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Lizards of Ethiopia (Reptilia Sauria): an annotated checklist, bibliography, gazetteer and identification key

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This review lists *Agama smithii* Boulenger 1896 as a synonym of *Agama agama* (Linnaeus 1758), *Agama trachypleura* Peters 1982 as a synonym of *Acanthocercus phillipsii* (Boulenger 1895) and describes for the first time *Acanthocercus guentherpetersi* n. sp. Without more convincing evidence, *Chamaeleon ruspolii* Boettger 1893 cannot be accepted as specifically distinct from *Chamaeleo dilepis* Leach 1819, nor *Chamaeleo calcaricarens* Böhme 1985 from *C. africanus* Laurenti 1768.

Consequently, 101 species of lizard are currently recognised in Ethiopia, of which some 40% appear to be denizens of the Somali-arid zone. This significant proportion is attributable in part to the importance of the Horn of Africa as a centre for reptilian diversification and endemicity, in part to the fact that this lowland fauna was rather extensively sampled during the 1930s, but also to the conspicuous neglect of lizards in other regions of the country. Mountain and forested habitats are widespread in Ethiopia, so it seems extraordinary to record only five saurian species which are believed to be endemic in such environments. The inference that there are many more still to be discovered has important implications for conservation, because montane forest is known to be among the most threatened of Ethiopian biomes and there is clearly an urgent need for its herpetofauna to be more thoroughly researched and documented.

KEY WORDS: Reptilia, Sauria, lizards, Ethiopia, taxonomy, new species, identification, distribution.

INTRODUCTION

Credit for initiating the present work must go to Ronald Gutberlet (University of Texas at Tyler), who first proposed a comprehensive review of Ethiopian lizards, comparable with previously published catalogues of snakes (Largen & Rasmussen 1993) and amphibians (Largen 2001). Regrettably, other commitments later obliged Gutberlet to withdraw from this project, before being able to implement his plan to study relevant museum collections in the United States and mainland Europe. The resulting checklist is clearly a less substantial product than was originally conceived, but we hope it may still be a useful contribution to a seriously neglected subject.

Fortunately, the Natural History Museum in London has good series of Ethiopian specimens, representing almost every saurian species ever recorded from this country. The present checklist is based upon these collections, which have also been used to authenticate and in part compile an identification key that was originally drafted mostly from literature sources. Though the bibliography of previous publications on Ethiopian lizards is believed to be comprehensive, most early authors were remarkably negligent about recording such details as accession numbers, or even in some cases the institutions in which their material was housed. Thanks to generous assistance from numerous colleagues we have been able to remedy this deficiency to a considerable extent, precisely locating many specimens of taxonomic or historic interest, as well as documenting those that appear to have perished. Such data will eventually facilitate a much-needed reassessment of material which, for the moment, we have generally been able to list only under the names assigned by former workers. Many of these determinations are expected to be accurate, but some are undoubtedly wrong and until past errors have been corrected no reliable picture of geographical distributions can be developed and any attempt to construct range maps would be premature.

Largen (2001) provided a brief outline of the topography and ecology of Ethiopia, together with a summary of the most significant events in the herpetological exploration of this country. To his account it is necessary to add only an acknowledgement of the magnificent collection of lizards and snakes obtained by R.H.R. Taylor, during 1929-1930 and 1932-1934, while serving on two Anglo-Italian Bound-

ary Commissions. Though reported by PARKER (1930, 1932, 1935, 1942, 1949) as specimens from "Somaliland", the exact nature of Taylor's work meant that most of his material was collected from localities situated very precisely along the border between Ethiopia and Somalia (and a small proportion of it from well within Ethiopian territory). Indisputably the finest single collection of reptiles ever made in NE Africa, a dozen species of lizard are still known from Ethiopia only on the evidence of examples donated by Taylor to the Natural History Museum in London.

The following abbreviations are used for museum collections: ANSP = Academy of Natural Sciences, Philadelphia; BM = Natural History Museum, London; CAS = California Academy of Sciences, San Francisco; FMNH = Field Museum of Natural History, Chicago; LIVM = Liverpool Museum; MCZ = Museum of Comparative Zoology, Harvard University, Cambridge; MNHN = Muséum National d'Histoire Naturelle, Paris; MSNG = Museo Civico di Storia Naturale, Genoa; MSNM = Museo Civico di Storia Naturale, Milan; MZUF = Museo Zoologico dell'Università, Florence; MZUT = Museo Zoologico dell'Università (now incorporated into the Museo Regionale di Scienze Naturali = MRSN), Turin; NHMAA = Natural History Museum, Addis Ababa; NMB = Naturhistorisches Museum, Basel; NMW = Naturhistorisches Museum, Vienna; NMZB = Natural History Museum of Zimbabwe, Bulawayo; NSMW = Naturwissenschaftliche Sammlung, Museum Wiesbaden; PEM = Port Elizabeth Museum; SMF = Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main; USNM = United States National Museum of Natural History, Washington, DC; ZFMK = Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn; ZMB = Museum für Naturkunde, Berlin; ZMH = Zoologisches Museum, Hamburg; ZSM = Zoologisches Sammlung des Bayerischen Staates, Munich.

SYSTEMATICS

Family Agamidae

Genus ***Acanthocercus*** Fitzinger 1843

Acanthocercus annectans (Blanford 1870)

Agama annectans BLANFORD 1870: 446, "near base of [Suru] Pass leading from Komayli to the highlands", Eritrea. PARKER 1942: 51.
Agama annectens; BOULENGER 1895a: 533 [part: BM 95.12.31.6], 1896b: 215; BATTERSBY 1954: 244.
Acanthocerus annectans; SPAWLS et al. 2002: 196 [Axum].

Material examined. 10°20'N 42°25'E [BM 1937.12.5.89]. Bisidima River, E of Harar [BM 1969.1255-1256, 1260]. 20 km E of Harar [BM 1969.1257]. Webi Shebeli (Donaldson Smith, 25.XII.1894) [BM 95.12.31.7]. Beearso [BM 95.12.31.6]. Sidam-Bale bridge [BM 1975.2108-2110]. Malka Murri [BM 1952.1.8.33, 35-40, 42-44]. Murri [BM 1952.1.8.81-83].

Additional material. Fulla Valley [TORNIER 1905: 371, KLAUSEWITZ 1954: 144; ZMB 19741]. Harar [NEUMANN 1905: 392, TORNIER 1905: 371, KLAUSEWITZ 1954: 144; ZMB 27399]. "Modjo" (= Moggio River, Ennia Galla region) [TORNIER 1905: 371, KLAUSEWITZ 1954: 144; ZMB 27400]. Sunerdarler [BOULENGER 1895a: 533; ANSP 4646]. Malka Murri [BATTERSBY 1954: 244; CAS 190888-190889, formerly BM 1952.1.8.34, 41]. Moyale [CAS 129939-129940].

Distribution. Eritrea, Djibouti, eastern Ethiopia, Somalia and northeastern Kenya.

Acanthocercus atricollis (A. Smith 1849)

Agama atricollis A. Smith 1849: 14, Natal, South Africa.
Agama cyanogaster (not Rüppell 1835); Boulenger 1896a: 550 [part], 1896b: 215 [part: BM 95.12.31.8-9]; Parker 1942: 50.
Agama atricollis minuta Klausewitz 1957: 170, "Dscheffedenza" (= Ciaffedenza, 08°58'N 39°08'E), Ethiopia [holotype: ZMB 29089].

Taxonomic notes. The question of whether or not this species is different from *Stellio cyanogaster* Rüppell 1835 is one that has perplexed herpetologists for many years. Boulenger (1896a) thought they were perhaps inseparable, Parker (1942) formally synonymised the two taxa and Loveridge (1957) concurred. Most recently, Spawls et al. (2002) have expressed the view that they are "doubtfully distinct". Nevertheless, the characters that Klausewitz (1954) used to discriminate between *A. cyanogaster* and *A. atricollis* certainly cluster around two recognisable phenotypes, the geographical distribution of which does not seem to allow consideration of a subspecific relationship. Admittedly, there is sufficient variation in these diagnostic features to introduce a degree of subjectivity into the identification of some preserved specimens, but the evidence still appears adequate to justify recognition of these taxa as separate (if somewhat poorly differentiated) species.

Surprisingly, Klausewitz (1954, 1957) failed to record the fact that there is also variation in the expression of carinate gular scales. Peters (1982) did incorporate this feature into his diagnostic key but seems, perhaps inadvertently, to have associated the possession of sharply keeled gulars with the wrong taxon. At least in Ethiopia, we believe it to be *A. cyanogaster*, not *A. atricollis*, in which carinate scales are found on the throat of adult animals. It should also be noted that, although we recognise the validity of *A. zonurus*, males of this species often exhibit more rows of preanal pores (range: 2-4) than Peters realised and the diagnostic usefulness of this character is correspondingly diminished.

Despite the best efforts of Klausewitz (1954, 1957), the taxonomy of *Acanthocercus* in NE Africa is still much in need of comprehensive review and it seems likely that molecular data will prove to be particularly valuable. Meanwhile, it is perhaps relevant to observe that *A. cyanogaster* is currently known with certainty only from Eritrea and Ethiopia. This may help to explain the confusion experienced by researchers working further south, who have possibly sought but failed to distinguish *cyanogaster* and *atricollis* in population samples from a geographical area in which only the latter species is actually present.

Material examined. Batie [BM 1974.3937]. 10°10'N 43°00'E [BM 1937.12.5.30]. Let Marefia [BM 85.5.27.6]. Adda [BM 1927.7.5.92-93]. Debre Zeit [BM 1973.3232]. Hora Bishoftu [BM 1927.7.5.91]. Zaguala [BM 1927.7.5.100]. Harra, Lake Zuai (E. Degen col.) [BM 1902.12.13.35]. 5 km E of Welenchiti [BM 1975.2112]. Maki River [BM 1970.1443-1447]. Sheikh Husein [BM 95.12.31.8-9]. 07°20'N 38°10'E [BM 1970.1448]. E shore of Lake Awasa [NHMAA/H.97, H.697-698]. S slope of Mt Gaysay [BM 1973.3233]. Dinshu [BM 1972.768-769]. 15 km W of Dodola [BM 1975.2113-2114]. Between Dodola and Adaba [NHMAA/H.100]. Felenguai [BM 1972.770]. 28 km N of Sidam-Bale bridge [BM 1975.2111]. 23 km SE of Kebre Mengist, on road to Neghelli [BM 1975.2115]. 32 km E of Neghelli [BM 1977.2245].

Additional material. "Gendoa River" (= Metemma) [LOVERIDGE 1936a: 57; MCZ-R34963, formerly FMNH 12734]. "Gendoa River" (= Deema) [LOVERIDGE 1936a: 57; FMNH 12735]. Let Marefia [BOULENGER 1896a: 550 (*Agama cyanogaster*), KLAUSEWITZ 1957: 170; ZMB 10306a-b (types of *minuta*)]. ?Farre [BOULENGER 1896a: 550 (*Agama cyanogaster*); MSNG 31944 (part)]. Mahal Uonz [BOULENGER 1896a: 550 (*Agama cyanogaster*), KLAUSEWITZ 1957: 170; ZMB 10305 (type of *minuta*)]. ?Alio Amba [BOULENGER 1896a: 550 (*Agama cyanogaster*); MSNG 31944 (part)]. Entotto [GIGLIOLI 1888: 65; MSNG 9536, MZUF 214]. Adis Abeba [TORNIER 1905: 371 (*Agama cyanogaster*), KLAUSEWITZ 1957: 170; ZMB 19740 (type of *minuta*)]. "Dscheffedenza" (= Ciaffedenza) [TORNIER 1905: 371 (*Agama cyanogaster*), KLAUSEWITZ 1957: 170; ZMB 29089 (type of *minuta*)]. Between Balci and "Ciadafena" (= Ciaffedenza) [SCORTECCI 1930: 3; MZUT-R338]. Godobuka [SCORTECCI 1930: 3; MZUT-R347]. Modjo (Shoa) [KLAUSEWITZ 1957: 170; ZSM 44/21 (type of *minuta*)]. Auasch (Awash) Valley, between (Mt) Fantalle and Sodare (Sodere) [SCORTECCI 1930: 3; MZUT-R333]. Sheikh Husein [BOULENGER 1896b: 215 (*Agama cyanogaster*); ANSP 4645]. Omo (River) region [NEUMANN 1905: 392 (*Agama cyanogaster*), TORNIER 1905: 371 (*Agama cyanogaster*), KLAUSEWITZ 1957: 170; ZMB 19739, 27401 (types of *minuta*)]. Between Sancurar and Amarr [BOULENGER 1898a: 717; MSNG 28813]. Moyale [SPAWLS et al. 2002: 196; CAS 129937-129938].

Field notes. According to BRANCH (1988), *Acanthocercus atricollis* in southern Africa is almost invariably associated with trees. This seems to be true also of some populations further north, since SPAWLS et al. (2002) agree that the species typically lives on the trunks of big trees, although it does sometimes occur on rocks and termite hills. In contrast, Ethiopian specimens are frequently encountered in more open habitats, provided that these afford the opportunity to obtain shelter in holes or beneath rocks. It is also interesting to note the report of CURRY-LINDAHL (1957), on lizards that appear to have been *A. atricollis* (though he identified them as *Agama cyanogaster*) in the Virunga region of eastern Congo Kinshasa. These animals were found living amongst boulders on a bare lava plain, where they tolerated surface temperatures up to 44.5 °C. It remains to be determined whether such conflicting observations apply to a single rather versatile species or are perhaps indicative of some taxonomic differentiation.

Distribution. Ethiopia and northwestern Somalia, southwards to Angola, Namibia and northern regions of South Africa.

Acanthocercus cyanogaster (Rüppell 1835)

Stellio cyanogaster RÜPPELL 1835: 10, Massaua, Eritrea.

Material examined. Worgesha [BM 1970.2237-2242, 1973.3229-3231]. Portuguese bridge [BM 1969.1258, 1261-1262]. 18 miles (29 km) SE of Portuguese bridge [BM 1969.1259]. Balchi [BM 1902.12.13.27-34]. SW of Zaguala [BM 1927.7.5.90].

Additional material. Egriariba [VINCIGUERRA 1931: 99; MSNG 31296]. Vicinity of Gondar [CALABRESI 1925: 102; MSNM-Re1727]. "Hawash" (= Awash) River [BOULENGER 1912: 330; MSNG 28954]. Harar [LOVERIDGE 1936a: 57; FMNH 3905-3906]. (NW corner of) Lake Shalla [LOVERIDGE 1936a: 57; FMNH 12522 and MCZ-R34967, formerly FMNH 12523]. Lower Tug Faf [BOETTGER 1893a: 114: specimen not found in SMF, so presumed lost]. "Webithal" (= Webi Shebeli) [BOETTGER 1893a: 114: specimen not found in SMF, so presumed lost]. Eghi Mt [BOETTGER 1893a: 114; specimen not found in SMF, so presumed lost]. Webi Mana [BOULEN-

GER 1912: 330; MSNG 28955]. Javello [SCORTECCI 1940: 143; MSNM-Re1785]. Moyale [SCORTECCI 1940: 143; MSNM-Re1786].

Distribution. Known with certainty only from Eritrea and Ethiopia.

Acanthocercus phillipsii (Boulenger 1895)

Agama phillipsii BOULENGER 1895c: 167, inland of Berbera, Somalia.
Agama phillipsi; PARKER 1942: 51.
Agama trachypleura G. PETERS 1982: 266, Eritrea. New synonymy.

Taxonomic notes. PETERS (1982) erected the name *Agama trachypleura* on the basis of just two specimens, one of which (FMNH 26318) was formerly part of the series BM 1937.12.5.5-13, identified by PARKER (1942) as *Agama phillipsii*. A careful reading of PETERS' account led us to conclude that his diagnosis of *trachypleura* corresponded remarkably well with our notion of *phillipsii*, but that his description of "*phillipsii*" seemed to represent a different taxon. Although PETERS documented no comparative material, it seemed reasonable to suppose that his concept of *A. phillipsii* might have been derived, wholly or in part, from material held by his own institution, the Museum für Naturkunde in Berlin. In order to clarify this issue, we therefore brought together all relevant specimens available from Berlin and elsewhere.

Direct comparison of the holotype (ZMB 37109) and paratype (FMNH 26318) of *A. trachypleura* with the two syntypes of *A. phillipsii* (BM 95.6.14.11/1946.8.26.12, 95.7.17.12/1946.8.26.13) leaves no doubt that all are conspecific. Four further specimens in Berlin (ZMB 18428, 36922, 54567-54568), catalogued as *A. phillipsii*, are found to be morphologically identical with material to which PETERS applied this name, although they in fact represent a clearly different and evidently still unnamed taxon. In summary, PETERS (1982) was entirely correct to recognise the existence of two separate species in the material before him, but was misinformed about the identity of *A. phillipsii*, apparently because of a failure to examine BOULENGER's types. Consequently, he mistakenly assigned to the wrong taxon the new name that was clearly required, so creating *A. trachypleura* as an unquestionable synonym of *A. phillipsii*.

Material examined. 10°10'N 43°00'E [BM 1937.12.5.17]. 10°05'N 43°00'E [BM 1937.12.5.2-4]. 10°00'N 43°00'E [BM 1937.12.5.1]. 09°55'N 43°10'E [BM 1937.12.5.5-12 and FMNH 26318, formerly BM 1937.12.5.13 (paratype of *trachypleura*)]. 09°50'N 43°10'E [BM 1937.12.5.14-16]. 09°50'N 43°15'E [BM 1937.12.5.19-21].

Distribution. Northwestern Somalia and immediately adjacent regions of Ethiopia, northwards to Eritrea.

Acanthocercus guentherpetersi n. sp.

Agama cyanogaster phillipsi (not Boulenger 1895); KLAUSEWITZ 1954: 145 (part: ZMB 36922).
Agama phillipsii (not Boulenger 1895); PETERS 1982: 266-268.

Etymology. This species is named for Dr Günther Peters, former Curator of Herpetology at the Museum für Naturkunde in Berlin, who first recognised and accurately documented its distinctive features. The value of his contribution should not be under-estimated, merely because associated with an unfortunate nomenclatural error.

Holotype. An adult male (BM 1969.1254) from ca 40 km E of Harar on the road to Jigjiga, Ethiopia (09°12'N 42°22'E, altitude 1500 m), collected 21 September 1968 by the Great Abbai Expedition.

Paratypes. ♀ (BM 1969.1253), ca 20 km E of Harar on the road to Jigjiga, Ethiopia (09°12'N 42°15'E, 1500 m), 21 September 1968, Great Abbai Expedition; ♀, 3 juveniles (BM 1970.1449-1452), "Dakhato" (= Dacata) River, between Harar and Jigjiga, Ethiopia (09°12'N 42°25'E, ca 1400 m), 30 September 1934, R.H.R. Taylor; ♂ (ZMB 36922), "Abessinien" (= Ethiopia), E. Wache [3]; ♂, ♀ (ZFMK 19450-19451), Af Abed, Eritrea (16°14'N 38°46'E), 7 February 1938, von Saalfeld; ♂ (BM 1915.3.9.1), Habesch (region), Eritrea (ca 15°40'N 39°00'E), G. Schroeder; 3 ♂♂ (ZMB 18428, 54567-54568), Eritrea, G. Schrader [4].

Diagnosis. Similar to *A. phillipsii* in habitus and probably coloration, but significantly larger, the snout-vent length of ♂♂ 77-102 (mean 88.8) mm, n = 7 and of ♀♀ 72-81 (77.7) mm, n = 3 [in *A. phillipsii*: ♂♂ 62-85 (71.5) mm, n = 9 and ♀♀ 55-70 (64.3) mm, n = 12]; enlarged, keeled and mucronate scales on the flanks generally few in number, widely dispersed or in weak and isolated transverse rows [in *A. phillipsii* such scales are closely compacted into a series of distinct transverse rows occupying a restricted area at mid-flank]; posterodorsal face of the thigh with a few large, keeled and mucronate scales irregularly arranged and intermingled with numerous smaller ones [in *A. phillipsii* this region of the femur has only large, regularly arranged scutes that are clearly separated from the small scales of the underside]; caudal scale rows (at a distance behind the vent equivalent to the maximum breadth of the tail) 20-29 (mean 23.8), n = 13 [in *A. phillipsii*: caudal scale rows only 16-21 (18.1), n = 28]. Further information may be obtained from PETERS (1982).

Field notes. Specimens collected between Harar and Jigjiga were all obtained amongst rocks and boulders in areas of dry *Acacia* scrub and at one such site, 20 km E of Harar, the species was found living in close association with *A. annectans*.

Distribution. At present recorded only from the neighbourhood of Harar in Ethiopia and from the eastern lowlands of Eritrea, this species may have a range similar to that of *A. phillipsii*; in which case its presence in northwestern Somalia is to be expected. Continuity between Ethiopian and Eritrean populations via the eastern foothills of the central plateau seems rather less likely, because this species (like *A. phillipsii*) is unknown in the comparatively well explored surroundings of the Awash National Park.

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[3] Ernst Wache is known to have collected in the Dire Dawa area of Ethiopia during 1909-1910 (R. GÜNTHER and A. HAAS in litt.), so it seems rather likely that this may be the provenance of ZMB 36922.

[4] We strongly suspect that "Schrader" and "Schroeder" are the same person and that the former is the correct spelling of his name.

Acanthocercus zonurus (Boulenger 1895)

Agama zonura Boulenger 1895: 533, Wardergubberner (ca 07°20'N 40°30'E), Ethiopia [holotype: BM 95.6.11.3/1946.8.28.10].

Material examined. "Gojjam" (= Piccolo Abbai bridge) [BM 1964.1037-1049]. N of Biccena [BM 1973.3234-3235]. Harar [BM 1902.12.13.36, 1937.12.5.31]. Wardergubberner [BM 95.6.11.3/1946.8.28.10 (holotype)].

Additional material. Lake "Haramaja" (= Alemaya) [Tornier 1905: 372; formerly ZMB, but now presumed lost]. Harar [Tornier 1905: 372; ZMB 18195, 19742, 27385, 27423].

Distribution. Known only from Ethiopia, where recorded on both sides of the Rift Valley at altitudes of approximately 2000-2500 m.

Genus ***Agama*** Daudin 1802

Agama agama (Linnaeus 1758)

Lacerta agama Linnaeus 1758: 207, "America" [erroneous].
Agama colonorum Daudin 1802: 356, "Amérique meridionale" [erroneous].
Agama smithii Boulenger 1896b: 213, between (Webi) Shebeli and Juba River (03°58'N 41°40'E), Ethiopia [holotype: BM 95.12.31.4/1946.8.27.79]. New synonymy.
Agama lionotus Boulenger 1896b: 214, SE of Lake Rudolf (= Lake Turkana), Kenya.
Agama agama lionotus; Battersby 1955: 149.

Taxonomic notes. Boulenger (1896b) failed to indicate what he considered to be the diagnostic features of *Agama smithii*, but suggested that his new taxon might be intermediate between *A. spinosa* and *A. rueppelli*. This seems strange, in view of the fact that the unique type specimen shows none of the characters now considered to define the latter species. Parker (1932a) referred the name *smithii* to the synonymy of *A. spinosa*, but subsequently (Parker 1942) expressed doubt about whether this action was justified. The holotype, a female of snout-vent length 110 mm, has the occipital scale distinctly enlarged, a well defined nuchal crest, the tympanum fully exposed, five discrete clusters of elongate spines surrounding the tympanum and a conspicuously pyriform nasal shield. As Lanza (1978a: 283-285) has correctly observed, *A. spinosa* invariably possesses six periauricular clusters of spines and a rounded nasal shield. On the basis of both morphological and geographical evidence, the name *smithii* should be relegated to the synonymy of *Agama agama*.

Material examined. Shimala River [BM 1970.1440-1442]. Gambela [BM 1972.754-765, NHMAA/H.90-91, H.353.1-3]. Gila River, 63 km SW of Gambela [BM 1970.309]. Arba Minch [BM 1969.236-237, LIVM 1991.115.13]. SW of Lake Abaya [BM 1969.238-240]. Cullufu River [BM 1969.235]. S side of Lake Abaya [BM 1969.233-234, 241, 1986.636]. NW corner of Lake Chamo [BM 1969.242]. W of Lake Stephanie [NHMAA/H.107]. Murri [BM 1954.1.2.79-80]. Between (Webi) Shebeli and Juba River (Donaldson Smith, 27.II.1895) [BM 95.12.31.4/1946.8.27.79 (holotype of *Agama smithii*)].

Additional material. Akobo (River), in Jambo region [Tornier 1905: 371; ZMB 27386]. Gondaraba [Scortecci 1943: 295; MSNM-Re1764]. Gongabaino [Scortecci 1943: 295; MSNM-

Re1720, 1786]. Asile [Scortecci 1943: 295; MSNM-Re1715, 1758, 1762-1763, 1765, 1767, 1770, 1774]. Caschei (River) [Scortecci 1943: 295; MSNM-Re1757, 1759, 1766, 1769, 1824]. Malca Guba [Scortecci 1940: 144; MSNM-Re1771-1772]. Between Sancurar and Amarr [Boulenger 1898a: 717; MSNG 28812]. ?W of Juba River (Donaldson Smith, 21.III.1895) [Boulenger 1896b: 214 (*Agama doriae*); ANSP 4647-4648 (part)] [5].

Field notes. Though known in East Africa as the "Red-headed Agama", most mature males in southwestern Ethiopia (within the Mago National Park, Lake Stephanie and Lake Turkana area) were observed to have yellow or orange-yellow heads, just as they do in northern Kenya according to Spawls et al. (2002).

Distribution. Senegal to Eritrea and Ethiopia, southwards to Tanzania in the east and Angola in the west. In Ethiopia, apparently confined to western and southern regions of the country.

Agama doriae Boulenger 1885

Agama doriae Boulenger 1885: 127, Keren, Eritrea. Moody & Böhme 1984: 113-114.

Material examined. Zegi [BM 1902.12.13.16-23]. Abbai (River: E. Degen col.) [BM 1902.12.13.10-15]. Ambo, 30 km NW of Dessie [BM 1972.772]. Portuguese bridge [BM 1969.1263-1264]. Near Quezan [BM 1970.1458-1459]. Between Quezan and Belfodio [BM 1970.1454-1457]. Shimala River [BM 1970.1460-1461]. Near Belfodio [BM 1970.1453]. Mabil [BM 1969.1268]. Fincha River mouth [BM 1969.1265]. Guder River mouth [BM 1969.1267, 1271-1277]. Hiressa [BM 1902.12.13.24-26]. 15 miles (25 km) N of Ghimbi [BM 1969.1266]. Mugher River gorge [NHMAA 2003.08-09]. Ghimbi [BM 1969.1269-1270]. Didessa River bridge [NHMAA/H.392.1-3, H.508, H.565.1-4, H.683.1-2]. Didessa River (bridge) [BM 1972.773-774]. Felenguai [BM 1972.771, 775].

Additional material. Metemma [Scortecci 1928: 314 (*Agama colonorum*), Moody & Böhme 1984: 113 (*Agama doriae*); MSNM-Re716]. Angareb River [Boulenger 1909: 193 (*Agama spinosa*), "Gondar" (= Angareb River), Moody & Böhme 1984: 114 (*Agama doriae*); MSNG 28957]. Vicinity of Gondar [Rüppell 1835: 14 (*Agama colonorum*) [6]; specimen not found in SMF, so presumed lost]. "Gorgona" (= Gorgora) region [Moody & Böhme 1984: 114; ZFMK 19454-19455, ZSM]. Kollu (Kolla region) [Tornier 1905: 370; formerly ZMB, but now presumed lost]. Didessa River (bridge) [Moody & Böhme 1984: 113; USNM 218599-218601]. "Omo River, E of Jimma" (= Ghibie River bridge) [Moody & Böhme 1984: 113; ZFMK 15861]. Omo (River) region [Neumann 1905: 391, Tornier 1905: 370, Moody & Böhme 1984: 113; ZMB 29154, 29254-29255, 55834-55844]. Shambala Valley [Tornier 1905: 370; ZMB 18193, 27457]. Bisan River [Loveridge 1936a: 55 (*Agama agama*); FMNH 15076, 15078-15080 and MCZ-R34958, formerly FMNH 15077]. Lake Stephanie (Donaldson Smith, 16.VI.1895) [Boulenger 1896b: 214: ANSP 4650-4651].

Field notes. Animals in the Mugher River gorge at an altitude of 1660 m were found to be active by day on exposed rock surfaces. Displaying males had vivid

[5] *Agama doriae* is known with certainty only from localities west of the Rift Valley (Moody & Böhme 1984: 115, fig. 3) and records from further east seem very dubious.

[6] Rüppell (1835) was uncertain about the identity of this material, but wrote "der Kehlsack ist lebhaft orangegelb, und hinter demselben ein blauschwarzes Halsband, welches den Kehlsack von der Brust absondert", which is a very fair description of the distinctive gular coloration seen in male *A. doriae*.

markings: the top of the head rust-red, the sides of the head and limbs blue, the throat mottled blue with orange patches anteriorly and the gular flap deep blue or blue-black (Fig. 1). Basking females were maroon, yellow and grey dorsally (Fig. 2).

Distribution. Ghana to Eritrea and Ethiopia, where known with certainty only from west of the Rift Valley.

Agama persimilis Parker 1942

Agama persimilis PARKER 1942: 52, Haud region at 08°00'N 45°50'E, Ethiopia [holotype: BM 1937.12.5.64/1946.8.27.51]. LANZA 1978a: 282, 1990: 419; SPAWLS et al. 2002: 205 [all relating to a single specimen from NE of Mandera: CAS 130307].

Material examined. 08°37'N 45°09'E [BM 1937.12.5.65/1946.8.27.52 (type)]. 08°17'N 46°09'E [BM 1937.12.5.67/1946.8.27.54 (type)]. Bohodle [BM 1937.12.5.68-73/1946.8.27.55-60, 1937.12.5.75-77/1946.8.27.62-64 (types)]. 08°00'N 45°50'E [BM 1937.12.5.64/1946.8.27.51, 1937.12.5.66/1946.8.27.53 (types)]. 2 km NE of Mandera [CAS 130307].

Distribution. Somalia, eastern Ethiopia and eastern Kenya.

Agama robecchii Boulenger 1892

Agama robecchii BOULENGER 1892: 6, between Obbia and Berbera, Somalia.

Material examined. Aware [NHMAA 2000.01].

Field notes. This species is reported to be diurnal and has been found living in holes on open sandy plains (S. TAYE pers. comm.). When agitated, the specimen from Aware curled its tail defensively over its back (Fig. 3). The conspicuously elevated eyes, set in a bony turret, and distinctively square head are good field characters. In fact, the shape of the head (which must surely reflect some underlying peculiarities in skull structure) and remarkable dorsal scalation together define a species very different in superficial appearance from all other Ethiopian *Agama*. We wonder if it is correctly assigned to the same genus.

Distribution. Known only from Somalia and the single Ethiopian record cited above.

Agama rueppelli Vaillant 1882

Agama rueppelli VAILLANT 1882: 6, "Pays Çomalis" (i.e. Somalia).
Agama vaillanti BOULENGER 1895b: 12, Ogaden (region), Ethiopia [lectotype: MSNG 28850]. BOULENGER 1895a: 532 [part: BM 95.12.31.2-3].
Agama rueppelli rueppelli; PARKER 1942: 52.

Material examined. 10°45'N 42°45'E [BM 1973.12.5.80-81]. 10°35'N 42°40'E [BM 1937.12.5.78]. 10°20'N 42°45'E [BM 1937.12.5.79]. 09°55'N 43°10'E [BM 1937.12.5.82-87]. Sassabana [BM 95.12.31.2]. (Webi) Shebeli (Donaldson Smith, 30.XII.1894) [BM 95.12.31.3].

