terra typica: Cape of Good Hope Range: Republic of South Africa

Meroles knoxii pequensis (HEWITT), 1935 [jj*] Terra typica: Bay of Lüderitz, Southwest Africa

Range: Namibia

Meroles micropholidotus (MERTENS), 1938

Terra typica: Bay of Lüderitz

Range: Namibia

Meroles reticulatus (BOCAGE), 1867 Terra typica: Angola, Mocámedes Range: coasts of Namibia and Angola

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Meroles suborbitalis (PETERS), 1869

Terra typica: Damaraland

Range: Namibia and western parts of Republic of South Africa

SUMMARY

For the last 50 years since the time of the wellknown work by BOULEN-GER (1921) explorers of African fauna described new species and forms of sand lizards and new information about their systematics and distribution was obtained.

The author of this work tries to summarize the contemporary ideas on taxonomy and areals of these species according to the data known by 1st of January 1974. In this work a list of their synonyms, bibliography, diagnoses of genera and determinative tables of species are given.

According to the opinion of the author (SZCZERBAK, 1971) about independence of African centre of formation of species of these lizards, only representatives of Asiatic species belong to the genus Eremias. Species of African origin are classed into five independent genera: *Lampreremias, Pseuderemias, Taenieremias, Mesalina, Meroles* (32 species). All species of these lizards are united into the subfamily Eremiainae. This work was carried out during 1971-75 at the laboratories of the Zoological Museum of the Ukrainian Academy of Sciences.

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