Additional material. Gumboworen [TORNIER 1905: 370; ZMB 27387]. Lasman [TORNIER 1905: 370; ZMB 27388]. 10°15'N 43°15'E [PARKER 1942: 52; MCZ-R49120, formerly BM 1937.12.5.88]. 18 km (N of) Camp Awash [LANZA 1972: 166; MZUF 12238]. Sassabana [BOULENGER 1895a: 532; ANSP 4652]. Dabanac [BOULENGER 1896c: 8; MSNG 28905]. Webi (Shebeli) [BOETTGER 1893a: 114; specimen not found in SMF, so presumed lost]. Abdallah (region) [BOETTGER 1893a: 114; specimen not found in SMF, so presumed lost]. ?Caschei (River) [SCORTECCI 1943: 297 (*Agama* sp.); MSNM-Re1752] [7]. Confluence of the Web and Ganana (Ganale) Rivers [BOULENGER 1896d: 17; formerly MSNG, but now apparently missing from that collection]. W of Juba River (Donaldson Smith, 7.III.1895) [BOULENGER 1896b: 213; ANSP 4653].

Distribution. Somalia, eastern and southern Ethiopia, extreme southeastern Sudan and Kenya.

Agama spinosa Gray 1831

Agama spinosa GRAY 1831: 57, "Africa" [restricted to Suakin, Sudan according to MARX (1968)].
Agama agama spinosa; PARKER 1942: 49.

Material examined. Mille River [BM 1974.3936]. 10°55'N 42°55'E [BM 1937.12.5.49]. 10°45'N 42°45'E [BM 1937.12.5.45]. 10°44'N 42°48'E [BM 1937.12.5.46]. 10°35'N 42°40'E [BM 1937.12.5.38-39]. 10°30'N 42°40'E [BM 1937.12.5.33-37]. 10°20'N 42°45'E [BM 1937.12.5.40-44]. 10°00'N 43°00'E [BM 1937.12.5.61]. 09°55'N 43°10'E [BM 1937.12.5.55-59]. Mt Fantalle crater [BM 1973.3228]. Metahara [BM 1972.766-767]. Kereyu Lodge, Awash National Park [NHMAA 2000.46].

Additional material. Gumboworen [TORNIER 1905: 371 (*Agama colonorum*); ZMB 27394]. Fulla Valley [TORNIER 1905: 371 (*Agama colonorum*); ZMB 27395]. Lasman [TORNIER 1905: 370; ZMB 29095]. "So-Omadu" (= Somadu) [TORNIER 1905: 370 (*Agama spinosa*), 371 (*Agama colonorum*); ZMB 29096, 27393]. 10°44'N 42°48'E [PARKER 1942: 49; MCZ-R49117-49118, formerly BM 1937.12.5.47-48]. "Arruena" (= Aroweina) [TORNIER 1905: 371 (*Agama colonorum*); ZMB 27396]. Djeldabal [TORNIER 1905: 370; ZMB 29097]. Auasch (Awash) Valley [SCORTECCI 1930: 4 (*Agama colonorum*); MZUT-R310]. 18 km (N of) Camp Awash [LANZA 1972: 165; MZUF 12237]. 1-2 km W of Metahara [LANZA 1972: 165; MZUF 12243-12244, 12280-12281]. Near Awash Falls [LANZA 1972: 165; MZUF 12231-12232]. ?Sheikh Hussein [BOULENGER 1895a: 533 (*Agama doriae*); ANSP 4647-4648 (part)]. Ogaden (region) [BOULENGER 1896c: 8 (*Agama doriae*); MSNG 28886] [8].

Distribution. Egypt to Eritrea, Djibouti, northeastern Ethiopia and northern Somalia.

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[7] SCORTECCI (1943) recorded 18 specimens of *Agama agama* from southwestern Ethiopia, including six from the Caschei River, but clearly believed that another lizard from this locality represented a different taxon, listing it only as *Agama* sp. He noted that it is a female of snout-vent length 88 mm, having 60 midbody scale rows. Available evidence seems to suggest that this might be an example of *A. rueppelli*.

[8] *Agama doriae* is known with certainty only from localities west of the Rift Valley (MOODY & BÖHME 1984: 115, fig. 3) and reports from further east seem very dubious. The specimen from "Ogaden" reported by BOULENGER (1896c) as *A. doriae* (MSNG 28886) is listed in the catalogue of that museum as *A. spinosa*; a determination that might require confirmation but which certainly appears more plausible.

Genus ***Uromastyx*** Merrem 1826

Uromastyx ocellata Lichtenstein 1823

Uromastyx ocellatus Lichtenstein 1823: 107, "Nubia" (= Sudan).
Uromastix macfadyeni Parker 1932a: 353, near Berbera, Somalia. Parker 1942: 55.

Material examined. 10°55'N 42°55'E [BM 1937.12.5.124-125]. 10°45'N 42°45'E [BM 1937.12.5.121-123]. 10°35'N 42°40'E [BM 1937.12.5.117]. 10°30'N 42°40'E [BM 1937.12.5.118-119]. 10°00'N 43°00'E [BM 1937.12.5.126-129].

Additional material. "So-Omadu" (= Somadu) [Tornier 1905: 373; ZMB 27398].

Distribution. Red Sea coasts of the Arabian Peninsula, Egypt and Sudan, south through Eritrea and Djibouti to northwestern Somalia and immediately adjacent Ethiopia.

Genus ***Xenagama*** Boulenger 1895

Xenagama batillifera (Vaillant 1882)

Uromastix batilliferus Vaillant 1882: 10, "Pays Çomalis" (i.e. Somalia).
Agama (*Xenagama*) *batillifera*; Parker 1942: 54.

Material examined. 09°50'N 43°10'E [BM 1937.12.5.90-93]. 09°50'N 43°15'E [BM 1937.12.5.95-115]. Milmil [BM 1937.12.5.116].

Additional material. 09°55'N 43°10'E [Parker 1942: 54; MCZ-R49121, formerly BM 1937.12.5.94]. Sassabana [Boulenger 1895a: 533; ANSP 4840].

Field notes. R.H.R. Taylor noted that "this species is chiefly nocturnal in its habits, being found by day in burrows which it constructs in soft earth" (Parker 1942: 54). Our informant agrees that it lives in burrows, but observed the animals to be diurnal at Gildessa, which has an altitude of 1100 m (S. Taye pers. comm.). The distinctive tail shape is a useful feature for identification in the field (Fig. 4).

Distribution. Northern Somalia and adjacent parts of eastern Ethiopia.

Xenagama taylori (Parker 1935)

Agama (Xenagama) taylori Parker 1935: 525, Haud region at 08°43'N 44°49'E, 3400 feet, Ethiopia-Somali border [holotype: BM 1936.6.12.1/1946.8.28.11]. Parker 1942: 54.

Material examined. 08°45'N 44°44'E [BM 1936.6.12.2/1946.8.28.14 (type)]. 08°43'N 44°49'E [BM 1936.6.12.1/1946.8.28.11 (type)]. Dagah Bur [NHMAA 2004.06-08].

Field notes. This species is diurnal and has been found living in flat semi-desert country, occupying burrows into which it retreats head first (S. TAYE pers. comm.). The extraordinary, discoid and conspicuously spinose tail aids rapid identification in the field and presumably serves as a defence against any predator that may attempt to follow this lizard into its burrow (Fig. 5).

Distribution. *X. taylori* is known to have been collected only from the three localities listed above, but it has also been observed at Aware, about 70 km east of Dagah Bur, by S. TAYE (pers. comm.).

Family Chamaeleonidae

Genus ***Chamaeleo*** Laurenti 1768

Chamaeleo affinis Rüppell 1845

Chamaeleo affinis RÜPPELL 1845: 300, "Abyssinien" (= Ethiopia) [syntypes: SMF 16402-16403, BM 45.7.22.27/1946.8.21.9]. LARGEN 1995: 337; SPAWLS 2000: 6.
Chamaeleon affinis; BOULENGER 1895a: 535 [part: BM 95.12.31.18], 1896a: 552 [part: BM 96.5.19.55].

Material examined. Abyssinia [BM 45.7.22.27/1946.8.21.9 (type)]. Gondar [BM 1961.1007]. Godeb [BM 1902.12.13.68]. Debre Marcos [BM 1969.1250]. Let Marefia [BM 96.5.19.55]. Mulu farm [NHMAA 2000.29, 2003.10]. Ghimbi [BM 1969.1249, 1251-1251a]. Addis Ababa [BM 1973.3237, NHMAA/H.594]. Djem Djem Forest [BM 1927.7.5.99]. Beletta Forest [NHMAA/H.517]. Rokar [BM 95.12.31.18]. Dinshu [LIVM 1986.212.247, NHMAA/H.601]. Danka River, near Dinshu [BM 1973.3236].

Additional material. Devark [LOVERIDGE 1936a: 75; FMNH 12726]. Vicinity of Gondar [CALABRESI 1925: 103; MSNM-Re1884 and MZUF 784, formerly MSNM 1048]. Let Marefia [BOULENGER 1896a: 552; MSNG 28892 (part)]. Harar [BOULENGER 1896a: 552; MSNG 28892 (part); NEUMANN 1905: 402, TORNIER 1905: 383; ZMB 27239]. Kollu (Kolla region) [NEUMANN 1905: 402, TORNIER 1905: 383; ZMB 27236]. Adis Abeba [NEUMANN 1905: 402, TORNIER 1905: 383; ZMB 27235, 27238, 27240, 27242]. Sheikh Mahomed [BOULENGER 1895a: 535; ANSP 4682]. Anderatscha [TORNIER 1905: 383; ZMB 27237]. Koscha (Coscia region) [NEUMANN 1905: 402, TORNIER 1905: 383; ZMB 18211, 27241]. Webi Mana [BOULENGER 1912: 331; MSNG 28004].

Field notes. SPAWLS (2000) has recorded the existence of this species, based on specimens confidently identified but not collected, at four additional localities: Bedelle; Bonga; Goba; and Dodola. This small chameleon (Fig. 6) is easily recognised in the field by its long tail (about 50% of total length) and lack of a gular crest; a combination of characters unique amongst Ethiopian members of the genus. It is common in the intensely farmed Derba region (about 40 km north of Addis Ababa), but may be less tolerant of urbanisation since now rarely found even in the wooded suburbs of the capital city, though still present on the nearby Entotto hills. At Goba, with an altitude of 2800 m, the species is so abundant that 15 individuals were found occupying a single hedge in the grounds of a hotel.

Animals from both Goba and Addis Ababa were seen to become active at dawn, before the temperature had risen above 7 °C. The species is viviparous. Mating was observed in captive specimens, maintained in the open air under semi-

natural conditions, during May, June and October, with females giving birth in June, August and September. The largest brood was of 20 young and the neonates measured about 40 mm in total length.

Distribution. An Ethiopian endemic, widespread on the central plateau at altitudes of about 1900-3100 m, inhabiting both forest and isolated thickets in otherwise open grassland.

Chamaeleo africanus Laurenti 1768

Chamaeleo africanus Laurenti 1768: 46, no locality. Spawls 2000: 7.
Chamaeleon basiliscus Cope 1868: 316, Korusko, Nubia, Egypt. Parker 1942: 79.
Chamaeleo (africanus) calcaricarens Böhme 1985: 475, Gewani (10°10'N 40°38'E), Ethiopia [holotype: BM 1961.1774].
Chamaeleo calcaricarens; Spawls 2000: 9.

Taxonomic notes. Böhme (1985) recognised *C. calcaricarens* as taxonomically distinct from *C. africanus* because his specimens were found to "lack the most important diagnostic character of the [latter] species, i.e. a tarsal spur in the male" and to possess not eight but ten cornified rotulae at the apex of the hemipenis. Böhme was clearly uncertain about "whether the two allopatric forms should be regarded as subspecies or full species", but finally concluded that since "there is generally no intraspecific variation of hemipenial characters" the new taxon should be regarded "as (allo)specifically distinct within a superspecies *C. africanus*". Although this judgement might eventually prove to be correct, Böhme identified no character which would allow females of the two forms to be separated and it now appears that even the males cannot invariably be distinguished by external features. At least two paratypic males of *C. calcaricarens* (BM 69.11.4.6 from Eritrea and BM 1937.12.5.781 from the Ethiopia-Somali border) possess small but perfectly distinct tarsal spurs (quite comparable with those of some immature *C. africanus* from Sudan and Nigeria). Where the identification of species is concerned, there is clearly a significant difference between a character which may be subjectively larger or smaller, as opposed to one that has the absolute value of either presence or absence.

Spawls (2000) attempted to improve this unsatisfactory situation and published a photograph of a dramatically pigmented specimen, found at Lefe Isa in Ethiopia, which he identified as *C. calcaricarens* (Fig. 7). Unfortunately, none of the subsequently examined type specimens of this name exhibit markings that closely resemble the vivid pattern of discrete blotches seen in the figured animal. The nearest approach is found in the holotype, that does indeed have prominent dark stripes on the side of the head, but its body is much more obscurely coloured by numerous spots and blotches, many of which tend to coalesce. Furthermore, virtually all the type specimens also have two or three pale stripes on the flanks; a feature which Spawls was wrongly inclined to regard as more characteristic of *C. africanus*. The same author recognised some difference between these taxa in the degree of development of the gular crest, which he described as "weak to almost absent" in *calcaricarens*, but "moderate" in *africanus*. Most type material of *calcaricarens* does conform to Spawls' description, but one exception is BM 1937.12.5.781, which has

a gular crest comparable with that seen in *C. africanus* from Sudan and Nigeria; another is a paratype from Gondar (BM 1961.1008), in which this structure is even more strongly developed. Since the latter specimen is also a female, one wonders what can have led Böhme to think that it should be included amongst the types of *C. calcaricarens*. We are much more inclined to call this individual *C. africanus*.

Since it now seems that the only reliable character for distinguishing *calcaricarens* from *africanus* is the number of rotulae on the hemipenis and this is always going to be a difficult feature to determine, it could hardly be claimed that the former is a satisfactorily defined taxon or that its specific status has yet been convincingly demonstrated. Indeed, acceptance of the taxonomic arrangement proposed by Böhme (1985) would certainly leave a significant number of Ethiopian specimens, including all females, undetermined and perhaps indeterminable. In order to establish a more workable taxonomy, the only available solution is to refer all such material to *Chamaeleo africanus*; an action which allows for *calcaricarens* to be one day redefined as a plausible subspecies having a clearly circumscribed geographical range. Alternatively, if one chooses to interpret the name *C. africanus* in the broader sense, as denoting a species-complex, then this would accommodate the possibility that *calcaricarens* might eventually be proved to justify specific ranking.

Material examined. Gondar [BM 1961.1008 (type of *calcaricarens*)]. 10°35'N 42°40'E [BM 1937.12.5.781 (type of *calcaricarens*)]. Gewani [BM 1961.1774 (type of *calcaricarens*)]. 10°05'N 43°00'E [BM 1937.12.5.783 (type of *calcaricarens*)]. 10°00'N 43°00'E [BM 1937.12.5.782 (type of *calcaricarens*)]. 09°55'N 43°10'E [BM 1937.12.5.784 (type of *calcaricarens*)]. Kudu Valley, Awash National Park [NHMAA/H.57]. Between Herdu and Oulancheti [BM 1916.6.24.1 (type of *calcaricarens*)].

Additional material. Devark [Loveridge 1936a: 75; FMNH 12727]. Vicinity of Gondar [Calabresi 1925: 103; MSNM-Re1898]. Near Gondar [Böhme 1985: 475; ZFMK 35900-35901 (types of *calcaricarens*)]. Harrar [Necas 1994: 101; NMW 7493]. Near Addis Abeba [Böhme 1985: 475; ZFMK 33624 (type of *calcaricarens*)] [9]. "Dscheffedenza" (= Ciaffedenza) [Tornier 1905: 383; ZMB 19738]. Asella [Böhme 1985: 475; ZFMK 19131 (type of *calcaricarens*)].

Field notes. Spawls (2000) has recorded the existence of this species, based on specimens confidently identified but not collected, at three additional localities: Shafartak bridge (in the Blue Nile gorge); near Mulu (at an altitude of 2300 m close to the edge of the Mugher River gorge); and in the vicinity of Gambela. At the Mugher gorge site, the species was found most often during the wet season in June to October. A similar association was noted by S. Taye (pers. comm.) in the more arid lowlands at Lefe Isa, where the animals were common on small trees and shrubs in April, but could not be found during the driest months of December and January, perhaps because they aestivate at this time of year.

Distribution. Western Mali (Böhme 1985) eastwards to Eritrea, Ethiopia, Djibouti and northern Somalia. If *C. calcaricarens* is distinguishable, its range is probably not as defined by Böhme (1985), but mainly restricted to the lowlands of Eritrea, Djibouti, northern Somalia and the Afar region of Ethiopia, with only a limited westward extension along the valley of the Awash River.

[9] This example from "near Addis Ababa" is a male and the westernmost specimen in which, according to Böhme (1985), the absence of tarsal spurs and presence of 10 cornified rotulae on the everted hemipenis have been confirmed.

Chamaeleo balebicornutus Tilbury 1998

Chamaeleo harennae Largen 1995: 334 [part: paratype].
Chamaeleo (Trioceros) balebicornutus Tilbury 1998: 294, Katcha, 06°42'N 39°44'E, 2400 m, Ethiopia [holotype: ZFMK 63049].

Material examined. Katcha [ZFMK 63049 (holotype)]. Near Shawe River [LIVM 1986.212.245 (paratype)]. Harenna Forest at 06°37'N 39°44'E [ZFMK 63050-63058 (paratypes)].

Distribution. This species (Fig. 8) is known only from the Bale Mountains of Ethiopia, where it has been found in *Podocarpus*, *Aningeria* and *Schefflera-Hagenia* forest at altitudes of 1700-2400 m.

Chamaeleo bitaeniatus Fischer 1884

Chamaeleo bitaeniatus Fischer 1884: 23, Lake Naivasha, Kenya. Spawls 2000: 8.
Chamaeleon bitaeniatus; Boulenger 1896b: 215, 1896c: 10 [part: BM 96.5.30.6-7], 1898a: 720 [part: BM 98.1.28.19].
Chamaeleo rudis rudis (not Boulenger 1906); Witte 1965: 132 [part: MNHN 1905.152-153].

Material examined. Confluence of the Akaki and Awash Rivers [MNHN 1905.153]. W of Zaguala [BM 1927.7.5.101]. "Sedene" (? = Sodere) [MNHN 1905.152]. Lake Abeia (Donaldson Smith = SE corner of Lake Abaya) [BM 95.12.31.19]. Between Badditu and Dime [BM 98.1.28.19]. Coromma [BM 96.5.30.6-7].

Additional material. Addis Abeba [Boulenger 1912: 331; MSNG 27995]. Between Badditu and Dime [Boulenger 1898a: 720; MSNG 28816]. Neghelli [Scortecci 1943: 303; formerly MSNM, but apparently now missing from that collection]. Coromma [Boulenger 1896c: 10; MSNG 28888]. Javello [Scortecci 1940: 147; MSNM-Re1902]. Between Sancurar and Amarr [Boulenger 1898a: 720; MSNG 28815].

Field notes. Spawls (2000) has recorded the existence of this species, based on specimens confidently identified but not collected, at three additional localities: Debre Zeit; Sodere; and Asella.

Distribution. Central and southern Ethiopia, the Imatong Mountains of southern Sudan, northeastern Congo Kinshasa, Uganda, Kenya and northern Tanzania.

Chamaeleo dilepis Leach 1819

Chamaeleo dilepis Leach 1819: 493, Congo Brazzaville.
Chamaeleo dilepis var. *Quilensis* Bocage 1866: 59, Rio Quilo, Cabinda.
Chamaeleon roperi Boulenger 1890a: 85, Kilifi, N of Mombasa, Kenya.
Chamaeleon ruspolii Boettger 1893a: 116, "Ogadeen" (= Ogaden region), Ethiopia [syntype: SMF 16300]
Chamaeleon dilepis ruspolii; Parker 1942: 79.

Taxonomic notes. Problems concerning *Chamaeleo dilepis* and its allies are in some ways similar to those which beset the *C. africanus* group, though they have persisted for much longer. The name *ruspolii* was once considered to represent a subspecies of *C. dilepis* (e.g. PARKER 1942, LOVERIDGE 1957), but has more recently been assigned specific status (e.g. LANZA 1983, 1990). Whether this subsequent action was justified seems questionable and the case has certainly not been convincingly argued. The population in northern Somalia and immediately adjacent Ethiopia, to which the name *ruspolii* is applicable, seems morphologically very uniform; the specimens having low counts of temporal and occipital lobe scales and short brow ridges (BOETTGER 1893a), that make them appear very different from "typical" examples of *C. dilepis* from Kenya, Tanzania and Malawi. However, this East African material is understandably much less uniform, because collected over a far wider area, and it is not difficult to find individuals having characteristics which approach and perhaps even overlap those that are supposedly diagnostic of *ruspolii*. Furthermore, specimens from southern Ethiopia appear morphologically intermediate between *ruspolii* from northern Somalia and *dilepis* from East Africa. If this is a reflection of underlying genetic intergradation, then the case for regarding *ruspolii* as specifically distinct becomes unsustainable.

The apparent absence of this group of chameleons from northern Kenya (SPAWLS et al. 2002), might be taken as an indication that the population in southern Ethiopia is likely to be isolated from all but those to the north and east (i.e. *ruspolii*). However, the same authors note that the East African population does extend into Somalia and this is confirmed by LANZA (1983, 1990), who listed it as *C. dilepis dilepis*. Unfortunately, LANZA then increased the confusion by recognising in Somalia a further and specifically distinct taxon, *C. quilensis,* despite the fact that other authorities (e.g. BROADLEY & HOWELL 1991) believe this name to be a junior synonym of *C. d. dilepis*!

Clearly, the taxonomic complexities within this group of chameleons and the morphological and geographical limits of its constituents are very far from being understood. Rather than agonise about whether *ruspolii* or *dilepis* would be the more appropriate name to apply to specimens from southern Ethiopia, the best solution is surely to refer all NE African material to *Chamaeleo dilepis* and allow posterity to decide, on the evidence of more comprehensive data, whether this term represents a single species or a species-complex.

Material examined. 08°45'N 44°44'E [BM 1937.12.5.785]. 08°42'N 44°54'E [BM 1937.12.5.786]. 08°39'N 45°04'E [BM 1937.12.5.787]. 08°34'N 45°18'E [BM 1937.12.5.789-790]. 08°32'N 45°24'E [BM 1937.12.5.791]. 08°30'N 45°29'E [BM 1937.12.5.792]. 08°29'N 45°34'E [BM 1937.12.5.793]. 08°28'N 45°38'E [BM 1937.12.5.794]. 08°26'N 45°43'E [BM 1937.12.5.795-796]. N and NW of Lake Chamo [BM 1971.1475-1476]. Sidam-Bale bridge [BM 1975.2135].

Additional material. 08°31'N 45°09'E [PARKER 1942: 79; MCZ-R49129, formerly BM 1937.12.5.788]. Bisan River [LOVERIDGE 1936a: 76; FMNH 15075]. Neghelli [SCORTECCI 1940: 148; MSNM-Re1907]. Javello [SCORTECCI 1940: 148; MZUF 20853-20854]. Arero [SCORTECCI 1940: 148; MZUF 20851-20852]. Moyale [SCORTECCI 1940: 148; MZUF 465, 630].

Distribution. Cameroun to northern Somalia and southwards, across the breadth of the continent, to northern regions of South Africa. Within this huge range a number of named populations have been recognised, including *ruspolii* in NE Africa, but most of these are of questionable validity.

Chamaeleo gracilis Hallowell 1842

Chamaeleo gracilis Hallowell 1842: 324, Monrovia, Liberia. Spawls 2000: 10.
Chamaeleon gracilis; Boulenger 1896c: 10 [part: BM 96.5.30.5].
Chamaeleon senegalensis (not Daudin 1802); Boulenger 1912: 331 [part: BM 1912.6.6.11].
Chamaeleo gracilis gracilis; Battersby 1954: 246.

Material examined. Zegi [BM 1902.12.13.67]. Didessa River bridge [BM 1974.5161, NHMAA/H.564.1-6]. Adamitullu [NHMAA/H.93]. Godare [BM 1976.1664-1665]. N (end) of Lake Margherita (= Abaya) [BM 1972.776]. Arba Minch [BM 1973.3238]. Murri [BM 1952.1.8.77-79]. Dolo [BM 1912.6.6.11]. Gellago [BM 96.5.30.5]. Moyale [BM 1952.1.8.76].

Additional material. ?Addis Ababa [Boulenger 1912: 331 (*Chamaeleon senegalensis*); MSNG 28001]. 3 miles (4.8 km) NE of Nazareth [CAS 86747]. Sibbe (Sibi region) [Boulenger 1895a: 535; ANSP 4691]. Sheikh Husein [Boulenger 1896b: 215; ANSP 4684-4686]. Furza (Donaldson Smith, 12.IX.1894) [Boulenger 1896b: 215; ANSP 4687 [10]]. Smith River [Boulenger 1895a: 535; ANSP 4688-4690 (part)]. Sheikh Mahomed [Boulenger 1895a: 535; ANSP 4688-4690 (part)]. "Webithal" (= Webi Shebeli) [Boettger 1893a: 116; specimen not found in SMF, so presumed lost]. Koscha (Coscia region) [Neumann 1905: 402, Tornier 1905: 383; ZMB 29298]. Audo Mts [Boulenger 1896c: 10; MSNG 28907 (part)]. Elba (River) [Boulenger 1896c: 10; MSNG 28907 (part)]. Web Valley [Boulenger 1896c: 10; MSNG 28907 (part)]. Neghelli [Scortecci 1940: 147; formerly MSNM, but apparently now missing from that collection]. Ela Gura [Boulenger 1896c: 10; MSNG 28907 (part)]. Javello [Scortecci 1940: 147; MZUF 631]. Dolo [Boulenger 1912: 331 (*Chamaeleon senegalensis*); MSNG 27999]. Mandera [Spawls et al. 2002: 224; BM 1958.1.1.87].

Field notes. Spawls (2000) has recorded this species, based on specimens confidently identified but not collected, at Lake Zwai and Lake Langano; while similar data have since been obtained from Jinka and Turmi.

Distribution. Senegal eastwards to southern Somalia and northern Tanzania.

Chamaeleo harennae Largen 1995

Chamaeleo harennae Largen 1995: 334, Katcha, 06°42'N 39°44'E, 2400 m, Ethiopia [holotype: LIVM 1986.212.246].
Chamaeleo harennae fitchi Necas 2004: 4, Arbe Gona, 06°37'N 38°40'E, 2550 m [holotype: ZFMK 81201].

Material examined. 12 km N of Katcha [ZFMK 63059-63062]. Katcha [LIVM 1986.212.246 (holotype)].

Additional material. Riro (Rira) [Necas 2004: 4; ZFMK 81200]. Arbe Gona (Arbagona) [Necas 2004: 4; ZFMK 81202 (paratype of *fitchi*)].

Taxonomic notes. Necas (2004) compared nine near-topotypic specimens of *C. harennae* with over a hundred examples from about 100 km further west at

[10] A second specimen was reported to have been obtained from the same locality on 12.XII.1894, but this was evidently an error because on that date Donaldson Smith was further south, at Finik.

Arbagona, and was led to consider the latter population as subspecifically distinct. It is rather difficult to comment on this proposal, because we have not seen Necas' material and he did not examine ours, but we offer the following observations. *C. h. fitchi* is said to be distinguished from the typical form by a range of characters; including strongly heterogeneous flank scalation, a continuous (not interrupted) dorsal crest, white (rather than rufous) pigmentation on the anterior face of the thigh and a ventral crest that is not white but similar in colour to the surrounding scales. Such features would certainly distinguish the western population from the holotype of *C. harennae*, but not necessarily from other material of the nominate form collected by Colin Tilbury, which we subsequently examined and photographed in 1996 (ZFMK 63059-63062). These four specimens were found to have both strongly heterogeneous flank scalation, continuous dorsal crests and ventral crests which shaded in colour from green anteriorly to white posteriorly. The anterior face of the femur, though not white, was recorded in life as being green, yellow-green, rust-brown or maroon-yellow.

We are also concerned by Necas' claim that the two known populations of *C. harennae* are geographically isolated, believing this to be most probably an artefact attributable to the fact that no herpetologist has yet visited the intervening area. Absence of evidence should clearly not be interpreted as evidence of absence. The extension of geographical and ecological range that Necas (2004) has documented is of great significance, not least because of its bearing on the conservation status of *C. harennae*, which is evidently rather common even in the degraded environment around Arbagona. Whether there is yet sufficient justification for regarding the species as polytypic seems more debatable, though we have recently learned from P. Necas (in litt.) that he now has molecular data to support his claim.

Field notes. C. Tilbury (pers. comm.) informs us that the four specimens he collected at 3300 m were basking on the tops of ericaceous shrubs shortly after dawn, when the temperature had barely risen above 0 °C.

Distribution. Known only from the Bale Mountains of Ethiopia. On the southern slopes it occupies habitats ranging from *Schefflera-Hagenia* forest at 2400 m to ericaceous shrubs above the treeline at about 3300 m (Tilbury 1998). Further west, at Arbagona where natural montane forest has been almost totally destroyed, the species lives on isolated trees, bushes and even in the hedges surrounding fields and houses (Necas 2004).

Chamaeleo laevigatus Gray 1863

Chamaeleo laevigatus Gray 1863: 95, 500 miles south of Khartoum, Sudan.

Material examined. Didessa River bridge [BM 1973.3239, NHMAA/H.689.1-3]. Gambela [BM 1972.777-778, NHMAA/H.431-432, H.438-439, H.659].

Distribution. Chad and the Central African Republic to Eritrea, western Ethiopia, western Kenya and western Tanzania. There is also a recent record from Assuan, in the Nile valley of southern Egypt (Necas 1994).

Genus ***Rieppeleon*** Matthee, Tilbury & Townsend 2004

Rieppeleon kerstenii (W. Peters 1868)

Chamaeleo Kerstenii W. Peters 1868: 449, "Wanga" (= Wange), south of Mombasa, Kenya.
Rhampholeon robecchii Boulenger 1892: 13, "Wuorandi" (= Warandi), near Obbia, Somalia.
Rhampholeon kersteni robecchii; Parker 1932a: 362, 1942: 80.
Rampholeon kerstenii kerstenii; Battersby 1954: 246.

Material examined. 10°00'N 43°00'E [BM 1937.12.5.797]. 09°00'N 44°00'E [BM 1937.12.5.798]. 08°58'N 44°05'E [BM 1937.12.5.799-800]. 08°37'N 45°09'E [BM 1937.12.5.801]. 08°32'N 45°24'E [BM 1937.12.5.802]. 08°29'N 45°34'E [BM 1937.12.5.803-805]. 08°28'N 45°38'E [BM 1937.12.5.806]. 08°20'N 46°00'E [BM 1937.12.5.807]. 08°15'N 46°20'E [BM 1937.12.5.808]. 08°00'N 47°02'E [BM 1931.7.20.386]. 08°00'N 47°07'E [BM 1931.7.20.387]. 08°00'N 48°00'E [BM 1931.7.20.389]. Murri [BM 1952.1.8.80].

Additional material. Neghelli [Scortecci 1940: 149; MZUF 643]. Hauacio [Boulenger 1896c: 10; MSNG 28903] [11].

Distribution. Somalia, eastern Ethiopia, Kenya and northeastern Tanzania.

Family Cordylidae

Genus ***Cordylus*** Laurenti 1768

Cordylus rivae (Boulenger 1896)

Zonurus rivae Boulenger 1896c: 8, Giacorsa (ca 04°10'N 39°50'E), Ethiopia [holotype: MSNG 28900].
Cordylus cordylus rivae; Loveridge 1944: 32.
Cordylus rivae; Broadley & Branch 2002: 20.

Material examined. 100 km E of Neghelli [BM 1977.1238-1241, NHMAA/H.774.1-3].

Distribution. Known with certainty from just two sites in the extreme south of Ethiopia, *C. rivae* is a valid species, widely separated geographically from the nearest congeneric populations in southern Kenya and not closely related to these East African taxa (Broadley & Branch 2002). Yirmed Demeke (1996) reported the presence of *Cordylus* in the Mago National Park, which would be unsurprising on geographical and ecological grounds, but we know of no voucher specimen to support the claim.

[11] The record of this species at Moyale (Spawls et al. 2002) was due to an error in documentation.

Genus ***Gerrhosaurus*** Wiegmann 1828

Gerrhosaurus flavigularis Wiegmann 1828

Gerrhosaurus flavigularis WIEGMANN 1828: 378, "Africa merid. Krebs" (= South Africa).

Material examined. Serba, Lake Zuai (E. Degen col.) [BM 1902.12.13.49]. Arba Minch [NHMAA/H.540, H.677]. Nachisar National Park [LIVM 1991.115.14]. 35 km E of Neghelli [BM 1975.2116].

Additional material. Harar [NEUMANN 1905: 397, TORNIER 1905: 381; ZMB 18199, 19782, 19800]. "Abulcassim" (= Abu el Kassim) [NEUMANN 1905: 397, TORNIER 1905: 381; ZMB 19777].

Field notes. This species has been observed, though not collected, on the W shore of Lake Langano, where it occupies burrows in grassy savanna.

Distribution. Eastern Sudan, Ethiopia and southern Somalia, southwards through Kenya and Tanzania to South Africa.

Gerrhosaurus major A. Duméril 1851

Gerrhosaurus Major A. DUMÉRIL 1851: 139, Zanzibar Island, Tanzania.
Gerrhosaurus bottegoi DEL PRATO 1895: 19, Ghinda Valley, Eritrea.
Gerrhosaurus maior var. *zechi* TORNIER 1901: 74, Kete Kratje, Togo.
Gerrhosaurus major bottegoi; PARKER 1942: 77.
Gerrhosaurus major major; BATTERSBY 1954: 245.

Material examined. 10°20'N 42°45'E [BM 1937.12.5.778]. 10°10'N 43°00'E [BM 1937.12.5.779-780]. Gambela [NHMAA/H.92]. Murri [BM 1952.1.8.84].

Additional material. Bisan River [LOVERIDGE 1936a: 64, 1942: 498; FMNH 15074].

Distribution. Ghana to Eritrea, Ethiopia and Somalia, thence southwards through Kenya and Tanzania to northeastern South Africa [12].

Family Gekkonidae

Genus ***Cnemaspis*** Strauch 1887

Cnemaspis dickersonae (Schmidt 1919)

Gonatodes dickersoni SCHMIDT 1919: 436, Medje, Ituri, Congo Kinshasa. This species was "named in honor of Miss Mary Cynthia Dickerson" and the incorrect original spelling is here emended.
Cnemaspis dickersoni; BROADLEY & HOWELL 1991: 10.

[12] D.G. BROADLEY (in litt.) comments that Ethiopian specimens from more northern localities are presumably referable to *G. m. bottegoi*, while those from the Bisan River and Murri are *G. m. major*. He suspects that molecular data might eventually show these taxa to be specifically distinct (BROADLEY 1987).

Material examined. Beletta Forest [BM 1973.3219-3220] [13].

Distribution. This species exhibits a disjunct distribution (apparently determined by the availability of suitable forest habitat) in southwestern Ethiopia, the Imatong Mountains of southern Sudan, western Uganda, the Ituri Forest in eastern Congo Kinshasa and various more or less isolated montane sites in Kenya and Tanzania.

Genus ***Hemidactylus*** Oken 1817 [14]

Hemidactylus albopunctatus Loveridge 1947

Teratolepis taylori Parker 1942: 33, Haud region at 08°15'N 46°20'E, 2100 feet, Ethiopia-Somali border [holotype: BM 1937.12.5.305/1946.8.22.75].

Hemidactylus albopunctatus Loveridge 1947: 107 (new name for *Teratolepis taylori* Parker, preoccupied by *Hemidactylus taylori* Parker 1932).

Material examined. 08°52'N 44°24'E [BM 1937.12.5.309/1946.8.22.73 (type)]. 08°42'N 44°54'E [BM 1937.12.5.308/1946.8.22.76 (type)]. 08°30'N 45°29'E [BM 1937.12.5.307/1946.8.22.77 (type)]. 08°15'N 46°20'E [BM 1937.12.5.305/1946.8.22.75, 1937.12.5.306/1946.8.22.79 (types)]. 10 km NE of Sof Omar [BM 1977.2239-2240].

Distribution. Northwestern Somalia and eastern Ethiopia [15].

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[13] Though currently catalogued in the BM as *C. quattuorseriata* (Sternfeld 1912), these specimens have been previously published by Broadley & Howell (1991) under the name *C. dickersoni*, from "southern Ethiopia (Kaffa)". Perret (1985) believed these taxa to be conspecific.

[14] Twenty species of this large and taxonomically complex genus are currently recognised in Ethiopia, after *H. laevis* Boulenger 1901 and *H. mabouia (*Moreau de Jonnés 1818) have been excluded. *Hemidactylus laevis* was recorded from Dolo by Boulenger (1912: 329), but Parker (1942) queried this identification, suggesting that the material might have been referable instead to *H. fragilis* Calabresi 1915; a species still known only from its type locality (Bur Meldac, S of Dinsor) in southern Somalia. Unfortunately, this problem has become impossible to resolve, since the specimens in question can no longer be found in MSNM. According to Lanza (1990), *H. laevis* is known only from the type locality (Gaan Libah) in northwestern Somalia. Boulenger (1896a: 550) tentatively referred a single damaged specimen (MSNG 31943) from Harar to *Hemidactylus mabouia*, but this determination was considered by Loveridge (1947) to require confirmation. Such scepticism seems well founded, in view of the fact that the species is otherwise unknown in Ethiopia and Lanza (1983, 1990) does not recognise its presence in Somalia. Spawls et al. (2002), while less than fully convinced about the specific distinction of *H. platycephalus* Peters 1854, nevertheless managed to record the sympatric occurrence of these taxa at two localities on the Ethiopia-Kenya border, though it appears that no museum specimens exist to support this contention. Examples from Murri (BM 1952.1.7.53-76) and Moyale (BM 1952.1.7.77), reported by Battersby (1954: 243) as *H. mabouia*, have proved upon re-examination to be representatives of *H. platycephalus*.

[15] A gecko from Murri (BM 1952.1.7.81), reported as *Hemidactylus albopunctatus* by Battersby (1954: 243), was reassessed by several investigators during the 1970s. To judge from notes which they deposited with the specimen, there was a clear consensus that it had been assigned to the wrong taxon, but that its poor condition made any more confident identification impossible. Since that time the specimen appears to have deteriorated still further; with no head and very little skin it seems now to be completely indeterminable.

Hemidactylus arnoldi Lanza 1978

Hemidactylus sp. PARKER 1942: 27 [BM 1937.12.5.296-297].
Hemidactylus arnoldi LANZA 1978a: 243, Guban region at 11°00'N 43°00'E, 1500 feet, Somalia [holotype: BM 1937.12.5.296].

Material examined. 11°00'N 43°00'E [BM 1937.12.5.296-297 (types)].

Distribution. Known only from the type locality in NW Somalia but, since this is located no more than 5 km from the borders of both Djibouti and Ethiopia, the species must surely be present also in these immediately adjacent territories.

Hemidactylus barodanus Boulenger 1901 [16]

Hemidactylus barodanus BOULENGER 1901: 48, "Gan Lebar" (= Gaan Libah), Somalia. PARKER 1942: 26.

Material examined. Between Belfodio and Quezan [BM 1970.1437-1438]. Shimala River [BM 1970.1439]. 10°20'N 42°25'E [BM 1937.12.5.205-206]. 10°15'N 42°40'E [BM 1937.12.5.208]. 09°55'N 43°10'E [BM 1937.12.5.210-211].

Additional material. 10°20'N 42°25'E [PARKER 1942: 26; FMNH 26320, formerly BM 1937.12.5.207].

Distribution. Known only from Ethiopia and northern Somalia, the recorded range of this taxon shows a broad discontinuity which is extraordinary and cannot readily be dismissed as an artefact of inadequate collecting. Samples from the eastern and western lowlands of Ethiopia seem morphologically very similar but, since these populations are separated by the huge massif of the central plateau, one cannot help wondering how gene flow could possibly be maintained and whether they are indeed conspecific.

Hemidactylus bavazzanoi Lanza 1978

Hemidactylus bavazzanoi LANZA 1978a: 249, ca 20 km SE of Lugh, at ca 03°40'N 42°40'E, Somalia. SPAWLS et al. 2002: 84.

Material examined. Mandera [CAS 130309].

Distribution. Currently known from only two males: the holotype and a second specimen obtained at Mandera on the Ethiopia-Kenya border.

[16] According to LANZA (1983, 1990), *H. barodanus* is possibly a junior synonym of *H. jubensis* Boulenger 1895 (as validly represented only by its male syntype: MSNG 28846).

Hemidactylus brookii Gray 1845

Hemidactylus brookii Gray 1845: 153, "Borneo".
Hemidactylus angulatus Hallowell 1852: 63, "West coast of Africa" (= Gabon).
Hemidactylus brookii angulatus; Battersby 1954: 244.

Material examined. Bomu [BM 1970.1436]. Guder River mouth [BM 1969.1175-1176]. Pokwo [NHMAA/H.599.1-4]. Gambela [BM 1972.740-743, NHMAA/H.437]. N end of Lake Margherita (= Abaya) [BM 1972.744]. W side of Lake Abaya, at Darsie River mouth [BM 1969.220-227]. Felenguai [BM 1972.739]. Arba Minch [BM 1969.211-212, 1975.2104]. SW corner of Lake Abaya [BM 1969.228-232]. S of Lake Abaya [BM 1969.210]. Nachisar National Park [LIVM 1991.115.15-16]. 95 km E of Neghelli [BM 1975.2101]. Murle [NHMAA/H.106]. Kelam [LIVM 1996.65.3]. Murri [BM 1952.1.7.82-85]. 10 km SE of Mega [BM 1972.738]. Moyale [BM 1958.1.1.80-85].

Additional material. Djildessa [Tornier 1905: 368; ZMB 19749]. Sheikh Mahomed [Boulenger 1895a: 532; ANSP 4643]. Coromma [Boulenger 1896c: 6; MSNG 28887]. Neghelli [Scortecci 1940: 141; MZUF 21190-21191]. Gondaraba [Scortecci 1943: 292; MZUF 22001-22002]. Asile [Scortecci 1943: 292; MZUF 25097]. Moyale [Scortecci 1940: 141; MZUF 21192-21193] [17].

Distribution. Senegal to Eritrea and Ethiopia, southwards to Tanzania in the east and Angola in the west (*H. b. angulatus*). The typical form is found in the Oriental region and there are introduced populations in parts of Australasia, northern South America and the Caribbean.

Hemidactylus curlei Parker 1942

Hemidactylus curlei Parker 1942: 24, Borama district at 09°55'N 43°10'E, 5000 feet, Ethiopia-Somali border [holotype: BM 1937.12.5.295/1946.8.25.41].

Material examined. 10°05'N 43°00'E [BM 1937.12.5.298-299/1946.8.23.82-83 (types)]. 09°55'N 43°10'E [BM 1937.12.5.295/1946.8.25.41, 1937.12.5.300-303/1946.8.23.78-81 (types)].

Distribution. All known specimens have been taken at the border between Ethiopia and northwestern Somalia.

Hemidactylus isolepis Boulenger 1895

Hemidactylus isolepis Boulenger 1895a: 531, Turfa (River, at 07°40'N 42°24'E), Ethiopia [holotype: BM 95.6.11.1/1946.8.23.95]. Battersby 1954: 243.
Teratolepis isolepis; Parker 1942: 35.

[17] Specimens from Neghelli (MZUF 21190-21191) and Moyale (MZUF 21192-21193) were listed by Scortecci (1940) as "*Hemidactylus* sp." Further examples from Gondaraba (MZUF 22001-22002) and Asile (MZUF 25097) were similarly treated by Scortecci (1943). He described them as having the unregenerated tail lanceolate, flattened and basally constricted; longitudinal rows of strongly carinate, trihedral tubercles on the back; a maximum snout-vent length of 60 mm; males with a series of 28-36 preanofemoral pores interrupted medially. These features strongly suggest *H. brookii*; this being the taxon with which Scortecci (1943: 294) was himself most inclined to associate the material and the name under which it is currently catalogued in MZUF.

Material examined. 09°55'N 43°10'E [BM 1937.12.5.310]. 09°50'N 43°15'E [BM 1937.12.5.311-312]. Turfa (River) [BM 95.6.11.1/1946.8.23.95 (holotype)]. NE of Lake Chamo [BM 1969.209]. Moyale [BM 1952.1.7.79].

Additional material. Harrar [Andersson 1910: 202, Lampe 1911: 153; formerly NSMW, but destroyed in 1945]. Webi (Shebeli) [Boettger 1893a: 114 (*Hemidactylus homoeolepis*), Loveridge 1947: 106 (*Hemidactylus isolepis*); specimen not found in SMF, so presumed lost]. El Dire [Scortecci 1943: 292; MSNM-Re350]. Todoniang [Roux 1936: 160; NMB 12060]. Mandera [Spawls et al. 2002: 87; CAS 130511].

Field notes. At least in southwestern Ethiopia, this species is rather common and found by day beneath rocks in dry savanna or semi-desert country. It has been identified, though not collected, at Murle; near Turmi (Fig. 9); and on the W side of Lake Stephanie.

Distribution. Ethiopia, Somalia and northern Kenya.

Hemidactylus jubensis Boulenger 1895

Hemidactylus jubensis Boulenger 1895b: 10, Upper Ganale (River at ca 05°45'N 39°30'E), Ethiopia [male syntype: MSNG 28846] [18].

Additional material. Milmil [Boulenger 1896c: 6; MSNG 28902].

Distribution. Recorded from only two localities in eastern Ethiopia, but considerably more widespread if *H. barodanus* Boulenger 1901 is a synonym, as Lanza (1983, 1990) has suggested.

Hemidactylus laticaudatus Andersson 1910

Hemidactylus laticaudatus Andersson 1910: 200, Harrar (09°18'N 42°08'E), Ethiopia [two syntypes: NSMW 581]. Lampe 1911: 153.

Material examined. 32 km E of Neghelli [BM 1977.2244].

Additional material. Vicinity of Gondar [Calabresi 1925: 101; MSNM-Re858-859]. "Fiume Caha" (= Caa River), below Gondar [Calabresi 1925: 101; MSNM-Re958-959]. "Lago Tsana" (= Lake Tana) [Calabresi 1925: 101; formerly MSNM, but apparently now missing from that collection].

Field notes. At both Gondar and Lalibela, we have observed this species inside buildings, foraging for insects around lamps at night.

[18] This taxon, described in March 1895, was based on two syntypes, of which the female (BM 95.3.5.1/1946.8.23.66) is conspecific with *H. smithi*; the latter being a species named by Boulenger in June of the same year.

Distribution. Known only from Ethiopia and a single locality (Saganeiti) in Eritrea, spanning an altitudinal range of 1570-2200 m.

Hemidactylus macropholis Boulenger 1896

Hemidactylus macropholis Boulenger 1896c: 7, Dolo (04°11'N 42°05'E), Ethiopia [syntypes: BM 96.5.30.4/1946.8.25.66, MSNG 28883]. Parker 1942: 27.

Material examined. Metahara [BM 1972.746-748]. Near Awash Falls [NHMAA/H.73]. 08°55'N 44°15'E [BM 1937.12.5.248]. 08°50'N 44°30'E [BM 1937.12.5.249]. 08°42'N 44°54'E [BM 1937.12.5.250-252]. 08°15'N 46°20'E [BM 1937.12.5.253-258]. Ado [BM 1937.12.5.247]. Wadere [BM 1957.1.15.23-24]. Dolo [BM 96.5.30.4/1946.8.25.66 (type)].

Additional material. Awash National Park [Lanza 1972: 164; formerly Awash National Park Museum, now MZUF 22202]. 08°15'N 46°20'E [Parker 1942: 27; FMNH 26306-26307]. Dolo [Boulenger 1912: 229; formerly MSNG, but apparently now missing from that collection]. Ramu [CAS 130231-130235]. Vicinity of Mandera [CAS 130512-130517, 130538-130540, 131691].

Field notes. This species is quite common in rocky, semi-desert areas of the Awash National Park but, unlike *H. laticaudatus*, it does not appear to enter buildings or be attracted to lamps at night.

Distribution. Somalia, eastern Ethiopia and eastern Kenya; possibly southern Eritrea (Vinciguerra 1931) and possibly northern Tanzania (Spawls et al. 2002).

Hemidactylus ophiolepis Boulenger 1903

Hemidactylus ophiolepis Boulenger 1903: 54, Amibarra (09°24'N 40°11'E), Ethiopia [holotype: BM 1902.12.13.2/1946.8.25.40].

Material examined. Amibarra [BM 1902.12.13.2/1946.8.25.40 (holotype)]. Ilala Sala, Awash National Park [LIVM 1995.50.1].

Additional material. Ilala Sala, Awash National Park [Lanza 1972: 161; MZUF 12288].

Field notes. This distinctively marked gecko (Fig. 10) seems to be uncommon. In semi-desert areas of the Awash National Park, it has been found on four occasions beneath isolated boulders resting on the soil of open plains, but never amongst the rocks favoured by *H. sinaitus* and *H. macropholis*.

Distribution. At present known from just two localities, both adjacent to the Awash River in Ethiopia.

Hemidactylus ophiolepoides Lanza 1978

Teratolepis ophiolepis (not Boulenger 1903); Parker 1942: 35 [BM 1937.12.5.324-326].
Hemidactylus ophiolepoides Lanza 1978b: 111, Haud region at 08°34'N 45°15'E, 2900 feet, Ethiopia-Somali border [holotype: BM 1937.12.5.324].

Material examined. 09°55'N 43°10'E [BM 1937.12.5.326 (type)]. 08°34'N 45°15'E [BM 1937.12.5.324-325 (types)].

Distribution. Known from only two sites, both located on the border between Ethiopia and northwestern Somalia.

Hemidactylus platycephalus W. Peters 1854

Hemidactylus platycephalus W. Peters 1854: 615, Mozambique Island, Mozambique [as restricted by Broadley (1977)].
Hemidactylus mabouia (not Moreau de Jonnés 1818); Battersby 1954: 243.

Material examined. Murri [BM 1952.1.7.53-76]. Moyale [BM 1952.1.7.77, 1958.1.1.61-62].

Additional material. Ramu [Spawls et al. 2002: 90; CAS 130285, -287, -290-91, -293, -297-300]. Moyale [Spawls et al. 2002: 90; CAS 129931-129932].

Distribution. Southern Somalia and the Ethiopia-Kenya border, southwards to Mozambique and Zimbabwe.

Hemidactylus robustus Heyden 1827 [19]

Hemidactylus robustus Heyden 1827: 19, Egypt, Arabia and Abyssinia [restricted to Abyssinia (= Eritrea) by Mertens (1967: 55)].
Hemidactylus parkeri Loveridge 1936b: 59, Zanzibar Island, Tanzania.
Hemidactylus turcicus (not Linnaeus 1758); Parker 1942: 27 [part].

Material examined. 10°45'N 43°00'E [BM 1937.12.5.275-277]. 10°10'N 42°50'E [BM 1937.12.5.266-267, 269-272].

Additional material. 10°20'N 42°50'E [Parker 1942: 27; MZUF 22212, formerly BM 1937.12.5.273]. 10°10'N 42°50'E [Parker 1942: 27; MZUF 22213, formerly BM 1937.12.5.268]. Mandera [Spawls et al. 2002: 92; CAS 130518-130521, 130523-130528, 132933].

Distribution. Egypt southwards to Eritrea, Djibouti, Somalia, eastern Ethiopia and extreme northeastern Kenya; also the coastal margins of the Arabian Peninsula, Iran and Pakistan; introduced to the island of Zanzibar.

[19] After many years of uncertainty, recent research on mitochondrial DNA has shown this species to be well differentiated from *H. turcicus*, that has an essentially Mediterranean distribution (E.N. Arnold in litt.).

Hemidactylus ruspolii Boulenger 1896

Hemidactylus ruspolii Boulenger 1896c: 6, between Lugh and Bardera, Somalia; Magala Umberto I (04°18'N 42°03'E), Ethiopia [syntypes: BM 96.5.30.3/1946.8.25.64, MSNG 28912] and Dolo (04°11'N 42°05'E), Ethiopia [syntypes: BM 96.5.30.1-2/1946.8.25.62-63, MSNG 28912]. Parker 1932a: 341, 1942: 23; Spawls et al. 2002: 93 [Mandera].
Hemidactylus erlangeri Steindachner 1907: 355, "Abyssinien" (= Ethiopia).

Material examined. 08°39'N 45°04'E [BM 1937.12.5.227]. 08°37'N 45°09'E [BM 1937.12.5.228-229]. 08°15'N 46°20'E [BM 1937.12.5.230-236]. Haud region (at 08°00'N 47°15'E) [BM 1931.7.20.83-84]. Ado [BM 1937.12.5.239-246]. Magala Umberto I [BM 96.5.30.3/1946.8.25.64 (type)]. Dolo [BM 96.5.30.1-2/1946.8.25.62-63 (types)]. Mandera [CAS 130391, 130506-130508].

Additional material. 08°15'N 46°20'E [Parker 1942: 23; FMNH 26321-26322, formerly BM 1937.12.5.237-238]. Dolo [Boulenger 1912: 229; MSNG 29206]. Ramu (Spawls et al. 2002: 93; CAS 130238-130240, 130242].

Distribution. Somalia, southeastern Ethiopia and Kenya.

Hemidactylus sinaitus Boulenger 1885

Hemidactylus sinaitus Boulenger 1885: 126, "Mount Sinai" [but almost certainly erroneous, according to Arnold (1977)].

Material examined. Mille River [BM 1974.3931]. Kereyu Lodge, Awash National Park [LIVM 1995.50.2].

Additional material. Djeldabal [Tornier 1905: 368; ZMB 19744]. "Daba-as" (= Dabahs River) [Tornier 1905: 368; ZMB 19746, MCZ-R21930]. Bussa [Tornier 1905: 368; ZMB 18188]. Artu [Tornier 1905: 368; ZMB 19747]. N slope of Mt Fantalle [Lanza 1972: 164; MZUF 12257-12260]. Awash National Park, near entrance [Lanza 1972: 164; MZUF 12252].

Distribution. The precise geographical range of *H. sinaitus* is difficult to establish, mainly because the species is so easily confused with *H. robustus* [20]. It appears to be present in the lowlands of northeastern Ethiopia and northern Somalia, has been reported from the coasts of Djibouti, Eritrea and Sudan (Lanza 1983, 1990) and there is a single record from the Nile Valley at Wadi Halfa (Schätti & Desvoignes 1999). In southern Yemen, the species is known with certainty only from the vicinity of Aden and Shuqrah (Schätti & Desvoignes 1999).

[20] Loveridge (1947: 146), who considered both taxa to be conspecific with *H. turcicus* (Linnaeus 1758), noted that most individuals show some combination of their supposedly distinguishing characters. At our request, B. Lanza has very kindly re-examined MZUF 12257-12260 from the Awash National Park and confirmed (in litt.) that he still believes these specimens to be *H. sinaitus*. He acknowledges, however, that such material exhibits some diagnostic features in common with *H. robustus* and comments that "we cannot exclude the occurrence of hybrids".

Hemidactylus smithi Boulenger 1895

Hemidactylus smithi Boulenger 1895a: 532, (Webi) Shebeli (at 07°18'N 42°05'E), Ethiopia [holotype: BM 95.6.11.2/1946.8.23.65]. Parker 1942: 30.
Hemidactylus jubensis Boulenger 1895b: 10 [part: BM 95.3.5.1/1946.8.23.66].
Hemidactylus smithii; Parker 1932a: 341.

Material examined. Axum [BM 1972.745]. 08°32'N 45°24'E [BM 1937.12.5.217]. Haud region (at 08°00'N 47°22'E) [BM 1931.7.20.85-86]. Haud region (at 08°00'N 48°00'E) [BM 1931.7.20.88-89]. (Webi) Shebeli (Donaldson Smith, 5.IX.1894) [BM 95.6.11.2/1946.8.23.65 (holotype)]. Upper Ganale (River) [BM 95.3.5.1/1946.8.23.66 (syntype of *Hemidactylus jubensis*)].

Distribution. Somalia and eastern Ethiopia.

Hemidactylus somalicus Parker 1932

Hemidactylus somalicus Parker 1932a: 344, Sol Haud, 10°N 49°E, 3000 feet, Somalia.

Material examined. 08°00'N 47°34'E [BM 1931.7.20.145/1946.8.25.75 (paratype)].

Distribution. Northern Somalia, including the above specimen taken at the border with Ethiopia.

Hemidactylus squamulatus Tornier 1896

Hemidactylus squamulatus Tornier 1896: 10, Kakoma, Tanzania.

Material examined. 10 km NE of Sof Omar [BM 1977.2242-2243]. 100 km E of Neghelli [BM 1977.2241]. 25 km SW of Neghelli [BM 1975.2102]. 20 km N of Malca Guba, on Daua Parma to Neghelli road [BM 1975.2103].

Distribution. Southern Ethiopia and southern Somalia, southwards to central Tanzania.

Hemidactylus tropidolepis Mocquard 1888

Hemidactylus tropidolepis Mocquard 1888: 113, "Pays Çomalis" (i.e. Somalia).
Teratolepis tropidolepis; Parker 1942: 36.

Material examined. 08°21'N 45°58'E [BM 1937.12.5.323]. 08°19'N 46°04'E [BM 1937.12.5.322]. 08°17'N 46°09'E [BM 1937.12.5.316-321]. 08°00'N 45°50'E [BM 1937.12.5.315]. Ado [BM 1937.12.5.313-314].

Additional material. 08°17'N 46°09'E [Parker 1942: 36; FMNH 26316-26317]. Dolo [Boulenger 1912: 330; formerly MSNG, but now apparently missing from that collection].

Distribution. Somalia and adjacent parts of Ethiopia; probably also eastern Kenya according to Spawls et al. (2002).

Hemidactylus yerburii Anderson 1895

Hemidactylus yerburii Anderson 1895: 640, Aden and Hayt al-Lim, Yemen.
Hemidactylus turcicus (not Linnaeus 1758); Parker 1942: 27 [part: BM 1937.12.5.274].
Hemidactylus yerburyi pauciporosus Lanza 1978a: 259, Galgala, Somalia.

Material examined. 09°55'N 43°10'E [BM 1937.12.5.274 (paratype of *pauciporosus*)].

Distribution. Northern Somalia, including a specimen taken at the border with Ethiopia; also southwestern Saudi Arabia, Yemen and southern Oman.

Genus ***Hemitheconyx*** Stejneger 1893

Hemitheconyx taylori Parker 1930

Hemitheconyx taylori Parker 1930: 603, Hegligab district, Somalia. Parker 1942: 37.

Material examined. 08°14'N 46°19'E [BM 1937.12.5.376]. Dagah Bur [NHMAA 2000.04-05].

Field notes. The animals from Dagah Bur (Fig. 11), like others observed about 70 km to the east at Aware, were found by day in deep burrows (S. Taye pers. comm.). Parker (1942) reported that R.H.R. Taylor had obtained most of his specimens from beneath stones, though he also noted that "three examples … were found together 3 feet underground where they were presumably aestivating through the dry season". Several animals that we maintained in captivity were not heard to "emit a coughing noise", such as described by Parker, although they did hiss when disturbed. Juveniles are more vividly coloured than adults, being bright orange and black.

Distribution. Known only from northern Somalia and two adjacent localities in eastern Ethiopia.

Genus ***Holodactylus*** Boettger 1893

Holodactylus africanus Boettger 1893

Holodactylus africanus Boettger 1893a: 114, Abdallah (region at ca 06°10'N 43°20'E), Ethiopia [holotype: SMF 59442]. Parker 1932a: 350 1942: 37, Battersby 1954: 244; Spawls et al. 2002: 74 [Mandera].

Material examined. 10°40'N 42°35'E [BM 1937.12.5.349]. 08°52'N 44°24'E [BM 1937.12.5.337]. 08°32'N 45°24'E [BM 1937.12.5.338]. 08°20'N 46°00'E [BM 1937.12.5.339-347]. 08°15'N 46°20'E [BM 1937.12.5.348]. Haud region (at 08°00'N 48°00'E) [BM 1931.7.20.267-268]. Murri [BM 1952.1.7.87-88, 90-91]. Mandera [CAS 130823].

Additional material. Gumboworen [TORNIER 1905: 370; ZMB 18140]. Dabanac [BOULENGER 1896c: 8; MSNG 28884]. Neghelli [SCORTECCI 1940: 140; MZUF 636].

Distribution. Eastern Ethiopia, Somalia, Kenya and northern Tanzania.

Genus ***Homopholis*** Boulenger 1885

Homopholis fasciata (Boulenger 1890)

Platypholis fasciata BOULENGER 1890a: 81, Mombasa, Kenya.

Material. Upper Ganale (River) [BOULENGER 1895b: 11; MSNG 28843].

Distribution. Ethiopia, Somalia, Kenya and Tanzania. The species appears to be uncommon, or at least sporadic in occurrence, throughout its recorded range.

Genus ***Lygodactylus*** Gray 1864

Lygodactylus grandisonae Pasteur 1962

Lygodactylus somalicus (not Loveridge 1935); BATTERSBY 1954: 244.
Lygodactylus grandisonae PASTEUR 1962: 613, Murri (04°14'N 40°42'E), 900 m, Ethiopia-Kenya border [holotype: BM 1952.1.8.10].

Material examined. Murri [BM 1952.1.7.98-99, 1952.1.8.1-15, 18-21, 24 (types)] [21].

Additional material. Murri [BATTERSBY 1954: 244, PASTEUR 1962: 613; MCZ-R53591-53592, formerly BM 1952.1.8.16-17 (types)].

Distribution. Known only from the type locality.

Lygodactylus gutturalis (Bocage 1873)

Hemidactylus gutturalis BOCAGE 1873: 211, Bissau, Guinea-Bissau.

Material examined. Godare [BM 1976.1662-1663]. Shashamane [BM 1975.2105-2106]. Felenguai [BM 1972.749].

[21] It is possible that BM 1975.2107 from 95 km E of Neghelli represents *Lygodactylus grandisonae*, but this remains uncertain because scattered dark spots on the throat are not arranged to create any detectable longitudinal pattern.

Field notes. At Jinka, this species is syntopic with *L. keniensis* but, while the latter occupies smaller trees and bushes in open situations, *L. gutturalis* was observed to favour the trunks and larger branches of big trees in deep shade.

Distribution. Senegal to Ethiopia, Uganda, Rwanda, Burundi and NW Tanzania.

Lygodactylus keniensis Parker 1936

Lygodactylus picturatus keniensis PARKER 1936: 602, Lodwar, Kenya. BATTERSBY 1954: 244.

Material examined. Debre Zeit [NMZB 11792-11796]. E shore of Lake Awasa [BM 1973.3223-3224]. Felenguai [BM 1972.750]. W side of Lake Abaya, at Darsie River mouth [BM 1969.215-216]. Arba Minch [BM 1969.214]. SW of Lake Abaya [BM 1969.213, 217-219]. Nachisar National Park [LIVM 1991.115.17]. Mui [BM 1986.672-674]. Murri [BM 1952.1.7.92-93, 95-96)]. Moyale [BM 1952.1.7.28].

Additional material. Upper Ganale (River) [BOULENGER 1895b: 11 (*Lygodactylus picturatus*), LOVERIDGE 1947: 228 (*Lygodactylus picturatus keniensis*); MSNG 28842]. Neghelli [SCORTECCI 1940: 142 *(Lygodactylus picturatus gutturalis*), LOVERIDGE 1947: 228 (*Lygodactylus picturatus keniensis*); formerly MSNM, but now apparently missing from that collection]. Murle [SCORTECCI 1943: 294 (*Lygodactylus picturatus picturatus*); MZUF 21987] [22]. Bourille [ROUX 1936: 161 (*Lygodactylus picturatus picturatus*), LOVERIDGE 1947: 228 (*Lygodactylus picturatus keniensis*), PASTEUR 1960: 1443 (*Lygodactylus picturatus keniensis*); MHNP 37.88-89]. Sagan (River) [SCORTECCI 1943: 294 (*Lygodactylus picturatus picturatus*); MZUF 21993-21994][22]. ?El Meti [SCORTECCI 1943: 294 (*Lygodactylus picturatus picturatus*); formerly MSNM, but now apparently missing from that collection]. Caschei (River) [SCORTECCI 1943: 294 (*Lygodactylus picturatus picturatus*); MZUF 21986][22]. Moyale [SCORTECCI 1940: 142 *(Lygodactylus picturatus gutturalis*), LOVERIDGE 1947: 228 (*Lygodactylus picturatus keniensis*); formerly MSNM, but now apparently missing from that collection].

Field notes. While not recorded at altitudes much above 1600 m in Kenya (SPAWLS et al. 2002), this species reaches 2000 m at both Debre Zeit and Felenguai in Ethiopia. It is syntopic with *L. gutturalis* at both Felenguai and Jinka, though field observations at the latter site indicate that the two taxa may be ecologically isolated (as described above).

Distribution. Ethiopia, southern Somalia and Kenya.

Lygodactylus somalicus Loveridge 1935

Lygodactylus somalicus LOVERIDGE 1935: 195, Bar Madobe, Somalia. PARKER 1942: 39; BATTERSBY 1955: 149.
Lygodactylus somalicus annectens LOVERIDGE 1935: 197, Buran district, Somalia.
Lygodactylus somalicus battersbyi PASTEUR 1962: 612, Haud region at 08°15'N 46°20'E, 700 m, Ethiopia-Somali border [holotype: BM 1937.12.5.331].

[22] SCORTECCI's (1943) material from Murle, Sagan and Caschei is listed in MZUF as *Lygodactylus p. keniensis*.

Material examined. 08°52'N 44°20'E [BM 1937.12.5.327-329]. 08°45'N 44°44'E [BM 1937.12.5.330]. 08°30'N 46°25'E [BM 1937.12.5.333-334]. 08°15'N 46°20'E [BM 1937.12.5.331-332 (types of *battersbyi*)]. Murri [BM 1954.1.2.65].

Additional material. 08°30'N 46°25'E [PARKER 1942: 39; FMNH 26312-26313, PASTEUR 1962: 612; FMNH 26312]. Odamuda [TORNIER 1905: 368 (*Lygodactylus conradti*), LOVERIDGE 1947: 201 (*Lygodactylus somalicus annectens*); ZMB 19797]. Between Badditu and Dime [BOULENGER 1898a: 716 (*Lygodactylus capensis*), LOVERIDGE 1947: 201 (*Lygodactylus somalicus annectens*); formerly MSNG, but now apparently missing from that collection [23]]. Dolo [BOULENGER 1912: 330 (*Lygodactylus capensis*), LOVERIDGE 1947: 201 (*Lygodactylus somalicus annectens*); formerly MSNG, but now apparently missing from that collection]. Moyale [CAS 129947, 129950, 129959].

Distribution. Ethiopia, Somalia and northern Kenya.

Genus ***Pristurus*** Rüppell 1835

Pristurus crucifer (Valenciennes 1861)

Gymnocephalus crucifer VALENCIENNES 1861: 433, "Abyssinie" [= Eritrea].
Pristurus crucifer; PARKER 1942: 43; SPAWLS et al. 2002: 116.

Material examined. 10°20'N 42°45'E [BM 1937.12.5.164]. 10°20'N 42°50'E [BM 1937.12.5.165-170]. 09°55'N 43°10'E [BM 1937.12.5.171-173]. 09°50'N 43°15'E [BM 1937.12.5.174]. 09°50'N 43°20'E [BM 1937.12.5.178-181]. 08°52'N 44°24'E [BM 1937.12.5.182]. 08°45'N 44°44'E [BM 1937.12.5.183]. 08°15'N 46°20'E [BM 1937.12.5.184-186, 188]. Ado [BM 1937.12.5.175-177]. Mandera [CAS 130332-36, -38-40, -43-44, -48, -53-54, -58-59, -61, -64-65].

Additional material. Gumboworen [TORNIER 1905: 367; ZMB 19756]. Artu [TORNIER 1905: 367; ZMB 19757]. Between Hargeisa and Milmil (Donaldson Smith, 22.VII.1894) [BOULENGER 1895a: 531; ANSP 4632]. Milmil [BOULENGER 1896c: 6; MSNG 28904 (part)]. Elba (River) [BOULENGER 1896c: 6; MSNG 28904 (part)]. Confluence of the Web and Ganana (= Ganale) Rivers [BOULENGER 1896d: 16; MSNG 28572].

Distribution. Eritrea, eastern Ethiopia, Somalia and extreme northeastern Kenya; also coastal areas of western Yemen.

Pristurus flavipunctatus Rüppell 1835

Pristurus flavipunctatus RÜPPELL 1835: 17, Massaua, Eritrea. PARKER 1942: 41.
Pristurus percristatus BOULENGER 1896a: 547, Ghinda and Emberemi, Eritrea; Neberet Valley, Sudan. PARKER 1932a: 347.

Material examined. Mille River [BM 1974.3932-3935]. 09°50'N 43°20'E [BM 1937.12.5.139-144]. 08°55'-08°15'N 44°20'-46°25'E [BM 1937.12.5.150-157]. Bohodle [BM

[23] It appears that data relating to this specimen may have been mistakenly transferred to another lizard, labelled *Hemidactylus mabouia*; a species which BOULENGER (1898a) did not record from Ethiopia.

1937.12.5.161-162]. Haud region (at 08°00'N 47°00'E) [BM 1931.7.20.157]. Haud region (at 08°00'N 47°22'E) [BM 1931.7.20.158]. Ado [BM 1937.12.5.147-148].

Additional material. Amhara (region) [BOULENGER 1909: 193; MSNG 27777]. Milmil [BOULENGER 1895a: 531; ANSP 4634]. Dolo [BOULENGER 1912: 329; MSNG 29173].

Distribution. Sudan, Eritrea, Djibouti, eastern Ethiopia and Somalia; also coastal areas of the southwestern Arabian Peninsula.

Pristurus rupestris Blanford 1874

Pristurus rupestris BLANFORD 1874: 454, Muscat, Oman [as restricted by SCHMIDT (1952)]. PARKER 1942: 42.

Material examined. 10°05'N 43°00'E [BM 1937.12.5.190-191]. 09°55'N 43°10'E [BM 1937.12.5.192, 195-198]. 09°50'N 43°25'E [BM 1937.12.5.199-201].

Distribution. Northern Somalia (including the border with Ethiopia), Djibouti, islands in the Dahlac Archipelago of Eritrea; also coastal regions of the Arabian Peninsula and Iran.

Pristurus somalicus Parker 1932

Pristurus somalicus PARKER 1932a: 349, Sol Haud, 10°27'N 49°E, 2500 feet, Somalia [24].
Pristurus phillipsi (not Boulenger 1895); PARKER 1942: 43 [part: including BM 1937.12.5.189].

Material examined. 08°15'N 46°20'E [BM 1937.12.5.189].

Distribution. Somalia, including a single specimen taken at the border with Ethiopia.

Genus ***Ptyodactylus*** Goldfuss 1820

Ptyodactylus ragazzii Anderson 1898

Ptyodactylus hasselquistii var. *ragazzii* ANDERSON 1898: 69, Ghinda, Eritrea.
Ptyodactylus hasselquisti (not Donndorff 1798); PARKER 1942: 44.

[24] SCORTECCI (1935), PARKER (1942), LOVERIDGE (1947), LANZA (1983, 1990) and others have all treated *Pristurus somalicus* as a synonym of *P. phillipsii* Boulenger 1895. However, the differences between these taxa, first documented by PARKER (1932a), are very evident when their types are compared and, since the two forms are syntopic (PARKER 1942), there seems to be good reason for considering them distinct. This being the case, the correct name for BM 1937.12.5.189, obtained at the Ethiopia-Somali border, is clearly *P. somalicus*.

Material examined. 10°30'N 42°40'E [BM 1937.12.5.131-133].

Additional material. Gumboworen [TORNIER 1905: 368; ZMB 19773]. Fulla Valley [TORNIER 1905: 368; ZMB 18182].

Distribution. Algeria, Mali and Ghana, eastwards to Sudan, Eritrea, Djibouti and northwestern Somalia, including the border with Ethiopia.

Genus ***Stenodactylus*** Fitzinger 1826

Stenodactylus sthenodactylus (Lichtenstein 1823)

Ascalabotes sthenodactylus LICHTENSTEIN 1823: 102, Egypt and "Nubia" (= Sudan).
Stenodactylus stenodactylus zavattarii SCORTECCI 1943: 294, Elolo (= Banya, 04°23'N 36°14'E), Lake Turkana, Kenya.

Distribution. Mauretania, eastwards to Egypt, Sudan, Eritrea (almost certainly western Ethiopia, though not yet recorded from this country) and northwestern Kenya; also Israel and Syria.

Genus ***Tarentola*** Gray 1825

Tarentola annularis (I. Geoffroy 1827)

Gecko annularis I. GEOFFROY 1827: 130, Egypt [25].
Tarentola annularis quadraticauda TORNIER 1905: 368, "Warabot" (= Warabod), Somalia [as restricted by LOVERIDGE (1947: 324)].
Tarentola annularis; PARKER 1942: 44.

Material examined. 11°00'N 43°00'E [BM 1937.12.5.360]. 10°35'N 42°40'E [BM 1937.12.5.356]. 10°30'N 42°40'E [BM 1937.12.5.353-355]. 10°10'N 42°50'E [BM 1937.12.5.357]. 10°10'N 43°00'E [BM 1937.12.5.358-359]. 30 km E of Dire Dawa [NHMAA/H.549]. Near Bitiju [BM 1961.1773]. Filwoha [BM 1972.752-753]. NE slope of Mt Fantalle [BM 1969.1177-1178]. Mt Fantalle crater [NHMAA/H.626]. S side of Mt Fantalle [NHMAA/H.745.1-2]. Metahara [BM 1972.751, NHMAA 2000.41]. Awash National Park entrance [BM 1973.3225-3227]. "Halla Dag" (= Alaideghi) Plain [BM 1902.12.13.3-9].

Additional material. Gumboworen [TORNIER 1905: 368; ZMB 19780 (type of *quadraticauda*)]. Lasman [TORNIER 1905: 368; ZMB 19781, 19811 (types of *quadraticauda*)]. Djeldabal [TORNIER 1905: 368; ZMB 19812 (type of *quadraticauda*)]. Bussa [TORNIER 1905: 368; ZMB 19772, 19813 (types of *quadraticauda*)]. Harrar [ANDERSSON 1910: 202; formerly NSMW, but destroyed in 1945]. 18 km (N of) Camp Awash [LANZA 1972: 164; MZUF 12236, 12240]. 1-2 km W of Metahara [LANZA 1972: 164; MZUF 12256, 12271-12279, 12294]. Sheikh Hussein [BOULENGER 1896b: 213 (*Tarentola ephippiata*); ANSP 4635].

[25] LOVERIDGE (1947) and LANZA (1983) give 1823 as the date of publication, while LANZA (1990) gives 1809. TOLLITT (1986) notes some evidence that pp. 115-120 (written by E. Geoffroy) may have been issued as early as 1809, but cites 1827 for pp. 121-160, subsequently contributed by his son.

Field notes. A conspicuously large gecko (sometimes exceeding 20 cm in length), usually easily recognised by having in the shoulder region four prominent white spots arranged in the form of a square (Fig. 12). Although most commonly found in rocky areas, the species survives in open country if there are cracks in the earth or isolated boulders where it can hide. At night it may forage for insects around lamps.

Distribution. Mauretania, eastwards to Egypt, Sudan, Eritrea, Djibouti, eastern Ethiopia and northern Somalia.

Genus ***Tropiocolotes*** Peters 1880

Tropiocolotes somalicus Parker 1942

Tropiocolotes somalicus Parker 1942: 46, 10°20'N 42°50'E, 3000 feet, Ethiopia-Somali border [holotype: BM 1937.12.5.693/1946.8.23.55].

Material examined. 10°20'N 42°50'E [BM 1937.12.5.693/1946.8.23.55 (holotype)].

Distribution. Northwestern Somalia, including one specimen (the holotype) taken at the border with Ethiopia.

Family Lacertidae

Genus ***Heliobolus*** Fitzinger 1843

Heliobolus neumanni (Tornier 1905)

Eremias neumanni Tornier 1905: 376, Barssa Valley, Male region (at ca 05°55'N 37°00'E), Ethiopia [holotype: formerly ZMB 18356, but now apparently lost (Bauer & Günther 1995: 55)]. Neumann 1905: 396.

Material examined. NE corner of Lake Chamo [BM 1969.260].

Distribution. Ethiopia, Kenya and Tanzania; but strangely sporadic in occurrence and recorded only from very few, widely scattered localities (Spawls et al. 2002).

Heliobolus spekii (Günther 1872)

Eremias spekii Günther 1872: 381, Unyamwezi, Tanzania.
Eremias sextaeniata Stejneger 1893: 718, Tana River, Kenya. Boulenger 1896b: 214, 1898a: 718 [part: BM 98.1.28.5], 1912: 330 [part: BM 1912.6.6.7].

Eremias spekii sextaeniata; PARKER 1932a: 354, 1942: 65.
Heliobolus spekii; SPAWLS et al. 2002: 177 [Mandera].

Material examined. 09°55'N 43°05'E [BM 1937.12.5.380-381]. Bisidima River, E of Harar [BM 1969.1243]. Dakhato (= Dacata) River [BM 1937.12.5.382-387]. 08°20'N 46°00'E [BM 1937.12.5.389]. 08°15'N 46°10'E [BM 1937.12.5.390]. 08°15'N 46°20'E [BM 1937.12.5.391-393]. Daghabur [BM 1937.12.5.388]. Haud region (at 08°00'N 47°27'E) [BM 1931.7.20.312]. Haud region (at 08°00'N 47°34'E) [BM 1931.7.20.313]. Haud region (at 08°00'N 48°00'E) [BM 1931.7.20.314-322]. 10 km NE of Sof Omar [BM 1977.2246]. "Boran country" (= Borana region: Donaldson Smith, 24.IV.1895) [BM 95.12.31.13]. Dolo [BM 1912.6.6.7]. Between Sancurar and Amarr [BM 98.1.28.5]. W of Juba River (Donaldson Smith, 19.III.1895 = Sancurar) [BM 95.12.31.12]. Mandera [CAS 130465-66, -68, -70, -73, -75-76, -78, -80, -86, -88, -93-94, 130501].

Additional material. Harar [NEUMANN 1905: 396, TORNIER 1905: 377; ZMB 19806-19807; ANDERSSON 1910: 202; formerly NSMW, but destroyed in 1945]. "Assabolk" (? = Assabot) [SCORTECCI 1930: 10; MZUT-R2253]. Arussi Galla region [NEUMANN 1905: 396, TORNIER 1905: 377; ZMB 19795]. Laku [BOULENGER 1896c: 9; MSNG 28908 (part)]. Barssa River [NEUMANN 1905: 396, TORNIER 1905: 377; ZMB 19796]. Schambala River [NEUMANN 1905: 396, TORNIER 1905: 377; ZMB 19778]. S shore of "Gandjule-See" (= Lake Chamo) [NEUMANN 1905: 396, TORNIER 1905: 377; ZMB 19805]. Gardulla [NEUMANN 1905: 396, TORNIER 1905: 377; ZMB 18197]. Gardulla Mt [TORNIER 1905: 377; formerly ZMB, but now presumed lost]. Web (Ueb River) district [BOULENGER 1896c: 9; MSNG 28908 (part)]. Between Dime and (the N end of) Lake Rudolf [BOULENGER 1898a: 718; formerly MSNG, but now apparently missing from that collection]. Murle [SCORTECCI 1943: 299; MSNM-Re2132]. Sagan (River) [SCORTECCI 1943: 299; MSNM-Re2131]. Gondaraba [SCORTECCI 1943: 299; MSNM-Re2133]. Asile [SCORTECCI 1943: 299; MSNM-Re2134]. Caschei (River) [SCORTECCI 1943: 299; MSNM-Re2130]. Dolo [BOULENGER 1912: 330; MSNG 28220].

Distribution. Southern Sudan, southern Ethiopia and Somalia, southwards through Kenya and Uganda to central Tanzania.

Genus ***Latastia*** Bedriaga 1884

Latastia boscai Bedriaga 1884

Latastia Boscai BEDRIAGA 1884: 322, Rugdeia Sogheira (09°40'N 41°02'E), Ethiopia [syntype: MSNG 10118] and Keren, Eritrea. PARKER 1932a: 355.
Latastia boscae; BOULENGER 1912: 330.
Latastia wachei WERNER 1913: 16, Dire Daua region (ca 09°35'N 41°52'E), Ethiopia [syntypes: ZMB 29458, 29460]; 70 km NW of Harrar (ca 09°45'N 41°45'E), Ethiopia [syntypes: ZMH-R01224-01225].
Latastia boscai boscai; PARKER 1942: 70; ARILLO et al. 1967: 113.
Latastia boscai arenicola PARKER 1942: 71, Haud region at 08°15'N 46°20'E, 2100 feet, Ethiopia-Somali border [syntypes: BM 1937.12.5.596-597/1946.9.2.96-97]; Haud region at 07°55'N 47°50'E, 1900 feet, Ethiopia [syntypes: BM 1931.7.20.343-344/1946.9.4.92-93]; Ado, 07°20'N 45°15'E, 2100 feet, Ethiopia [syntype: BM 1937.12.5.595/1946.9.2.98]; Dolo (04°11'N 42°05'E), Ethiopia [syntype BM 1912.6.6.6/1946.9.4.94].

Material examined. 10°30'N 42°40'E [BM 1937.12.5.570-572]. 10°10'N 42°50'E [BM 1937.12.5.573-576]. 10°10'N 43°10'E [BM 1937.12.5.585]. 10°00'N 43°00'E [BM 1937.12.5.577-579]. 09°55'N 43°10'E [BM 1937.12.5.582-584]. 09°50'N 43°25'E [BM 1937.12.5.590-594].

08°15'N 46°20'E [BM 1937.12.5.596-597/1946.9.2.96-97 (types of *arenicola*)]. 07°55'N 47°50'E [BM 1931.7.20.343-344/1946.9.4.92-93 (types of *arenicola*)]. Ado [BM 1937.12.5.595/1946.9.2.98 (type of *arenicola*)]. Dolo [BM 1912.6.6.6/1946.9.4.94 (type of *arenicola*)].

Additional material. 09°50'N 43°20'E [PARKER 1942: 70; MCZ-R49126-49127, formerly BM 1937.12.5.588-589]. Dolo [BOULENGER 1912: 330, ARILLO et al. 1967: 114; MSNG 28230].

Distribution. Eritrea, Djibouti, eastern Ethiopia and Somalia.

Latastia caeruleopunctata Parker 1935

Latastia longicaudata (not Reuss 1834); BOULENGER 1896b: 215 [part: BM 95.12.31.10].
Latastia longicaudata revoili (not Vaillant 1882); PARKER 1932a: 356 [part: 1931.7.20.347-351], 1942: 68 [part: BM 1931.7.20.347-351]; BATTERSBY 1954: 245; ARILLO et al. 1967: 125 [part: BM 1931.7.20.347-351].
Latastia caeruleopunctata PARKER 1935: 527, Haud region at 08°37'N 45°09'E, 3050 feet, Ethiopia-Somali border [holotype: BM 1936.6.12.3/1946.9.2.77].
Latastia longicaudata caeruleopunctata; PARKER 1942: 69; ARILLO et al. 1967: 128.

Taxonomic notes. There seem to be good reasons to follow LANZA (1990) and treat *L. caeruleopunctata* as a species distinct from *L. longicaudata,* characterised by the presence of 2-3 rows of bright blue spots on each flank and sometimes with ocelliform markings of similar colour on the back. At least in Ethiopia, if blue spots are seen in *L. longicaudata* they never occupy more than a single row along the flank. Some of the specimens that PARKER (1932a: 356) assigned to *Latastia longicaudata revoili* (BM 1931.7.20.347-351) seem remarkably similar to the series (BM 1937.12.5.536-542, 544-560) that he later (PARKER 1942: 69) identified as *L. l. caeruleopunctata*; as indeed do the examples from Murri and near Moyale that BATTERSBY (1954) reported under the name *L. l. revoili*.

ARILLO et al. (1967) examined the holotype of *Latastia carinata* (Peters 1874), described from Baraawe in southern Somalia, and found it to have a colour pattern "extremely similar" to that of *L. caeruleopunctata*; these taxa apparently differing only in the size and number of dorsal scales. PARKER (1935) reported 55-70 mid-body scale rows in the type series of *caeruleopunctata*, while ARILLO et al. observed 51 rows in the holotype of *carinata* and concluded that the separation of these taxa appeared somewhat dubious. Nevertheless, LANZA (1990) listed *L. carinata* from coastal regions of southern Somalia, while recognising *L. caeruleopunctata* as a distinct species occuring further north. On this evidence, material from Djildessa, reported as *L. carinata* by NEUMANN (1905) and TORNIER (1905), seems most likely to represent *L. caeruleopunctata*.

Material examined. 08°42'N 44°54'E [BM 1937.12.5.544-545]. 08°37'N 45°09'E [BM 1936.6.12.3/1946.9.2.77 and 1936.6.12.8/1946.9.4.97 (types)]. 08°34'N 45°18'E [BM 1936.6.12.9-10/1946.9.4.98-99 and 1936.6.12.11-14/1946.9.5.1-4 (types)]. 08°24'N 44°00'E [BM 1936.6.12.5/1946.9.4.96 and 1936.6.12.6/1946.9.2.79 (types)]. 08°15'N 46°20'E [BM 1937.12.5.546-560]. 08°13'N 43°30'E [BM 1936.6.12.19/1946.9.2.80 (type)]. 08°10'N 43°40'E [BM 1936.6.12.15-16/1946.9.5.5-6 (types)]. 08°00'N 48°00'E [BM 1931.7.20.347-351]. 07°20'N 45°15'E [BM 1937.12.5.536-542]. SW of Uardere [BM 1973.3240]. Murri [BM 1952.1.8.45-67, 70-73]. Between (Webi) Shebeli and Juba River (Donaldson Smith, 28.II.1895) [BM 95.12.31.10]. 10 miles (17 km) E of Moyale [BM 1952.1.8.74].

Additional material. Djildessa [NEUMANN 1905: 395 (*Latastia carinata*), TORNIER 1905: 375 (*Latastia carinata*); ZMB 19793-19794]. 08°10'N 43°40'E [PARKER 1935: 527; FMNH 26308-26309, formerly BM 1936.6.12.17-18 (types)]. 08°00'N 45°50'E [PARKER 1942: 69; formerly BM, but never catalogued by this institution and now apparently missing]. Mandera [CAS 130378].

Distribution. Somalia and southeastern Ethiopia, at least as far south as the Kenyan border.

Latastia doriai Bedriaga 1884

Latastia Doriai BEDRIAGA 1884: 313, Rugdeia Sogheira (09°40'N 41°02'E), Ethiopia [syntypes: BM 85.6.15.2-4/1946.9.2.85-87, MSNG 28250].
Latastia longicaudata doriai; PARKER 1942: 69.
Latastia doriai doriai; ARILLO et al. 1967: 137.

Material examined. Batie [BM 1974.3939-3940]. 10°30'N 42°40'E [BM 1937.12.5.535]. 10°20'N 42°50'E [BM 1968.519]. 10°00'N 43°00'E [BM 1968.520]. 09°55'N 43°05'E [BM 1937.12.5.531-532]. 09°55'N 43°10'E [BM 1937.12.5.533-534]. 09°50'N 43°10'E [BM 1937.12.5.526-529]. 09°50'N 43°20'E [BM 1937.12.5.530]. Rugdeia Sogheira [BM 85.6.15.2-4/1946.9.2.85-87 (types)]. "Taddeka Mullka" (= Tadeccia Melca) [BM 1902.12.13.40-41]. Mt Fantalle crater [NHMAA/H.627]. "Joba" (= Choba) [BM 1902.12.13.39].

Additional material. ?"Daba-as" (= Dabahs River) [NEUMANN 1905: 393 (*Latastia longicaudata*), TORNIER 1905: 373 (*Latastia longicaudata*); ZMB 19822] [26].

Distribution. Eritrea, Djibouti, northwestern Somalia and adjacent regions of Ethiopia.

Latastia longicaudata (Reuss 1834)

Lacerta longicaudata REUSS 1834: 29, Massawa, Eritrea [as designated by SCHÄTTI (2001)].
Eremias revoili VAILLANT 1882: 20, "Pays Çomalis" (i.e. Somalia).
Latastia longicaudata; BOULENGER 1896b: 215 [part: BM 95.12.31.11].
Latastia longicaudata longicaudata; PARKER 1942: 68; ARILLO et al. 1967: 117.
Latastia longicaudata revoili; PARKER 1942: 68 [part: excluding BM 1931.7.20.347-351]; ARILLO et al. 1967: 121 [part: excluding BM 1931.7.20.347-351].
L(atastia) longicaudata lanzai ARILLO, BALLETO & SPANÒ 1967: 128, Dinsor, Somalia.

Material examined. Sardo [BM 1974.3942-3943]. Mille River [BM 1974.3941]. 10°30'N 42°40'E [BM 1937.12.5.562]. 10°30'N 42°45'E [BM 1937.12.5.563-565]. 10°00'N 43°00'E [BM 1937.12.5.566]. Near Mugher River mouth [BM 1969.1244-1248]. Awash Falls [NHMAA/H.72]. Kereyu Lodge, Awash National Park [NHMAA 2000.02, 2000.47]. Arba Minch [BM 1969.247, 250]. SW corner of Lake Abaya [BM 1969.246, 249]. NW corner of Lake Chamo [BM 1969.245, 248]. NE shore of Lake Chamo [BM 1969.251-253]. 95 km E of Neghelli [BM 1985.370-373].

[26] These two specimens from the Dabahs River are provisionally listed as *L. doriai*, since both were reported by TORNIER (1905) to have only five femoral pores on each thigh.

20 km N of Malca Guba, on Daua Parma to Neghelli road [BM 1978.990]. Lake Stephanie (Donaldson Smith, 18.VI.1895) [BM 95.12.31.11].

Additional material. Harar [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19823]. "Mangascia" (= Magascia) Plateau [SCORTECCI 1930: 9; MZUT-R2423]. Menaballa (region) [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 18201]. Awash National Park, near entrance [LANZA 1972: 171; MZUF 12251]. Metaker [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19821]. "Modjo" (Moggio River) Valley, Ennia Galla region [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19787]. Odamuda [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19785]. Arussi Galla (region) [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19818]. "Abassi-See" (= Lake Awasa or, perhaps more correctly, Sciallo Swamp) [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19784]. Goulf [BOULENGER 1895a: 534]. Schambala River [NEUMANN 1905: 393, TORNIER 1905: 373; ZMB 19786]. Gardulla Mt [TORNIER 1905: 373; ZMB 19788]. Gondaraba [SCORTECCI 1943: 299; MSNM-Re2149]. Lake Stephanie (Donaldson Smith, 11.VI.1895) [BOULENGER 1896b: 215; ANSP 4657, 4659]. Dolo [BOULENGER 1912: 330, ARILLO et al. 1967: 128; MSNG 28248 (type of *lanzai*)]. W of Juba River (Donaldson Smith, 21.III.1895) [BOULENGER 1896b: 215; ANSP 4656].

Distribution. Senegal to southeastern Egypt, southwards through Sudan, Eritrea, Ethiopia, Somalia and Kenya to central Tanzania; also found in Yemen.

Genus ***Mesalina*** Gray 1838

Mesalina martini (Boulenger 1897)

Eremias Martini BOULENGER 1897: 467, Obok, Djibouti.
Eremias guttulata olivieri (not Audouin 1829); PARKER 1942: 60.

Material examined. 11°00'N 43°00'E [BM 1937.12.5.482-484]. 10°30'N 42°40'E [BM 1937.12.5.478].

Additional material. "Arruena" (= Aroweina) [TORNIER 1905: 381 (*Eremias guttulata*); ZMB 19802]. 10°20'N 42°50'E [PARKER 1942: 60; MCZ-R49122-49123, formerly BM 1937.12.5.479-480].

Distribution. Western coast of the Red Sea from Sinai in Egypt, southwards to Eritrea, Djibouti, northwestern Somalia and immediately adjacent parts of Ethiopia; also found in Yemen.

Genus ***Philochortus*** Matschie 1893

Philochortus hardeggeri (Steindachner 1891)

Latastia hardeggeri STEINDACHNER 1891: 371, between Hensa and Artu, Somalia.
Philochortus hardeggeri; PARKER 1942: 76.

Material examined. 10°20'N 42°50'E [BM 1937.12.5.614]. 08°30'N 45°29'E [BM 1937.12.5.606]. 08°29'N 45°34'E [BM 1937.12.5.607]. 08°28'N 45°38'E [BM 1937.12.5.608]. 08°20'N 46°00'E [BM 1937.12.5.609]. 08°15'N 46°20'E [BM 1937.12.5.610-612].

Distribution. Somalia, Djibouti and adjacent parts of eastern Ethiopia.

Philochortus intermedius Boulenger 1917

Philochortus intermedius BOULENGER 1917: 152, Berbera, inland of Berbera and Wagga (Goolis Mts), Somalia. PARKER 1932a: 354.
Philochortus intermedius intermedius; PARKER 1942: 75 [part: excluding BM 1937.12.5.602].

Material examined. 10°10'N 43°00'E [BM 1937.12.5.603-604]. 10°05'N 43°00'E [BM 1937.12.5.598-600]. Haud region (at 08°00'N 47°04'E) [BM 1931.7.20.323] [27].

Distribution. Somalia and adjacent parts of eastern Ethiopia. The species is unknown in Eritrea and Sudan and its presence in northern Egypt, where reported by MARX (1968), must be considered highly suspect. *Philochortus zolii* Scortecci 1934, known only from Libya and once treated as a subspecies of *P. intermedius*, is now considered to be distinct (SCHLEICH et al. 1996).

Philochortus phillipsii (Boulenger 1898)

Latastia Phillipsii BOULENGER 1898b: 131, Berbera, Somalia.
Philochortus hardeggeri taylori PARKER 1932a: 354, 11°05'N 49°E, 600 feet, Somalia; 10°20'N 49°E, 2400 feet, Somalia; Dagah Shabell, 1700 feet, Somalia; 09°N 49°E, 2500 feet, Somalia; 08°N 47°34'E, 2000 feet, Ethiopia-Somali border [syntype: BM 1931.7.20.332]; 08°N 48°E, 2000 feet, Ethiopia-Somali border [syntypes: BM 1931.7.20.327-330/1946.9.3.36-39].
Philochortus phillipsi; PARKER 1942: 76.

Material examined. 08°00'N 47°34'E [BM 1931.7.20.332 (type of *taylori*)]. 08°00'N 48°00'E [BM 1931.7.20.327-330/1946.9.3.36-39 (types of *taylori*)].

Additional material. Kudu Valley, Awash National Park [LANZA 1972: 171]. 1-2 km W of Metahara [LANZA 1972: 171; MZUF 12282].

Distribution. Eastern Ethiopia to northern and central Somalia.

Philochortus rudolfensis Parker 1932

Philochortus intermedius rudolfensis PARKER 1932b: 226, near mouth of Kaliokwell River, Lake Rudolf (= Lake Turkana), Kenya [28].

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[27] PARKER (1942: 75) listed a specimen from 08°28'N 45°38'E (BM 1937.12.5.605) as "*Philochortus intermedius* subspec.?", noting that the dorsal scales are exceptionally strongly keeled and longitudinal pale lines completely lacking. He might have added that it also possesses only 30 dorsal scale rows and 11 femoral pores on each thigh. Clearly, this is not *P. intermedius*, but seems very likely to represent an undescribed species, although further investigation of this possibility would require more material of better quality.

[28] Only recently recognised (by SPAWLS et al. 2002) as being specifically distinct from *P. intermedius*, with distinguishing features that include a much longer tail, feebly keeled dorsal scales, a lower mid-body scale count and fewer femoral pores; all characters mentioned also by PARKER (1932b).

Material. Mandera [Lanza 1990: 428 (*Philochortus intermedius*), Spawls et al. 2002: 164 (*Philochortus rudolfensis*); CAS 130490, 130500].

Distribution. This lizard is currently known from just four localities in the arid lowlands of northern Kenya (including Mandera on the border with Ethiopia) and might well be expected to extend into similar habitat further north.

Philochortus spinalis (W. Peters 1874)

Lacerta spinalis W. Peters 1874: 369, Bogos (region), Eritrea.
Philochortus spinalis; Parker 1942: 75.
Philochortus intermedius intermedius (not Boulenger 1917); Parker 1942: 75 [part: BM 1937.12.5.602].

Material examined. Sardo [BM 1974.3944]. 10°30'N 42°40'E [BM 1937.12.5.615-616]. 09°55'N 43°10'E [BM 1937.12.5.602]. Rugdeia Sogheira [BM 86.9.23.5].

Additional material. Between Balci and "Ciadafena" (= Ciaffedenza) [Scortecci 1930: 9; MZUT-R2438]. "Balinga Motscho" (= Moggio River) [Neumann 1905: 395 (*Latastia spinalis*), Tornier 1905: 375 (*Latastia spinalis*); ZMB 19791]. Odamuda [Neumann 1905: 395 (*Latastia spinalis*), Tornier 1905: 375 (*Latastia spinalis*); ZMB 19752].

Distribution. Eritrea to northwestern Somalia and adjacent regions of Ethiopia.

Genus ***Pseuderemias*** Boettger 1883

Pseuderemias brenneri (W. Peters 1869)

Eremias Brenneri W. Peters 1869: 432, "Barava" (= Baraawe), Somalia. Parker 1942: 64.

Material examined. 08°42'N 44°54'E [BM 1937.12.5.499-501]. 08°15'N 46°20'E [BM 1937.12.5.507-523]. 08°10'N 43°40'E [BM 1937.12.5.506]. Ado [BM 1937.12.5.502-503].

Additional material. 08°15'N 46°20'E [Parker 1942: 64; MCZ-R49130, formerly BM 1937.12.5.525].

Distribution. Somalia, eastern Ethiopia, Djibouti and perhaps Eritrea.

Pseuderemias mucronata (Blanford 1870)

Acanthodactylus mucronatus Blanford 1870: 453, Anseba (Valley), Eritrea.
Eremias striata (not Peters 1874); Parker 1932a: 354.
Eremias mucronata; Parker 1942: 61.
Eremias septemstriata Parker 1942: 62, Halin district at 09°07'N 48°38'E, 2000 feet, Somalia.

Material examined. 10°20'N 42°45'E [BM 1937.12.5.423-460]. Haud region (at 08°00'N 48°00'E) [BM 1931.7.20.298/1946.9.8.7 (type of *septemstriata*)].

Additional material. Artu [NEUMANN 1905: 396, TORNIER 1905: 381; ZMB 19829]. Abdallah (region) [BOETTGER 1893a: 115; specimen not found in SMF, so presumed lost]. "Webithal" (= Webi Shebeli) [BOETTGER 1893a: 115; specimen not found in SMF, so presumed lost].

Distribution. Southeastern Egypt, southwards along the west coast of the Red Sea, through Eritrea and eastern Ethiopia to central Somalia.

Pseuderemias smithi (Boulenger 1895)

Eremias smithi BOULENGER 1895a: 534, Milmil (08°18'N 43°53'E), Ethiopia [holotype: BM 95.6.11.4/1946.8.6.35]. PARKER 1942: 62.

Material examined. Borama district (at 09°55'N 43°10'E) [BM 1937.12.5.404]. Borama district (at 09°50'N 43°15'E) [BM 1937.12.5.405-410]. Borama district (at 09°50'N 43°20'E) [BM 1937.12.5.411-419]. Milmil [BM 95.6.11.4/1946.8.6.35 (holotype)].

Additional material. Borama district (at 09°50'N 43°20'E) [PARKER 1942: 62; MCZ-R49124-49125, formerly BM 1937.12.5.421-422]. Milmil [BOULENGER 1896c: 9; MSNG 28899]. Mandera [SPAWLS et al. 2002: 179; CAS 130420, -22-31, -33-34, -36, -38, -41, -45-47, -52, -56, -60, -63, -69, -98-99, 130502, 131692].

Distribution. Eastern Ethiopia, Somalia and northern Kenya.

Pseuderemias striata (W. Peters 1874)

Eremias brenneri var. *striatus* W. PETERS 1874: 370, "Barawa" (= Baraawe), Somalia.
Eremias striata; PARKER 1942: 64.
Eremias striata gardoensis ARILLO, BALLETTO & SPANÒ 1965: 101, Gardo, Somalia.

Material examined. 08°42'N 44°54'E [BM 1937.12.5.464-471]. 08°15'N 46°20'E [BM 1937.12.5.473-477].

Additional material. 08°42'N 44°54'E [PARKER 1942: 64; MCZ-R49131, formerly BM 1937.12.5.472]. Web (Ueb River) [BOULENGER 1896d: 18; MSNG 10123]. Confluence of the Web (Ueb) and Ganana (= Ganale) Rivers [BOULENGER 1896d: 18; MSNG 10122].

Distribution. Eastern Ethiopia, Djibouti, Somalia and perhaps Kenya.

Family Scincidae

Genus ***Chalcides*** Laurenti 1768

Chalcides ocellatus (Forsskål 1775)

Lacerta ocellata FORSSKÅL 1775: 13, Egypt.
Gongylus ocellatus; BLANFORD 1870: 456.

Material examined. Ashangi (Lake) [BM 69.11.4.14-15]. NE slope of Mt Fantalle [BM 1969.1181]. Kereyu Lodge, Awash National Park [NHMAA 2000.36-37].

Additional material. N slope of Mt Fantalle [LANZA 1972: 166; MZUF 12266-12267]. Awash National Park, near entrance [LANZA 1972: 166; MZUF 12245-12250].

Distribution. North Africa from Morocco eastwards to Egypt, Sudan, Eritrea, northeastern Ethiopia and (mainly coastal) Somalia; also islands in the Mediterranean, Greece and Turkey, southwards around the periphery of the Arabian Peninsula and eastwards along the shores of the Persian Gulf to coastal Pakistan.

Chalcides ragazzii Boulenger 1890

Chalcides ocellatus var. *ragazzii* BOULENGER 1890b: 444, Assab, Eritrea.
Chalcides bottegi BOULENGER 1898a: 719, between Sancurar (04°02'N 40°08'E) and Amarr (ca 05°20'N 38°00'E), Ethiopia [holotype: MSNG 28569].
Chalcides ocellatus (not Forsskål 1775); PARKER 1942: 83; LANZA & CARFÌ 1968: 246 [part].

Material examined. Zegi [BM 1902.12.13.59-65]. 10°30'N 42°40'E [BM 1937.12.5.749]. 10°20'N 42°45'E [BM 1937.12.5.748]. 10°20'N 42°50'E [BM 1937.12.5.754]. 10°10'N 42°50'E [BM 1937.12.5.750, 752-753]. 10°05'N 43°00'E [BM 1937.12.5.755-763]. 09°50'N 43°20'E [BM 1937.12.5.775]. Harar [BM 1911.12.13.11-14, 1970.1462-1467]. Bikalal Hill [BM 1969.1180].

Additional material. Vicinity of Gondar [CALABRESI 1925: 103; MSNM-Re2200]. Zegi [LOVERIDGE 1936a: 73; FMNH 1870]. 10°10'N 42°50'E [PARKER 1942: 83; MZUF 10655, formerly BM 1937.12.5.751]. Adis Abeba [BOULENGER 1912: 330; MSNG 27943]. Between "Hauasch" (= Awash) Valley and Adis Abeba [NEUMANN 1905: 401, TORNIER 1905: 383; ZMB 18205, 26710]. Lake "Buchoftu" (= Bishoftu) [TORNIER 1905: 383; formerly ZMB, but now presumed lost]. ?Sheikh Husein [BOULENGER 1896b: 215 (*Chalcides ocellatus*); ANSP 4681?].

Distribution. Southern Algeria and Niger eastwards to Sudan, Eritrea, northern Somalia, Ethiopia and northwestern Kenya.

Genus ***Lygosoma*** Hardwicke & Gray 1827

Lygosoma afrum (W. Peters 1854)

Eumeces afer W. PETERS 1854: 619, Mozambique Island, Mozambique [as restricted by BROADLEY (1966)].
Lygosoma sundevallii (not Smith 1849); BOULENGER 1912: 330.
Riopa sundevalii (not Smith 1849); PARKER 1942: 88.
Mochlus afer; LANZA & CARFÌ 1968: 235.

Material examined. Shimala River [BM 1970.1478]. 09°55'N 43°10'E [BM 1937.12.5.745]. Harar [BM 1909.12.4.1]. 08°55'N 44°15'E [BM 1937.12.5.744]. Sodere [LIVM 1995.50.3]. Arba Minch [NHMAA/H.645]. Cullufu River, near Arba Minch [BM 1972.794]. Nachisar National Park [LIVM 1991.115.18]. 15 km N of Sidam-Bale bridge [BM 1975.2133-2134]. Sidam-Bale bridge [BM 1975.2132, NHMAA/H.772.1-2]. 32 km E of Neghelli [NHMAA/H.779]. 40 km E of Neghelli [NHMAA/H.735.1-2]. Dolo [BM 1912.6.6.8].

Additional material. ?Sheikh Husein [Boulenger 1895a: 535, 1896b: 215 (*Lygosoma sundevallii*); ANSP 4678-4679, 4839]. ?Wageli [Boulenger 1896c: 10 (*Lygosoma sundevallii*); MSNG 28911 (part)]. Calam (Kelam) [Scortecci 1943: 302 (*Riopa sundevallii*); MSNM-Re2248] [29]. ?Lake Stephanie (Donaldson Smith, 18.VI.1895) [Boulenger 1896b: 215 (*Lygosoma sundevallii*); ANSP 4677]. Caschei (River) [Scortecci 1943: 302 (*Riopa sundevallii*; MSNM-Re2250] [29]. Dolo [Boulenger 1896c: 10 (*Lygosoma sundevallii*), Lanza & Carfì 1968: 235 (*Mochlus afer*); MSNG 28911 (part). Boulenger 1912: 330 (*Lygosoma sundevallii*), Lanza & Carfì 1968: 235 (*Mochlus afer*); MSNG 27859].

Distribution. Sudan, Ethiopia and Somalia, southwards to Mozambique.

Lygosoma paedocarinatum (Lanza & Carfì 1968)

Riopa laeviceps (not Peters 1874); Parker 1942: 89.
Mochlus laeviceps paedocarinatus Lanza & Carfì 1968: 240, Haud region at 08°15'N 46°20'E, 2100 feet, Ethiopia-Somali border [holotype: BM 1937.12.5.713].

Material examined. 08°39'N 45°04'E [BM 1937.12.5.700]. 08°21'N 45°58'E [BM 1937.12.5.701]. 08°19'N 46°04'E [BM 1937.12.5.702-703]. 08°17'N 46°09'E [BM 1937.12.5.704-706]. 08°15'N 46°20'E [BM 1937.12.5.711-716 (types)]. Ado [BM 1937.12.5.718-719].

Additional material. 08°15'N 46°10'E [Parker 1942: 89; MCZ-R49132-49133, formerly BM 1937.12.5.707-708]. 08°15'N 46°20'E [Parker 1942: 89; FMNH 26314, Parker 1942: 89, Lanza & Carfì 1968: 240; MZUF 10828, formerly BM 1937.12.5.709 (type)].

Distribution. Known only from the above material, all collected by R.H.R Taylor in the vicinity of the border between Ethiopia and northern Somalia.

Lygosoma somalicum (Parker 1942)

Riopa modesta somalica Parker 1942: 90, near Berbera, inland of Berbera and Wagga (Goolis Mts), Somalia; 10°10'N 42°50'E, 4500 feet, Ethiopia [syntype: BM 1937.12.5.746/1946.8.7.6]; 10°05'N 43°00'E, 5500 feet, Ethiopia [syntype: BM 1937.12.5.747/1946.8.7.5].
Riopa modestum modestum (not Günther 1880); Battersby 1954: 246 [30].
Mochlus sundevallii (not Smith 1849); Lanza & Carfì 1968: 240 [part: northern Somalia].

Material examined. 10°10'N 42°50'E [BM 1937.12.5.746/1946.8.7.6 (type)]. 10°05'N 43°00'E [BM 1937.12.5.747/1946.8.7.5 (type)]. Murri [BM 1952.1.8.30].

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[29] Scortecci's (1943) material should clearly be assigned to *L. afrum*, on the evidence of his statement that in these specimens "la narice è compresa tra una grande sopranasale e due nasali".

[30] Lanza (1990) believes *modestum* to be the northern subspecies of *L. sundevallii*, though Broadley & Howell (1991) consider it indistinguishable from the typical form. However, Battersby's specimen from Murri (BM 1952.1.8.30) compares much more favourably with the types of *L. somalicum*, particularly regarding relative length of the fifth toe and the number of its subdigital lamellae. Lanza (1990) listed *somalicum* only from NW Somalia and adjacent Ethiopia, but Laurent & Gans (1965) had previously recorded this taxon from near Afgoi in S Somalia and Spawls et al. (2002) have since reported its occurrence as far afield as SE Kenya and NE Tanzania.

Additional material. ?Sheikh Husein [BOULENGER 1895a: 535 (*Lygosoma modestum*); ANSP 4676?] [31].

Distribution. Northern Somalia, southwards through eastern Ethiopia to eastern Kenya and northeastern Tanzania (SPAWLS et al. 2002).

Lygosoma sundevallii (A. Smith 1849)

Eumices (Riopa) sunderallii A. SMITH 1849: 11, "eastward of Cape Colony" (but most probably western Transvaal, according to BROADLEY 1966), South Africa.
Sepacontias modestus GÜNTHER 1880: 235, Mpwapwa, Ugogo, Tanzania.

Material examined. Omo River, near Bongosi [NHMAA/H.917].

Additional material. Murle [SCORTECCI 1943: 303 (*Riopa modestum modestum*); MSNM-Re2242] [32]. Arero [SCORTECCI 1940: 146; MZUF 635]. Ramu [CAS 130225-130228]. Mandera [CAS 130383-130386, 130388]. Moyale [SCORTECCI 1940: 146; MSNM-Re2247].

Distribution. Angola, Namibia and South Africa northwards to Kenya, but apparently rare in southern Ethiopia, in southern Somalia (LANZA 1990) and in Uganda (SPAWLS et al. 2002).

Lygosoma vinciguerrae Parker 1932

Lygosoma vinciguerrae PARKER 1932a: 361, Lugh, Somalia.
Riopa vinciguerrae; PARKER 1942: 91.
Mochlus vinciguerrae; LANZA & CARFÌ 1968: 242.

Material examined. 08°24'N 45°49'E [BM 1937.12.5.721]. 08°21'N 45°58'E [BM 1937.12.5.722]. 08°17'N 46°09'E [BM 1937.12.5.723-724]. 08°15'N 46°20'E [BM 1937.12.5.726-740]. Ado [BM 1937.12.5.720].

Additional material. 08°14'N 46°19'E [PARKER 1942: 91; formerly BM, but apparently never catalogued by this institution]. 08°15'N 46°20'E [PARKER 1942: 91; FMNH 26310-26311; MCZ-R49134, formerly BM 1937.12.5.725]. Bohodle [PARKER 1932a: 361, LANZA & CARFÌ 1968: 242; MSNG 8688 (paratype)].

Distribution. Somalia and immediately adjacent regions of eastern Ethiopia.

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[31] Both PARKER (1942) and LANZA (1990) found reason to suppose that this record might be based upon *L. somalicum*. It seems to have been derived from ANSP 4676, though this specimen is listed with neither locality nor collection date in the original manuscript catalogue of that museum and does not appear at all in the current database of ANSP holdings.

[32] SCORTECCI (1943) says of his specimen from Murle: "Il secondo dito del piede è nettamente più lungo del quinto e questo ha inferiormente 6 o 7 lamelle".

Genus ***Mabuya*** Fitzinger 1826 [33]

Mabuya brevicollis (Wiegmann 1837)

Euprepes brevicollis Wiegmann 1837: 133, "Abyssinia" (= Eritrea).
Mabuya chanleri Stejneger 1893: 721, Tana River, Kenya.
Mabuia Rotschildi Mocquard 1905: 286, Endessa (ca 08°50'N 40°00'E), Ethiopia [holotype: MNHN 1905.0165].
Mabuya brevicollis; Parker 1942: 86.

Material examined. Asaita [NHMAA/H.707]. 10°45'N 42°45'E [BM 1937.12.5.666]. 10°30'N 42°40'E [BM 1937.12.5.665]. 10°20'N 42°50'E [BM 1937.12.5.667]. 40 km E of Harar [BM 1969.1182]. Awash National Park [BM 1969.1183]. Metahara [NHMAA/H.650]. 08°37'N 45°09'E [BM 1937.12.5.639]. 08°24'N 45°49'E [BM 1937.12.5.673]. 08°21'N 45°58'E [BM 1937.12.5.674]. 08°20'N 46°00'E [BM 1937.12.5.640]. 08°19'N 46°04'E [BM 1937.12.5.675]. 08°15'N 46°20'E [BM 1937.12.5.669-670]. Haud region (at 08°00'N 47°22'E) [BM 1931.7.20.369]. Ado [BM 1937.12.5.668]. Arba Minch [NHMAA/H.675-676]. NE shore of Lake Chamo [BM 1972.779]. Vicinity of Mandera [CAS 130370, 130372, 130375-130376, 131688].

Additional material. Harar [Neumann 1905: 400, Tornier 1905: 382; ZMB 26637]. N slope of Mt Fantalle [Lanza 1972: 167; MZUF 12265]. 1-2 km W of Metahara [Lanza 1972: 167; MZUF 12290-12291]. "Modjo" (= Moggio River), Ennia Galla region [Neumann 1905: 400, Tornier 1905: 382; formerly ZMB, but now presumed lost]. Murle [Scortecci 1943: 301; MSNM-Re2207-2208, 2213]. Between Caschei (River) and Murle [Scortecci 1943: 301; MSNM-Re2214]. Asile [Scortecci 1943: 301; MSNM-Re2209]. Ramu [CAS 130246-130248].

Field notes. In October 2001, a female from the Awash National Park gave birth to three young that measured about 8.5 cm in length; two young were produced by a female from Dagah Bur (Fig. 13).

Distribution. Sudan and Eritrea, southwards through eastern Ethiopia, Djibouti, Somalia, Kenya and eastern Uganda to northern Tanzania; also the southern Arabian Peninsula.

Mabuya hildebrandtii (W. Peters 1874)

Euprepes (Euprepis) Hildebrandtii W. Peters 1874: 372, "Barawa" (= Baraawe), Somalia.

Records. Abdallah (region) [Boettger 1893a: 116 (*Mabuia hildebrandti*); specimen not found in SMF, so presumed lost]. "Webithal" (= Webi Shebeli) [Boettger 1893a: 116 (*Mabuia hildebrandti*); specimen not found in SMF, so presumed lost].

[33] Although Mausfeld et al. (2002) favour partitioning the genus *Mabuya* and Bauer (2003) has shown that the earliest available name for their supposed "Afro-Malagasy clade" would be *Trachylepis* Fitzinger 1843, we note that this remains a contentious issue. For example, E.N. Arnold (in litt.) argues that Mausfeld and his colleagues have failed to convincingly demonstrate the need for radical taxonomic changes, since all their proposed subdivisions apparently lie "within a more or less monophyletic *Mabuya* and it is consequently not misleading to leave all the species within that genus". We therefore decline to promote the use of *Trachylepis* on the basis of disputed evidence, preferring to avoid the nomenclatural confusion such a change would inevitably cause and wait for conflicting opinions to be more satisfactorily resolved.

Distribution. Widespread in Somalia and presumably present also in neighbouring regions of eastern Ethiopia [34].

Mabuya isselii (W. Peters 1871)

Euprepes (Euprepis) Isselii W. Peters 1871: 567, Keren, Eritrea.

Material examined. Simien Mountains [BM 1977.2247]. Lake Ashangi [BM 69.11.4.7-9]. Portuguese bridge [BM 1969.1194]. Kude [BM 1902.12.13.53]. Debre Marcos [BM 1969.1185-1191]. 10 km SW of Debre Marcos [BM 1969.1184]. Guder River mouth [BM 1969.1192-1193]. Ambo [BM 1970.1476-1477].

Additional material. Dabarif [Boulenger 1909: 193; MSNG 27779]. Vicinity of Gondar [Calabresi 1925: 103 (*Mabuia varia isseii*, sic); MSNM-Re2267] [35].

Distribution. Apparently confined to Eritrea and Ethiopia, at altitudes of about 1000-2500 m on the central plateau and its immediately adjacent foothills; usually occupying more or less open grassland sites, but recorded also from riverine forest.

Mabuya maculilabris (Gray 1845)

Euprepis maculilabris Gray 1845: 114, "West Africa".

Material examined. Didessa River bridge [NHMAA/H.566, H.686]. 5 km E of Scecchi River bridge [BM 1972.780-781]. Gabba River bridge [BM 1972.782]. Gambela [NHMAA/H.441]. Polkom [BM 1905.10.16.6-7]. E of Abiu [BM 1972.787-788]. 2 km W of Gore [BM 1972.783-786]. W side of Lake Abaya [BM 1969.285]. Nachisar National Park [LIVM 1991.115.19-22]. Omo River, near Bongosi [NHMAA/H.916].

Field notes. *M. maculilabris* has been observed, though not collected, at Bahar Dar. While not strictly a sylvicolous form, its populations in southwestern Ethiopia have been found to occupy trees and bushes at the margins of forest clearings; a habitat which they share with few other lizards.

Distribution. Senegal to Somalia, southwards to Angola in the west and Mozambique in the east, but localised within this huge range. Because the species favours relatively humid environments, it is apparently confined to western regions

[34] This species is common in both northern and southern Somalia (Lanza & Carfì 1968, Lanza 1990), so it must surely be present also in the Ogaden region of Ethiopia. Unfortunately, its existence in this area has been reported only once, on the evidence of "zwei junge schlecht erhaltene Stücke" (Boettger 1893a), and the identity of this material cannot now be confirmed. Formerly in the Senckenberg Museum at Frankfurt, these specimens can no longer be found in the catalogue or collections of that institution (G. Köhler in litt.).

[35] Calabresi's two specimens from Gondar are considered to be correctly identified, having been referred to this taxon on the evidence of a single frontoparietal shield.

of Ethiopia, to southern parts of Somalia and has a similarly restricted distribution in East Africa (Spawls et al. 2002).

Mabuya megalura (W. Peters 1878)

Euprepes (Mabuia) megalura W. Peters 1878: 204, Teita, Kenya.
Mabuia megalura; Boulenger 1895a: 535 [part: BM 95.12.31.15], 1896a: 551 [part: BM 96.5.19.37], 1896b: 215, 1898a: 718 [part: BM 98.1.28.18].

Material examined. Let Marefia [BM 96.5.19.37]. 8 km NW of Ankober [BM 1986.198]. Mulu farm [NHMAA 2000.14-18]. Addis Ababa [BM 1902.12.13.50]. Djem Djem Forest [BM 1927.7.5.94-98]. Sheikh Mahomed [BM 95.12.31.15]. 4 km W of Dinshu [BM 1973.3243]. 10 km SE of Kofole [PEM 8590]. Garano River, near Goba [BM 1973.3241-3242]. Between Badditu and Dime [BM 98.1.28.18]. Lake Abeia (Donaldson Smith = SE corner of Lake Abaya) [BM 95.12.31.16].

Additional material. Monte Tschoki [Scortecci 1930: 11; MZUT-R437]. Let Marefia [Boulenger 1896a: 551; MSNG 28893]. Badattino [Tornier 1905: 382; ZMB 27411]. Garamulata [Neumann 1905: 398, Tornier 1905: 382; ZMB 27433]. Kolla (region) [Tornier 1905: 382; formerly ZMB, but now presumed lost]. Adis Abeba [Tornier 1905: 382; ZMB 27426]. Didda (region) [Tornier 1905: 382; ZMB 27432]. Sheikh Husein [Boulenger 1895a: 535; ANSP 4666-4669]. Budda, Gimirra region [Tornier 1905: 382; ZMB 27422]. ?Uebi (Webi) Shebeli, near its source [Vinciguerra 1930: 40 (*Mabuia megalura*?); MSNG 31290]. "Gajim" (= Gadjir) [Tornier 1905: 382; ZMB 27429]. Gedeb Mts [Loveridge 1936a: 68 = FMNH 12528 from SE of Dodola]. Omo (River) region [Neumann 1905: 398, Tornier 1905: 382; ZMB 27409]. Near Allata [Loveridge 1936a: 68; FMNH 12517]. Abera [Neumann 1905: 398, Tornier 1905: 382; ZMB 18210, 27424]. Gofa (region) [Tornier 1905: 382; ZMB 27414]. Between Badditu and Dime [Boulenger 1898a: 718; MSNG 29111 (part)]. Webi Mana [Boulenger 1912: 330; MSNG 27795]. El Dire [Scortecci 1943: 302; MSNM-Re2205]. Between Sancurar and Amarr [Boulenger 1898a: 718; MSNG 29111 (part)].

Field notes. Where there is open grassland at medium to high altitude, this species is often quite common in Ethiopia. It is viviparous and neonates have been observed at Mulu farm in November and December, which are the driest months of the year at this locality.

Distribution. Ethiopia, south through Kenya, Uganda and eastern Congo Kinshasa to central Mozambique; mostly at higher elevations, though recorded from sea level in both Tanzania and Mozambique.

Mabuya planifrons (W. Peters 1878)

Euprepes (Euprepis) planifrons W. Peters 1878: 203, Teita, Kenya.
Mabuia planifrons; Boulenger 1896b: 215.
Mabuya planifrons; Parker 1942: 87; Battersby 1954: 246.

Material examined. 10°20'N 42°45'E [BM 1937.12.5.644]. 10°05'N 43°00'E [BM 1937.12.5.643]. Bohodle [BM 1937.12.5.642]. Ado [BM 1937.12.5.641]. SW of Lake Abaya [BM 1969.287]. NW corner of Lake Chamo [BM 1969.286]. 35 km N of Sidam-Bale bridge [BM

1975.2118]. 16 km N of Sidam-Bale bridge [BM 1975.2117]. 75 km E of Neghelli [BM 1975.2119]. Murri [BM 1952.1.8.75]. W of Juba River (Donaldson Smith, 7.III.1895) [BM 95.12.31.14].

Additional material. "Hawash" (= Awash) River [BOULENGER 1912: 330; possibly MSNG 27781 [36]]. Wageli [BOULENGER 1896c: 9; MSNG 28913 (part)]. Web (Ueb River) Valley [BOULENGER 1896c: 9; MSNG 28913 (part)]. El Banno [SCORTECCI 1943: 300; MSNM-Re2262]. Dolo [LANZA & CARFÌ 1968: 223; formerly MSNM, but now apparently missing from that collection].

Distribution. Eastern and southern Ethiopia, Somalia and thence southwards to northern Zambia and southeastern Congo Kinshasa.

Mabuya quinquetaeniata (Lichtenstein 1823)

Scincus quinquetaeniatus LICHTENSTEIN 1823: 103, Egypt and "Nubia" (= Sudan).
Mabuya quinquetaeniata quinquetaeniata; PARKER 1942: 87.
Mabuya quinquetaeniata; LANZA & CARFÌ 1968: 223.

Material examined. Bahar Dar [BM 1969.1214]. 18 miles (29 km) SE of Portuguese bridge [BM 1969.1216-1217]. Between Belfodio and Quezan [BM 1964.702-704]. Shimala River [BM 1964.705-707]. 10°30'N 42°40'E [BM 1937.12.5.645-648]. Borama district (at 10°20'N 42°45'E) [BM 1937.12.5.649-650, 652-654, 656]. Borama district (at 10°10'N 43°00'E) [BM 1937.12.5.658]. 10 km W of Mabil [BM 1969.1197-1199]. Didessa River mouth [BM 1969.1200-1207]. Fincha River mouth [BM 1969.1213]. Guder River mouth [BM 1969.1195-1196]. Hiressa [BM 1902.12.13.53-55]. 15 miles (25 km) N of Ghimbi [BM 1969.1208]. Mugher River gorge [NHMAA 2003.11]. Bikalal Hill [BM 1969.1209-1212]. Ghimbi [BM 1969.1218-1220]. Didessa River bridge [NHMAA/H.391, H.393.1-2, H.651, H.687.1-2]. "Awharra Mullka" (= Aware Melca) [BM 1902.12.13.52]. Mt Fantalle summit [BM 1969.1215]. Awash National Park [BM 1972.789]. Kudu Valley, Awash National Park [NHMAA/H.673]. Kereyu Lodge, Awash National Park [NHMAA 2000.03]. Gambela [NHMAA/H.435-436, H.440]. SW of Lake Abaya [BM 1969.263]. S of Lake Abaya [BM 1969.261-262, 264, 267-269]. E side of Lake Chamo [BM 1969.270]. S shore of Lake Chamo [BM 1972.790]. Mui [NHMAA/H.935].

Additional material. "W of Lake Tana" [LOVERIDGE 1936a: 68 = FMNH 12708-12709 and MCZ-R34983, formerly FMNH 12713, all from 25 miles (40 km) NW of Lake Tana]. Gumboworen [NEUMANN 1905: 399, TORNIER 1905: 382; ZMB 18207]. Borama district (at 10°20'N 42°45'E) [PARKER 1942: 87, LANZA & CARFÌ 1968: 223; MZUF 10652-10653, formerly BM 1937.12.5.651, 655]. Borama district (at 10°10'N 43°00'E) [PARKER 1942: 87, LANZA & CARFÌ 1968: 223; MZUF 10650, formerly BM 1937.12.5.657]. 18 km (N of) Camp Awash [LANZA 1972: 169; MZUF 12234-12235, 12239]. Near Awash Falls [LANZA 1972: 169; MZUF 12225-12230]. Between Gelo (River) and Akobo (River) [NEUMANN 1905: 399, TORNIER 1905: 382; ZMB 27435]. Between Lake Stephanie and Lake Rudolf (Donaldson Smith, 4.VII.1895) [BOULENGER 1896b: 215; ANSP 4665]. Bisan River [LOVERIDGE 1936a: 68; FMNH 15081-15082, 15084-15086 and MCZ-R34985, formerly FMNH 15083]. Murle [SCORTECCI 1943: 301; MSNM-Re2231]. Gondaraba [SCORTECCI 1943: 301; MSNM-Re2232]. El Meti [SCORTECCI 1943: 301; MSNM-Re2222]. Asile [SCORTECCI 1943: 301; MSNM-Re2233]. Sololo [SPAWLS et al. 2002: 137; CAS 129858].

[36] This specimen, though attributed to the appropriate collector, is registered in MSNG with a different provenance (Rahanuin region, Somalia), from where BOULENGER (1912) did not record the species. Either the catalogue entry or BOULENGER's account must be wrong and it might be significant that extensive fieldwork in the Awash National Park has failed to reveal the presence of *M. planifrons* in this region of Ethiopia.

Distribution. Mali, eastwards to Eritrea, Ethiopia and northern Somalia, thence northwards to Egypt and southwards through southern Sudan, Uganda, northeastern Congo Kinshasa and Kenya to northern Tanzania [37]. Records indicate that this lizard is far more common in western regions of Ethiopia than in the southeast, it is absent from most of Somalia (LANZA 1990) and its occurrence in Kenya is decidedly sporadic (SPAWLS et al. 2002). The reason for such patchy distribution, though presumably ecological, seems rather obscure. SPAWLS et al. (2002) associate the species particularly with rocky outcrops and lava fields, but note that it will also live on tree trunks and colonise man-made structures such as houses and bridges.

Mabuya striata (W. Peters 1844)

Tropidolepisma striatum W. PETERS 1844: 36, Mozambique Island, Mozambique.
Mabuia striata; BOULENGER 1896a: 551 [part: BM 96.5.19.46].
Mabuya striata; PARKER 1942: 85.

Material examined. Worgesha [BM 1970.2326-2333]. 09°55'N 43°10'E [BM 1937.12.5.618]. 09°50'N 43°10'E [BM 1937.12.5.617]. Let Marefia [BM 96.5.19.46]. Bisidima River, E of Harar [BM 1969.1234-1235]. 20 km E of Harar [BM 1969.1236-1238]. Bikalal Hill [BM 1969.1221-1232]. Ghimbi [BM 1969.1239-1241]. Backo, Wollega [BM 1972.791]. Addis Ababa [BM 1974.3945-3947, 1975.2120, NHMAA/H.110, H.587]. "Awharra Mullka" (= Aware Melca) [BM 1902.12.13.57-58]. Near Metahara [NHMAA/H.671]. Awash National Park [BM 1972. 792]. 09°00'N 44°00'E [BM 1937.12.5.634]. 08°53'N 44°20'E [BM 1937.12.5.635]. 08°52'N 44°24'E [BM 1937.12.5.636]. 08°42'N 44°54'E [BM 1937.12.5.637-638]. 08°15'N 46°20'E [BM 1937.12.5.626-633]. Gambela [NHMAA/H.434, H.700]. Buyo [NHMAA/H.461-463]. Shashamane [BM 1975.2121]. Wadere [BM 1957.1.15.42-44]. Bilo [BM 1970.1468-1474]. Felenguai [BM 1972.793]. SW corner of Lake Abaya [BM 1969.277-280]. NW corner of Lake Chamo [BM 1969.271-276]. Nachisar National Park [LIVM 1991.115.23]. 28 km N of Sidam-Bale bridge [BM 1975.2123-2124]. Sidam-Bale bridge [BM 1975.2122].

Additional material. Monte Tschoki [SCORTECCI 1930: 11; MZUT-R433]. Let Marefia [BOULENGER 1896a: 551; MSNG 28909]. Lake "Haramaja" (= Alemaya) [TORNIER 1905: 382; ZMB 19764]. Harar [TORNIER 1905: 382; ZMB 18209, 27416]. Adis Abeba [TORNIER 1905: 382; ZMB 27417]. "Mangascia" (= Magascia) Plateau [SCORTECCI 1930: 11; MZUT-R451]. Filwoha [LANZA 1972: 170; MZUF 12241]. Near Awash Falls [LANZA 1972: 170; MZUF 12224]. "Hawash" (= Awash) River [BOULENGER 1912: 330; MSNG 27801]. Milmil [BOULENGER 1895a: 535, 1896b: 215; ANSP 4673]. Awadi River [LOVERIDGE 1936a: 70; FMNH 12524]. Gardulla [TORNIER 1905: 382; formerly ZMB, but now presumed lost]. Gubala Ginda [BOULENGER 1896c: 10; MSNG 28901]. Gondaraba [SCORTECCI 1943: 300; MSNM-Re2215]. Javello [SCORTECCI 1940: 146; MZUF 642, 2683]. Mega [SCORTECCI 1940: 146; MZUF 640]. Moyale [SCORTECCI 1940: 146: MZUF 641].

Distribution. Southeastern Sudan, Ethiopia and Somalia to northeastern regions of South Africa.

[37] *Euprepes margaritifer* Peters 1854, formerly believed to represent a southern race of *Mabuya quinquetaeniata*, is now considered a distinct species (BROADLEY & BAUER 1998).

Mabuya varia (W. Peters 1867)

Euprepes (Euprepis) varius W. Peters 1867: 20, Tete, Mozambique.
Mabuya varia; Parker 1942: 85; Lanza & Carfì 1968: 228.

Material examined. 10°10'N 42°50'E [BM 1937.12.5.676]. 10°05'N 43°00'E [BM 1937.12.5.680-682]. 10°00'N 43°00'E [BM 1937.12.5.677-679]. 09°50'N 43°10'E [BM 1937.12.5.683]. 09°50'N 43°15'E [BM 1937.12.5.688]. Mulu farm [NHMAA 2000.12-13]. Addis Ababa [BM 1970.1475]. N slope of Mt Fantalle [NHMAA/H.672]. 08°50'N 44°24'E [BM 1937.12.5.692]. Jimma [NHMAA/H.653]. E side of Lake Chamo [BM 1969.282-283]. 16 km N of Sidam-Bale bridge [BM 1975.2125]. 75 km SE of Kebre Mengist, on road to Neghelli [BM 1975.2127-2129]. 35 km E of Neghelli [BM 1975.2126].

Additional material. Lake "Haramaja" (= Alemaya) [Tornier 1905: 382; ZMB 19762]. Garamulata [Tornier 1905: 382; ZMB 18208, 26639, 27434]. Adis Abeba [Neumann 1905: 399, Tornier 1905: 382; formerly ZMB, but now presumed lost]. N slope of Mt Fantalle [Lanza 1972: 171; MZUF 12261-12264]. 18 km (N of) Camp Awash [Lanza 1972: 171; MZUF 12233]. Sheikh Husein [Boulenger 1895a: 535; ANSP 4670-4671; Boulenger 1896b: 215; ANSP 4672]. "Webithal" (= Webi Shebeli) [Boettger 1893a: 116; specimen not found in SMF, so presumed lost]. Omo (River) region [Neumann 1905: 399, Tornier 1905: 382; formerly ZMB, but now presumed lost]. Giari Bule [Boulenger 1896c: 10; MSNG 28910]. Bisan River [Loveridge 1936a: 69; FMNH 15087]. Between Sancurar and Amarr [Boulenger 1898a: 718; MSNG 31946].

Field notes. Though found at an altitude of about 1000 m in the semi-desert surroundings of the Awash National Park, this species extends to 2700 m or more in open grassland on the Ethiopian plateau and is commonly seen at such elevations in the vicinity of Addis Ababa.

Distribution. Southeastern Sudan, Ethiopia and Somalia to northeastern regions of South Africa, thence westwards to Namibia and southern Angola.

Mabuya wingatii (Werner 1907)

M(abuia) wingatii Werner 1907: 1848, Khor Attar, Sudan.

Material examined. Bahar Dar [BM 1902.12.13.51]. Ghimbi [BM 1969.1242]. Didessa River bridge [NHMAA/H.688.1-2].

Field notes. This species (Fig. 14) is common and easily observed at Bahar Dar, where it was found to be active by day on open ground. Though usually taking cover amongst vegetation when disturbed, animals in swampy areas were seen to jump into water and swim to safety if pursued.

Distribution. Known only from southeastern Sudan and western Ethiopia.

Genus ***Panaspis*** Cope 1868

Panaspis tancredii (Boulenger 1909)

Ablepharus tancredii Boulenger 1909: 193, Dabarif (? = Dabarik or Debarek, 13°08'N 37°55'E), Ethiopia [holotype: MSNG 27780].

Distribution. Known with certainty only from the type locality [38].

Panaspis wahlbergii (A. Smith 1849)

Cryptoblepharus wahlbergii A. Smith 1849: 10, "eastward of Cape Colony" (= Natal), South Africa.
Ablepharus wahlbergii; Boulenger 1896b: 215, 1912: 330 [part: BM 1912.6.6.9-10]; Parker 1942: 82.
Panaspis wahlbergii; Spawls et al. 2002: 155 [Mandera].

Material examined. 10°20'N 42°50'E [BM 1937.12.5.777]. Smith River [BM 95.12.31.17]. 20 km E of Neghelli [BM 1975.2131]. 32 km E of Neghelli [NHMAA/H.778]. 40 km E of Neghelli [NHMAA/H.736]. 20 km N of Malca Guba, on Daua Parma to Neghelli road [BM 1975.2130]. Dolo [BM 1912.6.6.9-10]. Mandera [CAS 130380, 131690].

Additional material. Monte Tschoki [Scortecci 1930: 12; MZUT-R1957]. Lake "Haramaja" (= Alemaya) [Tornier 1905: 383; ZMB 19759]. Garamulata [Tornier 1905: 383; ZMB 27410, 27430]. "Sequala" (= Mt Zuquala) [Tornier 1905: 383; ZMB 27431]. "Modjo" (= Moggio River, Ennia Galla region) [Tornier 1905: 383; ZMB 18203]. Djaffa (Mts) [Tornier 1905: 383; ZMB 19760]. Gadat [Tornier 1905: 383; ZMB 19761]. Between Sancurar and Amarr [Boulenger 1898a: 719; MSNG 29104]. Magalo Umberto I [Boulenger 1896c: 10; MSNG 28889]. Dolo [Boulenger 1912: 330; formerly MSNG, but now apparently missing from that collection; Lanza & Carfì 1968: 244; MSNM-Re877].

Distribution. Ethiopia and Somalia to eastern regions of South Africa.

Family Varanidae

Genus ***Varanus*** Merrem 1820

Varanus albigularis (Daudin 1802)

Tupinambis albigularis Daudin 1802: 72, no locality.
Monitor microstictus Rüppell 1845: 301, "Abyssinien" (nomen nudum).
Varanus microstictus Boettger 1893b: 72, "Abyssinien" (= Ethiopia).
Varanus ocellatus (not Heyden 1827); Parker 1942: 56.
Varanus (Empagusia) exanthematicus microstictus; Battersby 1954: 245.

[38] According to Fuhn (1964), *Ablepharus anselli* FitzSimons 1955 (type locality: Kasempa, Zambia) is conspecific and Broadley (1989) has added *A. seydeli* Witte 1933 (type locality: Elisabethville = Lubumbashi, Congo Kinshasa) and *A. moeruensis* Witte 1933 (type locality: Kilwa, Lake Mweru, Congo Kinshasa) to the synonymy, but it is difficult to find such conclusions convincing. Huge distances separate Ethiopia from these SE African localities and no geographically intermediate populations are known to exist.

Material examined. 10°30'N 42°40'E [BM 1937.12.5.378]. 10°20'N 42°50'E [BM 1937.12.5.379]. 08°52'N 44°24'E [BM 1937.12.5.377]. "Awharra Mullka" (= Aware Melca) [BM 1902.12.13.37]. E of Dagah Bur [NHMAA/H.418]. 08°00'N 47°27'E [BM 1931.7.20.366]. Mui [NHMAA/H.934]. Murri [BM 1952.1.8.85-87].

Additional material. Harar [NEUMANN 1905: 393 (*Varanus ocellatus*); no specimen preserved]. 18 km (N of) Camp Awash [LANZA 1972: 173 (*Varanus exanthematicus*); sight record, no specimen collected]. "Ogadeen" (= Ogaden region) [BOETTGER 1893a: 115; specimen not found in SMF, so presumed lost]. Goulf [BOULENGER 1895a: 534 (*Varanus ocellatus*); ANSP 4655]. Between Lake Stephanie and Lake Rudolf (Donaldson Smith, 4.VII.1895) [BOULENGER 1896b: 215 (*Varanus ocellatus*); ANSP 4654?] [39].

Distribution. Eastern and southern Ethiopia, Djibouti and Somalia, southwards to South Africa, Botswana and Namibia.

Varanus niloticus (Linnaeus 1766)

Lacerta nilotica LINNAEUS 1766: 369, Egypt.

Material examined. 10 km E of Caroarsa River mouth [BM 1969.1179]. Didessa River mouth [BM 1970.1983]. "Awharra Mullka" (= Aware Melca) [BM 1902.12.13.38]. Polkom [BM 1905.10.16.5]. Daro River, Arussi (W. Thesiger col.) [BM 1937.1.3.1]. W shore of Lake Langano [NHMAA/H.5]. S shore of Lake Abaya [BM 1969.243-244].

Additional material. Gendoa River [LOVERIDGE 1936a: 59; FMNH 12737]. "Gadschinbocha, Hauasch-Tal" (= Awash Valley, perhaps at Caccinua) [TORNIER 1905: 373; ZMB 19771]. Awash River, near Awash Falls [LANZA 1972: 174; sight record, no specimen collected]. Murle [SCORTECCI 1943: 298; MSNM-Re2335, 2337, 2345]. Sagan (River) [SCORTECCI 1943: 298; MSNM-Re2336].

Field notes. This species has been observed, though not collected, on the Dawa River at Mandera and also near Debre Zeit on the Ethiopian plateau, where it occurs at the unusually high elevation of 1950 m.

Distribution. Senegal to Eritrea, Ethiopia and Somalia, northwards along the Nile Valley to Egypt and southwards to South Africa. Almost invariably associated with rivers, lakes and similar sources of permanent water.

KEY TO THE LIZARDS RECORDED FROM ETHIOPIA

The following synopsis has been found to deliver satisfactory determinations of most Ethiopian lizards in most instances, particularly those represented by an adequate series of adult specimens in good condition. When difficulties arise, they

[39] The name *ocellatus* Heyden 1827 is currently considered to be a junior synonym of *Varanus exanthematicus* (Bosc 1792), a species believed to extend from Senegal to Eritrea. PARKER's (1942) records of *V. ocellatus* are referable to *V. albigularis* and it seems likely that this is true also of Ethiopian material reported under the same name by other authors.

frequently relate to the genus *Hemidactylus*, which includes many taxa still imperfectly defined on the basis of rather limited samples. If only immature, female or damaged specimens are available, it may sometimes be almost impossible to arrive at a satisfactory identification of the species. It must also be recognised that, as a general rule, any conclusion reached through use of a key should be regarded as tentative, until at least a detailed description of the species in question has been consulted or reliably identified comparative material has been examined.

1 Top of the head with numerous small, irregularly arranged scales or granules **4**
— Top of the head with large, more or less symmetrically arranged shields **2**
2 No femoral pores; dorsal and ventral scales not strongly differentiated and usually highly polished ..... Scincidae **8**
— Femoral pores present; dorsal and ventral scales strongly differentiated, the former either much smaller than those of the belly or separated from them by a lateral fold..... **3**
3 Dorsal scales large and keeled, separated from the ventrals by a more or less distinct lateral fold..... Cordylidae **26**
— Dorsal scales (or at least those adjacent to the ventrals) always small and sometimes granular, not separated from the ventrals by a lateral fold..... Lacertidae **28**
4 Body laterally compressed; digits bound into opposable bundles for grasping; tail prehensile in most species..... Chamaeleonidae **43**
— Body round or dorsoventrally flattened; digits not in opposable bundles; tail not prehensile **5**
5 Eyelids incapable of closing the eye, which is protected instead by a transparent spectacle; digits often expanded to form adhesive pads..... Gekkonidae (part) **52**
— Eyelids fully movable and capable of completely closing the eye; digits not specialised to form adhesive pads **6**
6 Head long and narrow; tongue extremely long, slender and deeply forked; tail with a distinct dorsal keel; adults 100 cm or more in total length, hatchlings at least 23 cm ..... Varanidae **87**
— Head short and broad; tongue short, broad and covered with papillae; tail never keeled (though sometimes with a dorsal crest of discrete, lanceolate scales); adults not exceeding 40 cm in total length **7**
7 Contracted pupil a vertical slit; dorsal lepidosis of juxtaposed granules; tail length conspicuously less than snout-vent length..... Gekkonidae (part) **51**
— Contracted pupil round; dorsal lepidosis of imbricate, usually carinate and often spinose scales; tail length in most species greater than snout-vent length ..... Agamidae **88**
8 Nostril well separated from the rostral shield **10**
— Nostril situated between nasal and rostral shields ..... *Chalcides* **9**
9 Mid-body scale rows 20-26; anterior region of the back, behind the shoulders, bearing a darker and/or more heavily ocellated longitudinal band that covers the entire width of just two mid-dorsal scale rows (sometimes this marking is so faint it is difficult to detect, alternatively it may be subdivided into three parallel stripes) ..... *Chalcides ragazzii*
— Mid-body scale rows 24-34; anterior region of the back not patterned differently from the rest of the dorsum, or with a darker and/or more heavily ocellated longitudinal band that covers the entire width of four mid-dorsal scale rows (and may be subdivided into three parallel stripes) ..... *Chalcides ocellatus*
10 Eyelids fully movable and capable of completely closing the eye **12**
— Eyelids fused, immovable, the eye protected by a single transparent scale ..... *Panaspis* **11**
11 Frontoparietal shields fused; mid-body scale rows 24-26 ..... *Panaspis wahlbergii*
— Frontoparietal shields paired; mid-body scale rows 22 ..... *Panaspis tancredii*

12 Lower eyelid with a large transparent disc; dorsal scales usually keeled; limbs well developed ..... *Mabuya* **17**

— Lower eyelid scaly or with only a small transparent disc; dorsal scales smooth; limbs reduced..... *Lygosoma* **13**

13 Nostril surrounded by two nasal scales and a separate supranasal .... *Lygosoma afrum*

— Nostril surrounded by only two scales or pierced within a single scale **14**

14 Nostril surrounded by two scales, the supranasal and anterior nasal being fused .. **15**

— Nostril pierced in a single scale, resulting from fusion of both anterior and posterior nasals with the supranasal ..... *Lygosoma vinciguerrae*

15 Four upper labial scales anterior to the subocular .....*Lygosoma paedocarinatum*

— Three upper labial scales anterior to the subocular **16**

16 Fifth toe clearly shorter than the second and having only 5-6 subdigital lamellae ..... *Lygosoma sundevallii*

— Fifth toe at least as long as the second and having 7-9 subdigital lamellae ..... *Lygosoma somalicum*

17 Frontoparietal shields fused; mid-body scale rows 30-34, the dorsals tricarinate; a dark lateral band from eye to groin with a pale dorsolateral stripe above and pale lateral stripe beneath ..... *Mabuya isselii*

— Frontoparietal shields paired **18**

18 Subocular scale excluded from the edge of the lip or having a lower margin that is clearly less than half the width of its upper margin **19**

— Subocular scale bordering the lip and having a lower margin that is clearly more than half the width of its upper margin **20**

19 Auricular lobes conspicuously long and pointed; subocular scale reaches the edge of the lip; adult males uniform pale brown above with a series of large dark blotches in a longitudinal row behind the ear, females and juveniles with both vertebral and dorsolateral pale lines ..... *Mabuya hildebrandtii*

— Auricular lobes relatively poorly developed and more rounded; subocular scale usually excluded from the edge of the lip; sexes similar, having a dark lateral band from eye to groin and broad dorsolateral pale stripes, but no pale vertebral or lateral lines ..... *Mabuya striata*

20 Lower margin of the subocular clearly shorter than its upper margin; a dark lateral band from eye to groin bordered by conspicuous pale dorsolateral and lateral stripes ..... *Mabuya varia*

— Upper and lower margins of the subocular more or less equal in length **21**

21 Mid-body scale rows 22-28; dorsal scales smooth ..... *Mabuya megalura*

— Mid-body scale rows usually 28 or more (rarely 26); dorsal scales keeled **22**

22 Dorsal scales with 5-8 keels; mid-body scale rows 30-38 (but rarely more than 34) ..... *Mabuya maculilabris*

— Dorsal scales with 2-3 (rarely 4 or 5) keels **23**

23 A very prominent pale line with distinct dark margins running from beneath the eye, along the lower flank to the groin, but no pale vertebral line in either sex; mid-body scale rows 30-32; dorsal scales with 3 distinct keels .... *Mabuya wingatii* (Fig. 14)

— No prominent pale line along the length of the lower flank, except in some females where it is accompanied by a conspicuous pale vertebral line **24**

24 Mid-body scale rows 32-46 (most commonly 34-40); dorsal scales with 3 (rarely 4 or 5) distinct keels; adult males uniform pale brown above with a series of large dark blotches in a longitudinal row behind the ear; females and juveniles with distinct pale vertebral, dorsolateral and lateral lines on a dark background ..... *Mabuya quinquetaeniata*

— Not having the above combination of characters **25**

25 Scales on sole of foot usually terminating in conspicuous spines; subdigital lamellae usually with a strong median keel and sometimes weak lateral keels; mid-body scale rows 30-35; dorsal scales usually with 2 (rarely 3) strong keels;

supranasals in short contact or separated; dark flanks not sharply demarcated ventrally ..... *Mabuya brevicollis*

— Scales on sole of foot not spinose; subdigital lamellae smooth or only weakly carinate; mid-body scale rows 26-32; dorsal scales with 3 (rarely 4) keels; supranasals generally in broad contact; dark lateral band strongly demarcated from the pale lower flanks ..... *Mabuya planifrons*

26 Nostril pierced in a single nasal scale; three pairs of large shields behind the frontal (i.e. one pair of frontoparietals and two pairs of parietals) ..... *Cordylus rivae*

— Nostril pierced between two nasal scales and the first labial; only two pairs of large shields behind the frontal (i.e. one pair of frontoparietals and one pair of parietals) ..... *Gerrhosaurus* **27**

27 Ventral plates in 8 longitudinal rows ..... *Gerrhosaurus flavigularis*

— Ventral plates in 10 longitudinal rows ..... *Gerrhosaurus major*

28 Nostril in contact with or very close to the first upper labial **35**

— Nostril well separated from the first upper labial by a lower nasal scale **29**

29 Supraoculars in contact with the frontal and frontoparietal; upper head shields smooth **30**

— Supraoculars separated from the frontal and frontoparietal by a row of small granular scales; upper head shields rarely smooth, usually with at least some surface sculpture **31**

30 Distal subdigital lamellae tricarinate; lower nasal scale in broad contact with the rostral; dorsal scales smooth or very feebly keeled; posterior subcaudals smooth; ventrals in 8 longitudinal series ..... *Mesalina martini*

— Distal subdigital lamellae bicarinate; lower nasal scale making no contact with the rostral; dorsal scales very distinctly keeled; posterior subcaudals keeled; ventrals usually in 6 longitudinal series ..... *Heliobolus neumanni*

31 Distal subdigital lamellae bicarinate; three (very rarely two) nasal scales; snout (measured from the anterior margin of the first supracilliary) usually shorter than the maximum distance between the anterior margins of the first supracilliaries and with no obvious constriction when viewed from above ..... *Heliobolus spekii*

— Distal subdigital lamellae unicarinate; usually four (more rarely three) nasal scales; snout usually longer than the maximum distance between the anterior margins of the first supracilliaries and, when viewed from above, clearly attenuated anterior to a marked constriction at the level of the prefrontal-frontonasal sutures ..... *Pseuderemias* **32**

32 Upper head shields striated; dorsal scales distinctly tricarinate **33**

— Upper head shields rarely smooth, usually more or less rugose but never striated; dorsal scales smooth or only feebly unicarinate **34**

33 Subocular scale excluded from the lip; 17-24 femoral pores on each thigh; the back with longitudinal dark bands, all or most of which incorporate rows of distinct pale spots ..... *Pseuderemias brenneri*

— Subocular scale usually entering the lip; 13-17 femoral pores on each thigh; longitudinal dark bands on the back having little or no trace of pale spots .... *Pseuderemias striata*

34 Subocular scale excluded from the lip; posterior subcaudals strongly keeled; ventrals in 8 longitudinal series of large rectangular plates, with evidence of an additional row of smaller and more rounded scales on either side; on the back five distinct dark bands incorporating discrete rows of pale spots .... *Pseuderemias smithi*

— Subocular scale entering the lip; posterior subcaudals smooth or only weakly keeled; ventrals usually in 6 (rarely 8) longitudinal series, with evidence of an additional row of smaller and more rounded scales on either side; on the back a mid-dorsal dark stripe (more rarely three), with two dark bands on either side that are frequently obscured, fragmented or reduced to a reticulum by pale and often coalescent pale blotches ..... *Pseuderemias mucronata*

35 One postnasal scale; several rows of clearly enlarged scales along the dorsal midline ..... *Philochortus* **39**

— Two postnasal scales, one above the other; scales along the dorsal midline not obviously enlarged ..... *Latastia* **36**

36 Centre of pectoral region covered by regularly arranged scales similar to those of the belly; back immaculate or with 3-5 more or less distinct longitudinal dark stripes; flanks rarely unmarked, usually dark with 2-3 longitudinal rows of vivid white spots; 8-12 femoral pores on each thigh ..... *Latastia boscai*

— Centre of pectoral region usually with a group of small, irregular scales that interrupt the linear arrangement of the ventral plates **37**

37 Ground colour of the back often distinctly reddish with darker markings frequently feeble or absent; 2-3 rows of obvious blue spots on each flank and similar spots sometimes present also on the back; 6-11 femoral pores on each thigh; in Ethiopia known only from the southeastern lowlands ..... *Latastia caeruleopunctata*

— Ground colour of the back not conspicuously reddish and dark markings usually more or less distinct; blue spots absent or confined to a single row on each flank **38**

38 4-7 femoral pores on each thigh; dark markings on the back well defined, consisting of a vertebral line that usually extends unbroken from nape to sacral region and is accompanied by three longitudinal rows of dark blotches on either side (though these may sometimes fuse to form longitudinal lines, transverse bars or a reticular pattern); in Ethiopia apparently confined to the northeastern lowlands ... *Latastia doriai*

— 7-14 femoral pores on each thigh; dark markings on the back tending to be more weakly defined, a continuous vertebral line often absent or confined to the anterior region of the back, with accompanying spots and blotches either much reduced or arranged in transverse lines or a reticular pattern rather than longitudinally orientated; widespread in Ethiopia ..... *Latastia longicaudata*

39 Frontal shield usually separated from the supraoculars by a more or less complete row of small granular scales; dorsal scales keeled, in 22-28 rows at mid-body; 6-8 enlarged scales between the hindlimbs; dorsum with five longitudinal pale lines, the median bifurcating on the nape ..... *Philochortus hardeggeri*

— Frontal shield usually in full contact with the supraoculars and not separated by small granular scales; dorsal scales smooth or keeled, in 28-46 rows at mid-body; 10-16 enlarged scales between the hindlimbs **40**

40 Dorsum with five longitudinal pale lines, the median bifurcating on the nape; dorsal scales smooth or weakly keeled; parietal shields most commonly completely separated through contact between the interparietal and occipital *Philochortus phillipsii*

— Dorsum with six longitudinal pale lines, the median two bifurcating on the nape **41**

41 Parietal shields in contact, the interparietal either absent or too small to reach the occipital; dorsal scales usually smooth ..... *Philochortus spinalis*

— Parietal shields completely separated through contact between the interparietal and occipital **42**

42 Dorsal scales distinctly keeled, in 35-40 rows at mid-body; 14-18 femoral pores on each thigh ..... *Philochortus intermedius*

— Dorsal scales very weakly keeled, in 30-32 rows at mid-body; 10-14 femoral pores on each thigh ..... *Philochortus rudolfensis*

43 Claws simple; scales on soles of feet smooth; tail long and strongly prehensile, its length frequently equal to or greater than the distance from snout to vent ..... *Chamaeleo* **44**

— Claws bicuspid, having a small secondary point directed ventrally; scales on soles of feet spinose; tail only weakly prehensile, much shorter than the distance from snout to vent ..... *Rieppeleon kerstenii*

44 A single row of enlarged scales forming a well defined gular crest in the midline of the throat **45**

— Gular crest absent (though there may be a pair of ridges covered by unmodified scales similar to those on the rest of the throat) ..... *Chamaeleo affinis* (Fig. 6)

45 Gular crest formed by a row of more or less prominent conical tubercles **47**
— Gular crest formed by a row of very long, laterally compressed, blade-like scales; known only from the Bale Mountains of Ethiopia **46**
46 Snout with a pair of distinct rostral projections that, in the male, become forwardly-directed annulated horns ..... *Chamaeleo balebicornutus* (Fig. 8)
— Snout devoid of rostral projections ..... *Chamaeleo harennae*
47 Distinct gular and ventral crests formed from a continuous row of enlarged, conical tubercles extending from chin to vent; casque no more than moderately raised posteriorly; parietal crest no more than moderately developed, sometimes weak or absent **48**
— Often no distinct ventral crest formed from enlarged tubercles (though there is usually a pale line along the centre of the chest and abdomen); casque much elevated posteriorly; parietal crest very well developed ....*Chamaeleo africanus* (including *calcaricarens*) (Fig. 7)
48 Scalation strongly heterogeneous, the body scales including one or two lateral rows of enlarged tubercles ..... *Chamaeleo bitaeniatus*
— Scalation homogeneous, all body scales of more or less equal size **49**
49 Occipital dermal lobes absent; parietal crest more or less continuous with the dorsal crest and not separated by a deep occipital groove; males without tarsal spurs ..... *Chamaeleo laevigatus*
— Occipital dermal lobes present; parietal crest not continuous with the dorsal crest, but distinctly separated by a deep occipital groove; males often with tarsal spurs **50**
50 Occipital lobes weakly developed and not movable ..... *Chamaeleo gracilis*
— Occipital lobes developed into pronounced and freely movable flaps .... *Chamaeleo dilepis* (including *ruspolii*)
51 Dorsal lepidosis homogeneous, all granules being more or less equal in size; digits long, slender and compressed; four scales surrounding the base of each claw; males without preanal or femoral pores ..... *Holodactylus africanus*
— Dorsal lepidosis heterogeneous, including both small and large granules; digits short, stout and cylindrical; three scales surrounding the base of each claw; males with an uninterrupted series of 23-28 preanofemoral pores *Hemitheconyx taylori* (Fig. 11)
52 Digits more or less strongly dilated and with well developed adhesive pads **59**
— Digits slender, not strongly dilated, lacking well developed adhesive pads **53**
53 Back covered with large imbricate scales ..... *Tropiocolotes somalicus*
— Back covered with small juxtaposed granules, sometimes including an admixture of enlarged tubercles **54**
54 Contracted pupil a vertical slit; digits with a conspicuous lateral fringe of pointed scales ..... *Stenodactylus sthenodactylus*
— Contracted pupil rounded; digits with no lateral fringe **55**
55 Dorsal lepidosis heterogeneous, the back covered with small juxtaposed granules intermixed with large tubercles; cloacal sacs (opening through a pair of slits immediately behind the vent) present in both sexes; tail subcylindrical; forest habitats in southwestern Ethiopia ..... *Cnemaspis dickersonae*
— Dorsal lepidosis homogeneous, the back covered with juxtaposed granules of uniform size; cloacal sacs absent in both sexes; tail often laterally compressed and even crested, especially in males; savanna and semi-desert habitats .....*Pristurus* **56**
56 Nostril separated from the rostral shield **58**
— Nostril in contact with the rostral shield **57**
57 Tail (especially in males) strongly compressed, with a dorsal crest of elongate, lanceolate scales that extends anteriorly beyond the level of the vent, at least as a row of enlarged scales; fold of upper eyelid usually weakly enlarged; maximum snout-vent length 40 mm ..... *Pristurus flavipunctatus*
— Tail less strongly compressed, that of males (and some females) with a more feeble dorsal crest or row of enlarged scales that does not extend anteriorly beyond the level of the vent; fold of upper eyelid moderately enlarged; maximum snout-

vent length 32 mm ..... *Pristurus rupestris*

58 Snout rounded, not depressed or beak-like; dorsal granules clearly smaller than the ventral scales; 18-23 lamellae beneath the fourth toe; claws longer than their basal scales ..... *Pristurus crucifer*

— Snout pointed, depressed and almost beak-like; dorsal and ventral granules subequal in size; 16-19 lamellae beneath the fourth toe; claws equal to or shorter than their basal scales ..... *Pristurus somalicus*

59 Digits furnished distally with two diverging, fan-shaped groups of scansors that surround and extend far beyond the claw ..... *Ptyodactylus ragazzii*

— Scansors not in two fan-shaped distal groups surrounding or extending far beyond the claw **60**

60 Subdigital lamellae in two rows separated by a longitudinal groove **62**

— Subdigital lamellae in a single row not divided by a longitudinal groove **61**

61 All fingers with small retractile claws (that of the thumb being particularly minute and inconspicuous); males with 2 preanal pores ..... *Homopholis fasciata*

— Claws present on only the third and fourth fingers, the rest terminating in a flat, nail-like scute; males with neither preanal nor femoral pores .... *Tarentola annularis* (Fig. 12)

62 First digit conspicuously reduced; free distal portion of the toes short and arising from the end of a strongly dilated discoid expansion; cloacal sacs absent in both sexes; contracted pupil round ..... *Lygodactylus* **84**

— First digit not conspicuously reduced; free distal portion of the toes long and arising angularly from within the digital expansion; cloacal sacs (opening through a pair of slits immediately behind the vent) present in both sexes; contracted pupil vertical ..... *Hemidactylus* **63**

63 Tail lacking any significant basal constriction, cylindrical or sometimes depressed and usually tapering gradually throughout its length **67**

— Tail more or less conspicuously constricted at its base, depressed and often swollen or root-shaped **64**

64 Back covered with granules among which are rows of large, trihedral and strongly keeled tubercles **65**

— Back covered with flat, subcircular scales or by a mixture of granules and tubercles, the latter only moderately large and either smooth or weakly keeled **66**

65 Upper surface of snout covered with large, strongly keeled tubercles; males with 28-36 preanofemoral pores in a continuous series; regenerated tail grossly swollen and often leaf-shaped; maximum snout-vent length 50 mm *Hemidactylus ruspolii*

— Upper surface of snout covered with small granules (only rarely including an admixture of keeled tubercles); males with a series of 20-46 preanofemoral pores that is interrupted mid-ventrally; regenerated tail no more than moderately swollen and root-shaped; maximum snout-vent length about 70 mm *Hemidactylus brookii*

66 Dorsal lepidosis homogeneous, consisting of flat, subcircular, weakly imbricate scales; males with 4 preanal pores ..... *Hemidactylus curlei*

— Dorsal lepidosis heterogeneous, consisting of small granules and larger, rounded, flat or faintly keeled tubercles; males with a series of 12-18 preanofemoral pores that is interrupted mid-ventrally ..... *Hemidactylus laticaudatus*

67 Dorsal lepidosis of juxtaposed or weakly imbricating granules or tubercles **73**

— Dorsal lepidosis of strongly imbricating scales **68**

68 Scales on the back homogeneous, all of more or less equal size and smooth **70**

— Scales on the back heterogeneous, the larger ones being more or less strongly keeled **69**

69 Dominant scales on the back large and strongly keeled, with much smaller carinate scales packed into the narrow spaces between them; males with 6-10 preanal pores ..... *Hemidactylus tropidolepis*

— Dominant scales on the back small and smooth, with larger keeled scales widely scattered amongst them; males with 6-20 preanal or preanofemoral pores .....

..... *Hemidactylus squamulatus*

70 Midbody scale rows 59-102; scales on the occiput and nape different from those on the back, granular and juxtaposed **72**

— Midbody scale rows 50-59; scales on the occiput and nape similar to those on the back, smooth and imbricate **71**

71 Males with 8 preanal pores ..... *Hemidactylus ophiolepis* (Fig. 10)

— Males with 22-25 preanofemoral pores ..... *Hemidactylus ophiolepoides*

72 Midbody scale rows 59-81; males with 4-13 preanal pores; posterior face of femur and tibia bearing only small, subequal scales ..... *Hemidactylus isolepis* (Fig. 9)

— Midbody scale rows 70-102; males with 12-19 preanal pores; posterior face of femur and tibia with enlarged tubercles scattered among the smaller scales .... *Hemidactylus albopunctatus*

73 Back with small uniform granules, sometimes accompanied by weakly enlarged tubercles that are no more than feebly keeled **81**

— Back with rows of greatly enlarged, more or less strongly keeled, trihedral tubercles **74**

74 Back with a vivid pattern of four black transverse bands between the neck and tail-base; 3-6 lamellae beneath the first toe; 6-9 lamellae beneath the fourth toe; maximum snout-vent length 40 mm ..... *Hemidactylus bavazzanoi*

— No vivid pattern of dark transverse bands (or if such markings are present then 7-10 lamellae beneath the first toe; 9-14 lamellae beneath the fourth toe and maximum snout-vent length 80 mm or more) **75**

75 4-6 lamellae beneath the first toe; 5-9 lamellae beneath the fourth toe; males with 20-46 preanofemoral pores; proximal region of the tail lacking a ventrolateral row of enlarged tubercles; maximum snout-vent length about 70 mm ..... *Hemidactylus brookii*

— 5-10 lamellae beneath the first toe; 8-14 lamellae beneath the fourth toe; males with 2-13 preanal pores but no femoral pores; proximal region of the tail with or without a ventrolateral row of enlarged tubercles **76**

76 Proximal region of the tail strongly depressed, its outermost row of tubercles forming a distinct ventrolateral series; 6-8 lamellae beneath the first toe; 9-11 lamellae beneath the fourth toe; males with 6-11 preanal pores .. *Hemidactylus barodanus*

— Proximal region of the tail no more than moderately depressed, its outermost row of tubercles not forming a ventrolateral series but lying close to the lateral midline **77**

77 5-8 lamellae beneath the first toe; 8-11 lamellae beneath the fourth toe; males with 2-9 preanal pores; maximum snout-vent length about 60 mm **79**

— 7-10 lamellae beneath the first toe; 9-14 lamellae beneath the fourth toe; males with 4-13 preanal pores (in *H. macropholis*, adult males of *H. arnoldi* are unknown); maximum snout-vent length 80 mm or more **78**

78 An enlarged scale, surrounded by the granules of the sole, situated between the bases of the first and fifth toes; a prominent dorsal pattern of dark transverse bars, each widest at the level of the vertebral line ..... *Hemidactylus arnoldi*

— No enlarged scale on the sole of the foot; no prominent dorsal pattern, except in some juveniles which have transverse bars that are widest at their lateral margins ..... *Hemidactylus macropholis*

79 Digits feebly expanded; claws long and slender; usually no enlarged scales on the underside of the unregenerated tail; supranasal scales usually in contact; 5-8 lamellae beneath the first toe; 8-11 lamellae beneath the fourth toe; males with 2-6 (most commonly 4) preanal pores ..... *Hemidactylus sinaitus*

— Digits more strongly expanded; claws short and stout; a median series of transversely enlarged scales usually present on the underside of the unregenerated tail; supranasals often separated by one or more smaller scales; males with 4-9 (most commonly 6) preanal pores **80**

80 7-10 upper labials; at midbody 5-9 ventral scales in a longitudinal series equivalent in length to the horizontal diameter of the eye ..... *Hemidactylus robustus*

— 10-13 upper labials; at midbody 9-14 ventral scales in a longitudinal series equivalent in length to the horizontal diameter of the eye *Hemidactylus yerburii*
81 Dorsal lepidosis more or less homogeneous, consisting of small granular scales with or without a few that are only very slightly enlarged; males lacking both preanal and femoral pores ..... *Hemidactylus somalicus*
— Dorsal lepidosis heterogeneous, including both small granules and some clearly enlarged tubercles; males with preanal or preanofemoral pores **82**
82 Subdigital lamellae on the fifth toe often failing to reach the sole of the foot, its proximal portion with only small scales or granules; 5-6 lamellae beneath the first toe; males with more than 40 preanofemoral pores; snout-vent length of adults up to 94 mm ..... *Hemidactylus platycephalus*
— Subdigital lamellae of all toes reaching the sole of the foot; 6-7 lamellae beneath the first toe; males with fewer than 40 preanofemoral pores; snout-vent length of adults not exceeding 70 mm **83**
83 Male (syntype) with 8 preanal pores ..... *Hemidactylus jubensis* [40]
— Males with 24-32 preanofemoral pores ..... *Hemidactylus smithi*
84 Mental shield deeply fissured posteriorly, the fissures sometimes uniting to excise a single large and entirely separate postmental scale; nostril in contact with the rostral shield **86**
— Mental shield entire; nostril narrowly separated from the rostral shield **85**
85 Dark gular chevrons usually uniting at their apices to surround a distinct pale postmental spot; head prominently patterned and often contrasting strongly with the back; subcaudal scutes lacking a median series of dusky marks *Lygodactylus keniensis*
— Dark gular chevrons not uniting to surround a distinct pale spot; head not prominently patterned and generally rather similar to the back; subcaudal scutes with a conspicuous median series of dusky marks ..... *Lygodactylus gutturalis*
86 Throat with three longitudinal dark lines, weakly divergent though often conjoined anteriorly ..... *Lygodactylus grandisonae*
— Throat immaculate ..... *Lygodactylus somalicus*
87 Nostril only slightly closer to the eye than to the snout tip; snout shallow in profile, gradually sloping towards the tip; tail long, usually more than 1½ times the snout-vent length ..... *Varanus niloticus*
— Nostril much closer to the eye than to the snout tip; snout deep, its upper surface strongly angled to produce a distinctly aquiline profile; tail short, less than 1½ times the snout-vent length ..... *Varanus albigularis*
88 Femoral pores present; tail with regular whorls of very large spinose tubercles; all dorsal scales smooth ..... *Uromastyx ocellata*
— Femoral pores absent; tail without regular whorls of very large spinose tubercles; at least some dorsal scales keeled **89**
89 Tail longer than the distance from snout to vent and not depressed **91**
— Tail much shorter than the distance from snout to vent and strongly depressed, discoidal at the base ..... *Xenagama* **90**
90 Basal portion of the tail longer than broad and merging gradually into the termi-

[40] *Hemidactylus jubensis* is very poorly known. Its appearance in the same couplet as *H. smithi* owes much to the influence of Parker (1932a, 1942) and Loveridge (1947) and could be highly misleading, particularly if Lanza (1983, 1990) is right to suspect that the former taxon might be conspecific with *H. barodanus*. Both Parker and Loveridge clearly relied heavily upon Boulenger's (1895b) original account of *H. jubensis* and subsequent re-examination of the female syntype in London (BM 95.3.5.1/1946.8.23.66), which is now considered to be an example of *H. smithi*. Although Loveridge's (1947: 165) description included some supplementary information (e.g. "males with 6-10 preanal pores forming an uninterrupted series"), this was evidently derived from some unspecified material of dubious identity and is consequently unacceptable. The only specimen that can be used to define *H. jubensis* is the male syntype in Genoa (MSNG 28846) and this has not been seen by the present authors.

nal filament, its marginal spines not conspicuously larger than those on its upper surface; dorsal scalation strongly heterogeneous, with larger and more spinose scales clearly differentiated from the rest ..... *Xenagama batillifera* (Fig. 4)

— Basal portion of the tail broader than long and abruptly differentiated from the terminal filament, its marginal spines conspicuously large; dorsal scalation only weakly heterogeneous ..... *Xenagama taylori* (Fig. 5)

91 Occipital scale (which bears the pineal organ) usually clearly larger than adjoining scales on the back of the head; no dorsolateral skin folds ..... *Agama* **97**

— Occipital scale not larger than adjoining scales on the back of the head; a distinct dorsolateral skin fold extending along each side of the back from neck to groin .. .. *Acanthocercus* **92**

92 Flanks covered with uniformly small, smooth scales .... *Acanthocercus annectans*

— Flanks with some conspicuously enlarged, keeled and spinose scales in addition to the smaller ones **93**

93 Region of the back between the dorsolateral folds including at least some clearly enlarged, keeled and spinose scales in addition to numerous smaller ones; no conspicuous pale vertebral stripe (though sometimes a diffuse pale band, lacking sharp lateral margins) **94**

— Region of the back between the dorsolateral folds with only small, more or less uniform scales; always a prominent pale vertebral stripe, clearly defined by sharp lateral margins **96**

94 Scales on the anterior throat more or less distinctly and sharply keeled; mid-dorsal scales of the back not sharply differentiated from those of the tail; nostril directed posteriorly ..... *Acanthocercus cyanogaster*

— Scales on the anterior throat not distinctly and sharply keeled; at the base of the tail, a more or less abrupt transition between the smaller scales of the back and the larger caudal scutes; nostril directed laterally **95**

95 Mid-dorsal lepidosis of the back strongly heterogeneous, typically with longitudinal rows of conspicuously enlarged, strongly keeled and spinose scales distributed amongst numerous smaller ones; each tail segment composed of 3-4 rings of scales ..... *Acanthocercus atricollis*

— Mid-dorsal lepidosis of the back less strongly heterogeneous, the scales generally more similar in size, all rather weakly keeled and none conspicuously spinose; each tail segment composed of only 2 annuli ..... *Acanthocercus zonurus*

96 Enlarged, keeled scales on the flanks in distinct transverse rows, most of which are closely compacted into a single restricted field; scales on the posterodorsal face of the thigh essentially homogeneous, all of moderate size, keeled, spinose and regularly arranged; caudal scale rows (at a distance behind the vent equivalent to the maximum breadth of the tail) 16-21 (most commonly 18-19) *Acanthocercus phillipsii*

— Enlarged, keeled scales on the flanks widely dispersed or in weak and isolated transverse rows; scales on the posterodorsal face of the thigh clearly heterogeneous, with enlarged, keeled and spinose scales irregularly arranged and intermingled with numerous smaller ones; caudal scale rows 20-29 (most commonly 22-26) ..... *Acanthocercus guentherpetersi*

97 Dorsal scales strongly heterogeneous, the back being scattered with large thorn-like scutes, each usually surrounded by a rosette of smaller spines; head massive, with an abbreviated snout and much enlarged orbits elevated high on the upper surface ..... *Agama robecchii* (Fig. 3)

— Dorsal scales more or less homogeneous, none conspicuously larger than the rest; head shape unremarkable **98**

98 A distinct longitudinal crest of enlarged, lanceolate scales on the nape **100**

— No nuchal crest **99**

99 Tympanum fully exposed, not encroached upon by the surrounding clusters of elongate spines; snout-vent length of adult males not more than 54 mm, of females not more than 64 mm ..... *Agama persimilis*

— Tympanum partly occluded by encroaching clusters of elongate spines; snout-vent length of adult males at least 58 mm, of females at least 76 mm *Agama rueppelli*

100 Nasal shield rounded; in Ethiopia known only from arid northeastern regions of the country ..... *Agama spinosa*

— Nasal shield pyriform, prolonged into a distinct point anteriorly **101**

101 Nostril clearly displaced beneath the canthus rostralis; first canthal scale behind the nasal separated from the rostral by just 2 (rarely 1 or 3) markedly elongate scutes; adult male with a patch of intense blue-black pigmentation on the posterior region of the throat; in Ethiopia known only from localities west of the Rift Valley ..... *Agama doriae* (Figs 1-2)

— Nostril situated on the canthus rostralis; first canthal scale behind the nasal separated from the rostral by 3-4 (rarely 2 or 5) scutes; adult male lacking a prominent dark patch on the posterior region of the throat ..... *Agama agama*

GAZETTEER OF COLLECTION LOCALITIES

Much of the information incorporated into the following gazetteer has been derived from published itineraries and route-maps of expeditions, or from details recorded on collectors' labels, but the main references for geographical co-ordinates are the 1:1000000 maps, series GSGS 4646, issued by the British War Office in the years 1946-1947. Considerably more accurate maps have since been produced, but the former were the best available during the period 1968-1977, when many recent collections of Ethiopian lizards were obtained and gazetteers for this and other groups of vertebrates first compiled. It therefore needs to be understood that, while these co-ordinates have considerable validity in relation to one another, in abstraction the accuracy of individual figures may be more limited. It is perhaps hardly necessary to add that any attempt to "improve" some of the easier co-ordinates (such as those for major towns), while leaving the rest unchanged, will have an overall effect which is the direct opposite of that intended – it will make a slightly unsatisfactory situation vastly more chaotic!

Locality	*Co-ordinates*
Abassi-See (Erlanger & Neumann col.) = Lake Awasa	
or, perhaps more correctly, Sciallo Swamp	ca 07°05'N 38°33'E
Abaya Lake, N (end) of	06°37'N 37°58'E
Abaya Lake, W (side) of	06°15'N 37°50'E
Abaya Lake, E of	06°15'N 38°00'E
Abaya Lake, SW (corner) of	06°04'N 37°40'E
Abaya Lake, SE corner of	06°03'N 37°50'E
Abaya Lake, S (shore) of	06°02'N 37°45'E
Abbai (E. Degen col.) = Great Abbai River	at either 10°06'N 38°17'E
	or 09°52'N 37°49'E
Abdallah (region)	at ca 06°10'N 43°20'E
Abera	06°27'N 38°30'E
Abiu, E of	08°11'N 35°22'E
Abu el Kassim (Abulcassim) Mt	07°41'N 40°29'E
Adamitullu	07°51'N 38°42'E

Adda (Addas)	see Debre Zeit
Addis Ababa (Adis Abeba)	09°02'N 38°45'E
Ado	07°20'N 45°15'E
Akaki River, at confluence with Awash River	08°37'N 38°45'E
Akobo River, in Jambo region	07°23'N 34°00'E
Alaideghi Plain	ca 09°20'N 40°20'E
Alemaya (Haramaja) Lake	09°24'N 42°01'E
Alio Amba	09°32'N 39°50'E
Allata	06°33'N 38°28'E
Amarr	ca 05°20'N 38°00'E
Ambo	08°57'N 37°57'E
Ambo, 30 km NW of Dessie	11°16'N 39°34'E
Amhara region	? at ca 13°10'N 37°30'E
Amibarra	09°24'N 40°11'E
Anderatscha	07°12'N 36°27'E
Angareb River	at ca 13°10'N 37°15'E
Ankober, 8 km NW of	09°38'N 39°42'E
Arba Minch	06°05'N 37°38'E
Arero	04°44'N 38°50'E
Aroweina (Arruena)	10°32'N 42°41'E
Artu, Somalia	ca 10°46'N 42°55'E
Arussi Galla region (Erlanger & Neumann col.)	ca 07°50'N 41°10'E
Asaita	11°34'N 41°26'E
Asella	07°57'N 39°07'E
Ashangi (Lake)	12°35'N 39°30'E
Asile	04°52'N 36°41'E
Assabot (Mt)	09°15'N 40°50'E
Audo Mts	06°30'N 41°30'E
Awadi River	at ca 07°23'N 38°40'E
Aware (Auareh)	08°15'N 44°10'E
Aware Melca (Awharra Mullka)	09°08'N 39°58'E
Awasa Lake, E shore of	07°05'N 38°27'E
Awash Falls	08°50'N 40°01'E
Awash National Park	08°54'N 39°55'E
Awash National Park, entrance	08°55'N 40°00'E
Awash (Hauasch) Valley (Erlanger & Neumann col.)	at either 08°20'N 38°55'E
	or 08°25'N 39°25'E
Axum	14°07'N 38°42'E
Backo, Wollega	09°07'N 37°03'E
Badattino	09°31'N 38°00'E
Badditu (region)	ca 05°55'N 37°55'E
Bahar Dar	11°35'N 37°25'E
Balci (Balchi)	08°54'N 39°16'E
Balinga Motscho (Erlanger & Neumann col.)	see Modjo (Moggio) Valley
Barssa (River) Valley	at ca 05°55'N 37°00'E
Batie	11°10'N 40°01'E
Bedelle	08°28'N 36°21'E
Beearso	06°53'N 42°18'E
Beletta Forest	07°33'N 36°34'E
Belfodio	10°34'N 34°49'E

Biccena, N of	10°29'N 38°16'E
Bikalal Hill	09°18'N 35°55'E
Bilo	06°45'N 38°25'E
Bisan River	ca 05°20'N 37°50'E
Bishoftu (Buchoftu) Lake	08°44'N 38°58'E
Bisidima River, E of Harar	09°15'N 42°12'E
Bitiju	09°33'N 40°45'E
Bohodle	08°15'N 46°20'E
Bomu (Boma)	10°27'N 34°46'E
Bonga	07°15'N 36°15'E
Borana region (Donaldson Smith, 24.IV.1895)	05°25'N 37°56'E
Bourille	05°07'N 36°07'E
Budda, Gimirra region	ca 07°10'N 36°00'E
Burao, Somalia	09°30'N 45°32'E
Bussa	09°55'N 42°15'E
Buyo	07°40'N 36°45'E
Calam	see Kelam
Camp Awash, 18 km N of	ca 08°58'N 39°56'E
Caroarsa River mouth, 10 km E of	10°10'N 36°05'E
Caschei (or Turmi River)	at ca 04°50'N 36°30'E
Chamo (Shamo) Lake, N of	05°59'N 37°42'E
Chamo Lake, NW corner of	05°57'N 37°40'E
Chamo Lake, NE (corner/shore) of	05°57'N 37°45'E
Chamo Lake, W of	ca 05°50'N 37°30'E
Chamo Lake, E side of	05°55'N 37°44'E
Chamo Lake, S shore of	ca 05°42'N 37°35'E
Choba (Cioba)	ca 08°57'N 39°35'E
Ciaffedenza (Dscheffedenza, Ciadafena)	08°58'N 39°08'E
Coromma	05°30'N 38°05'E
Cullufu (Collufu) River, near Arba Minch	ca 06°05'N 37°38'E
Dabahs (Daba-as) River	at 10°02'N 42°23'E
Dabanac	06°54'N 43°02'E
Dabarif	? = Dabarik or Debarek 13°08'N 37°55'E
Dacata (Dakhato) River	at 09°12'N 42°25'E
Dagah Bur (Daghabur)	08°13'N 43°30'E
Dagah Bur, E of	08°10'N 44°15'E
Danka River, near Dinshu	07°06'N 39°47'E
Daro River, Arussi (W. Thesiger col.)	ca 07°45'N 40°25'E
Darsie River mouth	06°07'N 37°42'E
Debre Marcos (Debra Markos)	10°21'N 37°44'E
Debre Marcos, 10 km SW of	10°18'N 37°40'E
Debre Zeit	08°44'N 38°59'E
Deema	10°32'N 38°14'E
Dejem (Degen)	10°10'N 38°10'E
Derba (region)	ca 09°30'N 38°40'E
Devark (Debarek, Dabarik)	13°08'N 37°55'E
Dida (Didda region)	ca 07°50'N 39°30'E
Didessa River bridge	09°02'N 36°09'E
Didessa River mouth	10°05'N 35°38'E
Dime	06°18'N 36°16'E

Dinshu	07°06'N 39°47'E
Dinshu, 4 km W of	07°06'N 39°46'E
Dire Dawa (Dire Daua)	09°35'N 41°52'E
Dire Dawa, 30 km E of	09°45'N 42°05'E
Djaffa Mts	07°40'N 40°10'E
Djeldabal	ca 10°13'N 42°30'E
Djem Djem Forest	09°00'N 38°12'E
Djildessa (Jildessa, Gildessa)	09°42'N 42°05'E
Dodola and Adaba, between	07°00'N 39°15'E
Dodola	06°58'N 39°11'E
Dodola, 15 km W of	06°57'N 39°02'E
Dodola, SE of	06°55'N 39°12'E
Dolo	04°11'N 42°05'E
Dungalbar (Dungulbar)	11°58'N 37°01'E
Eghi Mt	05°45'N 43°51'E
Egriariba	13°28'N 39°36'E
Ela Gura	05°01'N 38°42'E
Elba (River)	ca 05°45'N 41°55'E
El Banno	04°51'N 37°23'E
El Dire	04°59'N 37°07'E
El Meti	04°58'N 37°08'E
Endessa	ca 08°50'N 40°00'E
Entotto	09°02'N 38°45'E
Fantalle Mt	08°59'N 39°54'E
Fantalle Mt, N slope of	09°00'N 39°54'E
Fantalle Mt, NE slope of	08°59'N 39°55'E
Fantalle Mt, S side of	08°57'N 39°53'E
Farre	09°38'N 39°53'E
Felenguai	06°12'N 36°39'E
Filwoha (Filhoa, Filua)	09°00'N 39°58'E
Fincha River mouth	10°03'N 37°20'E
Finik	ca 07°00'N 42°00'E
Fulla Valley, Somalia	at ca 10°48'N 42°58'E
Furza	07°38'N 41°43'E
Gabba River bridge	08°17'N 36°05'E
Gadat	06°20'N 36°50'E
Gadshinbocha, Hauasch-Tal (Erlanger & Neumann col.)	? = Caccinua 09°03'N 40°13'E
Gajim (Gadjir)	ca 06°55'N 35°35'E
Gambela	08°15'N 34°35'E
Ganale River, upper region	ca 05°45'N 39°30'E
Garamulata	09°16'N 41°44'E
Garano River, near Goba	at 07°00'N 39°57'E
Gardulla	05°37'N 37°30'E
Gardulla Mt	05°35'N 37°24'E
Gaysay Mt	07°08'N 39°45'E
Gellago (Cellago)	04°10'N 40°02'E
Gelo (Ghilo) River and Akobo River, between (O. Neumann col.)	ca 07°30'N 36°10'E
Gendoa River	at ca 12°30'N 36°30'E
Gewani (Gowani)	10°10'N 40°38'E
Ghibie River bridge	08°14'N 37°35'E

Ghimbi	09°10'N 35°50'E
Ghimbi, 25 km N of	09°30'N 35°50'E
Giacorsa	ca 04°10'N 39°50'E
Giari Bule	05°33'N 38°33'E
Gila (Ghilo) River, 63 km SW of Gambela	07°38'N 34°15'E
Gildessa (Jildessa, Jeldesa)	09°42'N 42°05'E
Goba	07°01'N 39°59'E
Godare	07°26'N 35°00'E
Godeb (Godab River)	at ca 10°22'N 37°35'E
Godobuka	08°55'N 39°25'E
Gofa (region)	ca 06°15'N 36°40'E
Gondar	12°37'N 37°27'E
Gondaraba	04°58'N 36°48'E
Gongabaino	04°57'N 36°42'E
Gore, 2 km W of	08°08'N 35°30'E
Gorgora region	at ca 12°15'N 37°20'E
Goulf	06°50'N 41°25'E
Gubala Ginda	05°28'N 37°52'E
Guder River mouth	09°50'N 37°41'E
Gumboworen, Somalia	ca 10°52'N 43°00'E
Harar (Harrar)	09°18'N 42°08'E
Harar, 20 km E of	09°12'N 42°15'E
Harar, 40 km E of	09°12'N 42°22'E
Hargeisa and Milmil, between (Donaldson Smith, 22.VII.1894)	ca 08°00'N 44°00'E
Harra, Lake Zuai (E. Degen col.)	08°07'N 38°47'E
Harrar	see Harar
Hauacio	ca 04°50'N 39°15'E
Hiressa	ca 09°47'N 37°50'E
Hora Bishoftu	see Bishoftu Lake
Ilala Sala	08°50'N 40°05'E
Javello	04°55'N 38°07'E
Jinka	05°49'N 36°39'E
Juba River, W of (Donaldson Smith, 7.III.1895)	03°52'N 40°30'E
Juba River, W of (Donaldson Smith, 19.III.1895)	see Sancurar
Juba River, W of (Donaldson Smith, 21.III.1895)	03°57'N 40°00'E
Katcha	06°42'N 39°44'E
Katcha, 12 km N of	06°47'N 39°46'E
Kebre Mengist, 23 km SE of	05°48'N 39°12'E
Kebre Mengist, 75 km SE of	05°37'N 39°23'E
Kelam (Kalam, Calam)	04°50'N 36°05'E
Kereyu Lodge	08°50'N 40°02'E
Kofole (Kofele, Koffole), 10 km SE of	07°03'N 38°52'E
Kollu (Kolla region)	at ca 09°15'N 38°10'E
Koscha (Coscia) region	06°45'N 36°35'E
Kude	ca 11°00'N 37°00'E
Kudu Valley	08°56'N 40°02'E
Laku (E. Ruspoli col.)	not located, but Ogaden region assumed
Lalibela	12°02'N 39°02'E
Langano Lake, W shore	07°37'N 38°42'E
Lasman, Somalia	10°44'N 42°51'E

Lefe Isa	09°30'N 42°53'E
Let Marefia	09°39'N 39°46'E
Mabil	10°21'N 36°49'E
Mabil, 10 km W of	10°19'N 36°45'E
Magala Umberto I	04°18'N 42°03'E
Magascia (Mangascia) Plateau	ca 09°00'N 39°35'E
Mago National Park	05°30'N 36°30'E
Mahal Uonz	09°37'N 39°46'E
Maki (Meki) River	at 08°15'N 38°45'E
Malca Guba	04°47'N 39°22'E
Malca Guba, 20 km N of	04°55'N 39°38'E
Malca Murri	04°16'N 40°47'E
Mandera, Kenya	03°56'N 41°52'E
Mega	04°05'N 38°19'E
Mega, 10 km SE of	04°00'N 38°22'E
Menaballa (region)	08°58'N 39°01'E
Metahara	08°53'N 39°55'E
Metahara, 1-2 km W of	08°53'N 39°54'E
Metaker	08°47'N 42°11'E
Metemma	12°57'N 36°10'E
Mille River	at 11°24'N 40°46'E
Milmil	08°18'N 43°53'E
Modjo (Shoa)	08°36'N 39°07'E
Modjo (Valley), Ennia Galla region (Erlanger & Neumann col.)	= Moggio River at ca 08°12'N 41°43'E
Monte Tschoki	ca 09°45'N 35°33'E
Moyale	03°32'N 39°03'E
Mugher River gorge	at 09°24'N 38°39'E
Mugher River mouth, near	09°47'N 37°53'E
Mui	05°50'N 35°45'E
Mulu (farm)	09°24'N 38°39'E
Murle	05°10'N 36°13'E
Murri	04°14'N 40°42'E
Nachisar National Park	05°55'N 37°46'E
Nazareth	08°32'N 39°16'E
Neghelli	05°20'N 39°35'E
Neghelli, 20 km E of	05°16'N 39°46'E
Neghelli, 32 km E of	05°13'N 39°52'E
Neghelli, 35 km E of	05°15'N 39°53'E
Neghelli, 40 km E of	05°13'N 39°56'E
Neghelli, 75 km E of	05°23'N 40°16'E
Neghelli, 95 km E of	05°16'N 40°20'E
Neghelli, 100 km E of	05°15'N 40°21'E
Neghelli, 25 km SW of	05°03'N 39°32'E
Odamuda	ca 07°50'N 41°10'E
Omo River region (O. Neumann col.)	at ca 06°38'N 36°36'E
Omo River, near Bongosi	05°22'N 36°05'E
Oulancheti (Uelenciti, Welenchiti)	08°39'N 39°25'E
Oulancheti, 5 km E of	08°41'N 39°29'E
Pokwo	08°15'N 34°25'E

Polkom	08°11'N 34°17'E
Portuguese bridge	11°14'N 37°54'E
Portuguese bridge, 29 km SE of	11°10'N 38°10'E
Quezan	10°50'N 34°48'E
Ramu, Kenya	03°57'N 41°14'E
Rira (Riro)	06°46'N 39°43'E
Rokar	07°32'N 41°52'E
Rudolf (Turkana) Lake, N end of	04°35'N 36°05'E
Rugdeia Sogheira	09°40'N 41°02'E
Sagan (River)	at ca 05°00'N 36°55'E
Sancurar (Sankural)	04°02'N 40°08'E
Sardo	11°58'N 41°18'E
Sassabana (Sassabane)	07°53'N 43°40'E
Scecchi River bridge, 5 km E of	08°22'N 35°49'E
Schambala Valley (Shambala River)	at 05°45'N 37°10'E
Serba, Lake Zuai (E. Degen col.)	(N?) shore of Lake Zwai [41]
Shafartak bridge	10°06'N 38°17'E
Shalla Lake, NW corner of	07°32'N 38°25'E
Shamo Lake	see Chamo Lake
Shashamane	07°12'N 38°36'E
Shawe River, near	06°40'N 39°44'E
Sheikh Husein (Sheik Hussein)	07°44'N 40°42'E
Sheikh Mahomed (Sheik Mahomet)	07°20'N 40°30'E
Shimala River	ca 10°45'N 34°49'E
Sibbe (Sibi region)	ca 07°50'N 43°10'E
Sidam-Bale bridge	05°42'N 39°30'E
Sidam-Bale bridge, 35 km N of	05°59'N 39°35'E
Sidam-Bale bridge, 28 km N of	05°55'N 39°32'E
Sidam-Bale bridge, 15-16 km N of	05°50'N 39°42'E
Simien Mountains	ca 13°15'N 38°20'E
Smith River	ca 07°35'N 41°48'E
Sodere (Sodare)	08°25'N 39°24'E
Sof Omar	06°54'N 40°48'E
Sof Omar, 10 km NE of	07°05'N 40°38'E
Sololo, Kenya	03°44'N 38°41'E
Somadu (So-Omadu), Somalia	10°38'N 42°44'E
Stephanie Lake (Donaldson Smith, 11.VI.1895)	04°32'N 36°55'E
Stephanie Lake (Donaldson Smith, 16.VI.1895)	ca 04°52'N 36°41'E
Stephanie Lake (Donaldson Smith, 18.VI.1895)	04°58'N 36°48'E
Stephanie Lake, W of	04°50'N 36°45'E
Stephanie Lake and Rudolf Lake, between (Donaldson Smith, 4.VII.1895)	ca 05°20'N 36°38'E
Sunerdarler (Sunderarler)	06°20'N 43°00'E
Tadeccia Melca (Taddeka Mullka)	09°08'N 39°51'E
Tana Lake	12°00'N 37°20'E
Tana Lake, 40 km NW of	ca 12°25'N 36°50'E
Todoniang, Kenya	04°32'N 35°55'E
Tug Faf, lower region	ca 06°20'N 44°20'E
Turfa (River)	at 07°40'N 42°24'E

[41] Largen & Rasmussen (1993: 404) inadvertently associated this locality with Lake Tana.

Turkana Lake	see Rudolf Lake
Turmi	05°05'N 36°29'E
Uardere (Wadere)	06°59'N 45°20'E
Uardere, SW of	06°55'N 45°10'E
Wageli	? = Wadeli 04°32'N 39°42'E
Wardergubberner	ca 07°20'N 40°30'E
Web (Ueb) River, at confluence with Ganana (Ganale) River	04°18'N 42°03'E
Web (Ueb River) Valley (E. Ruspoli col.)	ca 05°40'N 41°55'E
Webi Mana (mouth)	05°27'N 41°10'E
Webi Shebeli, source region	ca 07°00'N 39°00'E
Webi Shebeli (Donaldson Smith, 5.IX.1894)	07°18'N 42°05'E
Webi Shebeli (Donaldson Smith, 25.XII.1894)	07°17'N 42°14'E
Webi Shebeli (Donaldson Smith, 30.XII.1894)	ca 06°45'N 43°10'E
Webi Shebeli and Juba River, between (Donaldson Smith, 27.II.1895)	03°58'N 41°40'E
Webi Shebeli and Juba River, between (Donaldson Smith, 28.II.1895)	03°57'N 41°22'E
Welenchiti	see Oulancheti
Worgesha	11°35'N 39°40'E
Zaguala (Mt)	see Zuquala Mt
Zegi (Zegie)	11°42'N 37°21'E
Zuquala (Zaguala, Sequala) Mt	08°32'N 38°52'E
Zwai Lake	07°55'N 38°43'E

DISCUSSION

The lizard fauna currently recognised in Ethiopia comprises 101 species (Gekkonidae 37, Scincidae 19, Lacertidae 16, Agamidae 15, Chamaeleonidae 9, Cordylidae 3, Varanidae 2), of which no fewer than 40 are denizens of the Somali-arid zone. Such taxa have their centres of distribution in the desert and semi-desert regions of Somalia and eastern Ethiopia, although some may extend southwards into eastern Kenya (more rarely NE Tanzania) and/or northwards through Eritrea into NE Sudan (occasionally even SE Egypt). Three nominal Ethiopian endemics (*Cordylus rivae*, *Hemidactylus jubensis* and *H. ophiolepis*) have ecological characteristics which suggest that they may well extend into the lowlands of neighbouring territories and perhaps have their closest zoogeographic affinities with the Somali-arid fauna.

It has long been recognised that palaeogeographic and palaeoclimatic events in the Horn of Africa have created in the present dry lowlands of this region a significant centre of reptilian diversification and consequent endemicity (e.g. PARKER 1942, LANZA 1990). Nevertheless, the preponderance of Somali-arid forms amongst Ethiopian lizards clearly owes much to the fact that this fauna has been rather extensively sampled and researched, most notably through the large collections accumulated by R.H.R. Taylor during the 1930s and numerous subsequent publications by H.W. PARKER and B. LANZA. Twelve species (10 of them Somali-arid forms) are recorded in Ethiopia solely on the evidence of examples obtained by Taylor and four of these taxa are still known only from type specimens derived, wholly or in part, from material that he donated to the Natural History Museum in London.

In marked contrast, lizards from other parts of Ethiopia have clearly been seriously neglected. It seems extraordinary, for example, that records indicate no more than nine species which are in any way characteristic of montane habitats on

the central plateau, with only five of these being endemic. *Chamaeleo balebicornutus* (1700-2400 m) and perhaps *C. harennae* (2400-3300 m) are believed to be associated with forest in the Bale Mountains (though the latter is also known from montane moorland and sites where natural forest cover has been destroyed). *Acanthocercus zonurus* (2000-2450 m), *Chamaeleo affinis* (1900-3100 m) and probably *Panaspis tancredii* appear to favour more open environments. *Chamaeleo bitaeniatus* (1300-2500 m), *Hemidactylus laticaudatus* (1570-2200 m), *Mabuya isselii* (1000-2500 m) and *M. megalura* (1300-3400 m) are grassland forms that extend beyond the Ethiopian borders. *Cnemaspis dickersonae*, although neither montane nor endemic, is significant in being only the third species of sylvicolous lizard yet reported from Ethiopia.

This country occupies a land area almost twice that of Kenya, with 8 times as much ground lying above 2000 m and 14 times as much occurring at altitudes in excess of 3000 m (YALDEN 1983). It also has substantially greater forest cover at moderate to high elevations, yet in Kenya there are eight lizard species that are clearly inhabitants of montane grassland or moorland and at least twelve taxa predominantly associated with forest habitats (SPAWLS et al. 2002). Only three such species are known to be common to both countries.

The obvious inference must be that many species, including both endemic and more widespread forms, still remain to be discovered in the mountains and forests of Ethiopia; which is a conclusion having important implications for conservation. Numerous publications have drawn attention to the declining flora and fauna of Ethiopia and emphasised that it is forest (and particularly montane forest) species that are most obviously at risk (e.g. YALDEN et al. 1996, LARGEN 2001). Because such forests are being felled at an alarming rate to provide timber, fuel-wood and cleared ground for agriculture, there seems to be a very real possibility that some sylvicolous lizards in Ethiopia may be facing extinction due to habitat destruction, before their existence in this country has even been recognised. Fortunately, the two chameleons which are the only montane forest endemics yet reported from the region are currently protected within the Bale Mountains National Park.

A great deal of further research, on museum collections but more especially in the field, is required before any deep understanding of the composition, distribution and status of the Ethiopian lizard fauna can be achieved. The need for additional information has become particularly urgent in highland regions with an unstable, often rapidly degrading, environment and we would like to hope that the present interim contribution will encourage and perhaps assist the development of such future studies.

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REFERENCES

Anderson J. 1895. On a collection of reptiles and batrachians made by Colonel Yerbury at Aden and its neighbourhood. *Proceedings of the Zoological Society of London*: 635-663.

Anderson J. 1898. Zoology of Egypt. Vol. 1. Reptilia and Batrachia. *London: B. Quaritch*, LVIII + 371 pp.

Andersson L.G. 1910. A new species of *Hemidactylus* from Harar, Abyssinia. *Jahrbüchern_des Nassauischen Vereins für Naturkunde in Wiesbaden* 63: 200-205.

Arillo A., Balletto E. & Spanò S. 1965. II e III spedizione Scortecci in Migiurtinia: il genere *Eremias* Wiegmann (Reptilia, Lacertidae). *Bollettino dei Musei e degli Istituti Biologici dell'Università di Genova* 33 (204): 85-109.

Arillo A., Balletto E. & Spanò S. 1967. Il genere *Latastia* Bedriaga in Somalia. *Bollettino dei Musei e degli Istituti Biologici dell'Università di Genova* 35 (229): 105-145.

Arnold E.N. 1977. Some little-known geckoes (Reptilia: Gekkonidae) from Arabia with descriptions of two new species from the Sultanate of Oman. In: The scientific results of the Oman Flora and Fauna Survey 1975. *Journal of Oman Studies. Special Report* 1: 81-110.

Battersby J.C. 1954. Reptiles and amphibians collected in the Northern Frontier division of Kenya in 1951. *Annals and Magazine of Natural History* (12) 7: 241-248.

Battersby J.C. 1955. On further amphibians and reptiles from the Northern Frontier division of Kenya. *Annals and Magazine of Natural History* (12) 8: 149-150.

Bauer A.M. 2003. On the identity of *Lacerta punctata* Linnaeus 1758, the type species of the genus *Euprepis* Wagler 1830, and the generic assignment of Afro-Malagasy skinks. *African Journal of Herpetology* 52 (1): 1-7

Bauer A.M. & Günther R. 1995. An annotated type catalogue of the lacertids (Reptilia: Lacertidae) in the Zoological Museum, Berlin. *Mitteilungen aus dem Zoologischen Museum in Berlin* 71 (1): 37-62.

Bedriaga J. von 1884. Die neue Lacertiden-Gattung *Latastia* und ihre Arten. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 20: 307-324.

Blanford W.T. 1870. Reptilia, pp. 444-459. In: Observations on the geology and zoology of Abyssinia, made .... 1867-68. *London*: *Macmillan*, XII + 487 pp.

Blanford W.T. 1874. Descriptions of new lizards from Persia and Baluchistan. *Annals and Magazine of Natural History* (4) 13: 453-455.

Bocage J.V. du B. 1866. Reptiles nouveaux ou peu connus recueillis dans les possessions portugaises de l'Afrique occidentale, qui se trouvent au muséum de Lisbonne. *Jornal de Sciencias Mathematicas Physicas e Naturaes, Lisboa* 1: 57-78.

Bocage J.V. du B. 1873. Mélanges erpétologiques. II. Sur quelques reptiles et batraciens nouveaux, rares ou peu connus d'Afrique occidentale. *Jornal de Sciencias Mathematicas Physicas e Naturaes, Lisboa* 4: 209-227.

Boettger O. 1893a. Übersicht der von Prof. C. Keller anlässlich der Ruspoli'schen Expedition nach den Somaliländern gesammelten Reptilien und Batrachier. *Zoologischer Anzeiger, Leipzig* 16 (416): 113-119, (417): 129-132.

Boettger O. 1893b. Katalog der Reptilien-Sammlung im Museum der Senckenbergischen Naturforschenden Gesellschaft in Frankfurt am Main. I. Teil (Rhynchocephalen, Schildkröten, Krokodile, Eidechsen, Chamäleons). *Frankfurt am Main: Senckenbergischen Naturforschenden Gesellschaft*, X + 140 pp.

Böhme W. 1985. Zoogeographical patterns of the lizard fauna of the African subsaharan savanna belt, with preliminary description of a new chameleon. *Proceedings of the International Symposium on African Vertebrates, Bonn*: 471-478.

Boulenger G.A. 1885a. Description d'une espèce nouvelle d'Agame. *Annali del Museo Civico di Storia Naturale Giacomo Doria* (2) 2: 127-128.

Boulenger G.A. 1885b. Catalogue of the lizards in the British Museum (Natural History). Vol. 1. Geckonidae, Eublepharidae, Uroplatidae, Pygopodidae, Agamidae. *London: Trustees of the British Museum*, XII + 497 pp.

Boulenger G.A. 1890a. First report on additions to the lizard collection in the British Museum (Natural History). *Proceedings of the Zoological Society of London*: 77-86.

Boulenger G.A. 1890b. On the varieties of *Chalcides ocellatus*, Forsk. *Annals and Magazine of Natural History* (6) 5: 444-445.

Boulenger G.A. 1892. On some reptiles collected by Sig. L. Brichetti Robecchi in Somaliland. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 32: 5-15.

Boulenger G.A. 1895a. An account of the reptiles and batrachians collected by Dr. A. Donaldson Smith in Western Somali-land and the Galla Country. *Proceedings of the Zoological Society of London*: 530-540.

Boulenger G.A. 1895b. Esplorazione del Giuba e dei suoi affluenti compiuta dal Cap. V. Bottego durante gli anni 1892-93 sotto gli auspici della Società Geografica Italiana. Risultati zoologici. II. Rettili e Batraci. *Annali del Museo Civico di Storia Naturale_Giacomo Doria* 35: 9-18.

Boulenger G.A. 1895c. On the reptiles and batrachians obtained by Mr. E. Lort-Phillips in Somaliland. *Annals and Magazine of Natural History* (6) 16: 165-169.

Boulenger G.A. 1896a. A list of the reptiles and batrachians collected by Dr. Ragazzi in Shoa and Eritrea. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 36: 545-554.

Boulenger G.A. 1896b. Second report on the reptiles and batrachians collected by Dr. A. Donaldson Smith during his expedition to Lake Rudolf. *Proceedings of the Zoological Society of London*: 212-217.

Boulenger G.A. 1896c. A list of the reptiles and batrachians collected by the late Prince Eugenio Ruspoli in Somaliland and Gallaland in 1893. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 37: 5-14.

Boulenger G.A. 1896d. Report on Capt. Bottego's second collection of reptiles and batrachians from Somaliland. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 37: 15-23.

Boulenger G.A. 1897. Description of a new lizard from Obok. *Annals and Magazine of Natural History* (6) 19: 467-468.

Boulenger G.A. 1898a. Concluding report on the late Capt. Bottego's collection of reptiles and batrachians from Somaliland and British East Africa. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 38: 715-723.

Boulenger G.A. 1898b. On a second collection of reptiles made by Mr. E. Lort-Phillips in Somaliland. *Annals and Magazine of Natural History* (7) 2: 130-133.

Boulenger G.A. 1901. A list of batrachians and reptiles obtained by Dr. Donaldson Smith in Somaliland in 1899. *Proceedings of the Zoological Society of London*: 47-49.

Boulenger G.A. 1903. Descriptions of two new lizards discovered by Mr. E. Degen in his journey to Abyssinia. *Annals and Magazine of Natural History* (7) 11: 54-55.

Boulenger G.A. 1909. On the reptiles and batrachians collected by the Tancredi Expedition to Lake Tsana, Abyssinia. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 44: 193.

Boulenger G.A. 1912. Missione per la Frontiera Italo-Etiopica sotto il comando del Capitano Carlo Citerni. Risultati zoologici. List of the reptiles and batrachians. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 45: 329-332.

Boulenger G.A. 1917. On the lizards of the genus *Philochortus* Matschie. *Proceedings of the Zoological Society of London*: 145-157.

Branch W.R. 1988. Field guide to the snakes and other reptiles of southern Africa. *London*: *New Holland*, 326 pp.

Broadley D.G. 1966. A review of the *Riopa sundevallii* group (Sauria: Scincidae) in southern Africa. *Arnoldia, Bulawayo* 2 (34): 1-7.

Broadley D.G. 1977. A review of the *Hemidactylus mabouia* complex in southeastern Africa (Sauria: Gekkonidae). *Arnoldia, Bulawayo* 8 (19): 1-15.

Broadley D.G. 1987. A review of geographical variation in *Gerrhosaurus major* Duméril (Sauria: Cordylidae). *Herpetological Journal* 1: 194-198.

Broadley D.G. 1989. A reappraisal of the genus *Panaspis* Cope, with the description of a new species of *Leptosiaphos* (Reptilia: Scincidae) from Tanzania. *Arnoldia, Bulawayo* 9 (32): 439-449.

Broadley D.G. & Bauer A.M. 1998. A review of the *Mabuya quinquetaeniata* complex in East Africa (Sauria: Scincidae). *African Journal of Herpetology* 47 (2): 43-58.

Broadley D.G. & Branch W.R. 2002. A review of the small east African *Cordylus* (Sauria: Cordylidae), with the description of a new species. *African Journal of Herpetology* 51 (1): 9-34.

Broadley D.G. & Howell K.M. 1991. A checklist of the reptiles of Tanzania, with synoptic keys. *Syntarsus* 1: 1-70.

Calabresi E. 1925. Anfibi e rettili raccolti dal Signor Ugo Ignesti nell'Abissinia settentrionale. *Atti della Società Italiana di Scienze Naturali, e del Museo Civico di Storia Naturale, Milano* 64: 100-109.

Cope E.D. 1868. Observations on reptiles of the Old World. Art. II. *Proceedings of the Academy of Natural Sciences, Philadelphia*: 314-323.

Curry-Lindahl K. 1957. Behaviour of the Tropical Rock Lizard *Agama cyanogaster* (Ruppel) in hot environments. *Annales de la Société Royale Zoologique de Belgique* 87: 45-74.

Daudin F.M. 1802. Histoire naturelle générale et particulière des reptiles, 3. *Paris: F. Dufart*, 452 pp.

Del Prato A. 1895. Vertebrati eritrei. Aggiunta al catalogo della collezione Eritrea Bòttego. *Atti della Società Italiana di Scienze Naturali, e del Museo Civico di Storia Naturale, Milano* 35: 17-26.

Duméril A.M.C. & Duméril A.H.A. 1851. Catalogue méthodique de la collection des reptiles du Muséum d'Histoire Naturelle de Paris. *Paris: Gide et Boudry*, IV + 224 pp.

Fischer J.G. 1884. Über die von Herrn Dr. G.A. Fischer in Massai-Gebiete (Ost-Afrika) auf seiner in Veranlassung der geographischen Gesellschaft in Hamburg unternommenen Expedition gesammelten Reptilien, Amphibien und Fische. *Jahrbuch Hamburg Wissenschaft Anstalt* 1: 3-32.

Forsskål P. 1775. Descriptiones Animalium, Avium, Amphibiorum, Piscium, Insectorum, Vermium, quae in itinere orientali observavit Petrus Forskål. Post mortem auctoris editit C. Niebuhr. *Hauniae* [*Copenhagen*]: *Heineck and Faber*, 20 + XXXIV + 164 pp.

Fuhn I.E. 1964. *Ablepharus anselli* FitzSimons 1955, synonyme d'*Ablepharus tancredii* Boulenger 1909 (Reptilia: Sauria). *Doriana* 3 (150): 1-3.

Geoffroy [Saint-Hilaire] I. 1827. Description des reptiles qui se trouvent en Égypte, pp. 121-160. In: Geoffroy Saint-Hilaire E.-F., Edit. Description de l'Égypte, ou recueil des observations et des recherches qui ont été faites en Égypte pendant l'expédition de l'armée française (1798-1801). Histoire Naturelle. Vol. 1 (1). *Paris: Imprimerie Impériale.*

Giglioli E.H. 1888. Note intorno agli animali vertebrati raccolti dal Conte Augusto Boutourline e dal Dott. Leopoldo Traversi ad Assab e nello Scioa negli anni 1884-87. *Annali del Museo Civico di Storia Naturale Giacomo Doria* (2) 6: 5-73.

Gray J.E. 1831. A synopsis of the species of the class Reptilia, pp. 1-110. In: Griffith E. & Pidgeon E., Edits. The animal kingdom arranged in conformity with its organization, by the Baron Cuvier .... with additional descriptions of all the species hitherto named, and of many not before noticed. 9. The class Reptilia arranged by the Baron Cuvier, with specific descriptions. *London: Whittaker, Treacher & Co.,* 368 + 110 pp.

Gray J.E. 1845. Catalogue of the specimens of lizards in the collection of the British Museum. *London: British Museum*, XXVII + 289 pp.

GRAY J.E. 1863. Notice of a new species of *Chameleon* sent from Khartoom by Mr. Consul Petherick. *Proceedings of the Zoological Society of London*: 94-95.

GÜNTHER A. 1872. Description of three new species of *Eremias*. *Annals and Magazine of Natural History* (4) 9: 381-382.

GÜNTHER A. 1880. Description of new species of reptiles from eastern Africa. *Annals and Magazine of Natural History* (5) 6: 234-238.

HALLOWELL E. 1842. Description of a new species of Chameleon from Western Africa. *Journal of the Academy of Natural Sciences, Philadelphia* 8: 324-329.

HALLOWELL E. 1852. Description of new species of Reptilia from western Africa. *Proceedings of the Academy of Natural Sciences, Philadelphia*: 62-65.

HEYDEN C.H.G. VON 1827. Reptilien. In: Rüppell E. Atlas zu der Reise im nördlichen Afrika. Vol. I. Zoologie. *Frankfurt-am-Main: H.L. Brönner*, 24 pp.

KLAUSEWITZ W. 1954. Eidonomische Untersuchungen über die Rassenkreise *Agama cyanogaster* und *Agama atricollis*. 1. Der Rassenkreise der *Agama cyanogaster*. *Senckenbergiana Biologica* 35 (3-4): 137-146.

KLAUSEWITZ W. 1957. Eidonomische Untersuchungen über die Rassenkreise *Agama cyanogaster* und *Agama atricollis*. 2. Die Unterarten von *Agama atricollis*. *Senckenbergiana Biologica* 38 (3-4): 157-174.

LAMPE E. 1911. Erster Nachtrag zum Katalog der Reptilien- und Amphibien-Sammlung des Naturhistorischen Museums der Stadt Wiesbaden. *Jahrbüchern des Nassauischen Vereins für Naturkunde in Wiesbaden* 64: 137-236.

LANZA B. 1972. The reptiles of the Awash National Park (Shoa, Ethiopia). *Monitore Zoologico Italiano (Nuova Serie) Supplemento* 4: 159-184.

LANZA B. 1978a. On some new or interesting East African amphibians and reptiles. *Monitore Zoologico Italiano (Nuova Serie) Supplemento* 10: 229-297.

LANZA B. 1978b. A new Somali *Hemidactylus* (Reptilia Gekkonidae). *Monitore Zoologico Italiano (Nuova Serie) Supplemento* 11: 111-117.

LANZA B. 1983. A list of the Somali amphibians and reptiles. *Monitore Zoologico Italiano (Nuova Serie) Supplemento* 18: 193-247.

LANZA B. 1990. Amphibians and reptiles of the Somali Democratic Republic: checklist and biogeography. *Biogeographia* 14: 407-465.

LANZA B. & CARFÌ S. 1968. Gli Scincidi della Somalia (Reptilia, Squamata). *Monitore Zoologico Italiano (Nuova Serie) Supplemento* 2: 207-260.

LARGEN M.J. 1995. A new species of chameleon (Reptilia Sauria Chamaeleonidae) from montane forest in Ethiopia. *Tropical Zoology* 8: 333-339.

LARGEN M.J. 2001. Catalogue of the amphibians of Ethiopia, including a key for their identification. *Tropical Zoology* 14: 307-402.

LARGEN M.J. & RASMUSSEN J.B. 1993. Catalogue of the snakes of Ethiopia (Reptilia Serpentes), including identification keys. *Tropical Zoology* 6: 313-434.

LAURENT R.F. & GANS C. 1965. Lizards, pp. 25-45. In: Gans C., Laurent R.F. & Pandit H. Notes on a herpetological collection from the Somali Republic. *Annales du Musée Royal de l'Afrique Centrale (8vo), Sciences Zoologiques, Tervuren* 134: 1-93.

LAURENTI J.N. 1768. Specimen medicum, exhibens synopsin reptilium emendatum cum experimentis circa venena et antidota reptilium austriacorum, quod authoritate et consensu. *Vienna: J. Thomae Trattnern*, 8 + 214 + 3 pp.

LEACH W.E. 1819. Appendix IV. In: Bowdich T.E. Mission from Cape Coast Castle to Ashantee with statistical account of that kingdom and geographical notices of other parts of the interior of Africa. *London*: *John Murray*, VII + 513 pp.

LICHTENSTEIN H. 1823. Verzeichniss der Doubletten des Zoologischen Museums der Königlichen Universität zu Berlin nebst Beschreibung vieler bisher unbekannter Arten von Säugethieren, Vögeln, Amphibien und Fischen. *Berlin: T. Trautwein*, X + 118 pp.

LINNAEUS C. VON 1758. Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Ed. 10, 1. *Holmiae* [*Stockholm*]*: Laurenti Salvii*, IV + 824 pp.

Linnaeus C. von 1766. Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Ed. 12, 1. *Holmiae* [*Stockholm*]*: Laurenti Salvii*, 532 pp.

Loveridge A. 1935. New geckoes of the genus *Lygodactylus* from Somaliland, Sudan, Kenya and Tanganyika. *Proceedings of the Biological Society of Washington* 48: 195-200.

Loveridge A. 1936a. African reptiles and amphibians in Field Museum of Natural History. *Field Museum of Natural History Publications (Zoological Series), Chicago* 22 (1): 1-111.

Loveridge A. 1936b. New geckos of the genus *Hemidactylus* from Zanzibar and Manda Islands *Proceedings of the Biological Society of Washington* 49: 59-62.

Loveridge A. 1942. Revision of the African lizards of the family Gerrhosauridae. *Bulletin of the Museum of Comparative Zoology, Harvard* 89: 483-543.

Loveridge A. 1944. Revision of the African lizards of the family Cordylidae. *Bulletin of the Museum of Comparative Zoology, Harvard* 95: 1-118.

Loveridge A. 1947. Revision of the African lizards of the family Gekkonidae. *Bulletin of the Museum of Comparative Zoology, Harvard* 98: 1-469.

Loveridge A. 1957. Check list of the reptiles and amphibians of East Africa (Uganda; Kenya; Tanganyika; Zanzibar). *Bulletin of the Museum of Comparative Zoology, Harvard* 117 (2): 153-362, I-XXXVI.

Marx H. 1968. Checklist of the reptiles and amphibians of Egypt. *Special Publication of the United States Naval Medical Research Unit Number 3, Cairo*: 1-91.

Mausfeld P., Schmitz A., Böhme W., Misof B., Vrcibradic D. & Rocha C.F.D. 2002. Phylogenetic affinities of *Mabuya atlantica* Schmidt, 1945, endemic to the Atlantic Ocean archipelago of Fernando de Noronha (Brazil): necessity of partitioning the genus *Mabuya* Fitzinger 1826 (Scincidae: Lygosominae). *Zoologischer Anzeiger, Leipzig* 241: 281-293.

Mertens R.F.W. 1967. Die herpetologische Sektion des Natur-Museums und Forschungs-Instituts Senckenberg in Frankfurt am Main nebst einem Verzeichnis ihrer Typen. I. *Senckenbergiana Biologica* 48: 1-106.

Mocquard F. 1888. Sur une collection de reptiles et batraciens rapportée des pays çomalis et de Zanzibar par M.G. Révoil. Mémoires publiés par la Société Philomatique à l'occasion du centenaire de sa fondation. Sciences naturelles: 109-134. *Paris: Gauthier-Villars et Fils*.

Mocquard F. 1905. Note préliminaire sur une collection de reptiles et de batraciens offerte au Muséum par M. Maurice de Rothschild. *Bulletin du Muséum National d'Histoire Naturelle, Paris* 11: 285-288.

Moody S.M. & Böhme W. 1984. Merkmalsvariation und taxonomische Stellung von *Agama doriae* Boulenger, 1885 und *Agama benueensis* Monard, 1951 (Reptilia: Agamidae) aus dem Sudangürtel Afrikas. *Bonner Zoologischer Beiträge* 35: 107-128.

Necas P. 1994. Bemerkungen zur Chamäleon-Sammlung des Naturhistorischen Museums in Wien, mit vorläufiger Beschreibung eines neuen Chamäleons aus Kenia (Squamata: Chamaeleonidae). *Herpetozoa* 7 (3-4): 95-108.

Necas P. 2004. *Chamaeleo* (*Trioceros*) *harennae fitchi* (Reptilia: Sauria: Chamaeleonidae), ein neues Chamäleon aus dem äthiopischen Hochland. *Sauria, Berlin* 26 (1): 3-9.

Neumann O. 1905. Über nordost-afrikanische und arabische Kriechtiere. *Zoologische Jahrbücher (Abteilung für Systematik, Ökologie und Geographie der Tiere), Jena* 22: 389-404.

Parker H.W. 1930. Three new reptiles from Somaliland. *Annals and Magazine of Natural History* (10) 6: 603-606.

Parker H.W. 1932a. Two collections of reptiles and amphibians from British Somaliland. *Proceedings of the Zoological Society of London*: 335-367.

Parker H.W. 1932b. Scientific results of the Cambridge Expedition to the East African lakes, 1930-1931. 5. Reptiles and amphibians. *Zoological Journal of the Linnean Society* 38: 213-229.

Parker H.W. 1935. Two new lizards from Somaliland. *Annals and Magazine of Natural History* (10) 16: 525-529.

Parker H.W. 1936. Reptiles and amphibians collected by the Lake Rudolf Rift Valley Expedition, 1934. *Annals and Magazine of Natural History* (10) 18: 594-609.

PARKER H.W. 1942. The lizards of British Somaliland. (With an appendix on topography and climate by Capt. R.H.R. Taylor, O.B.E.). *Bulletin of the Museum of Comparative Zoology, Harvard* 91: 1-101.

PARKER H.W. 1949. The snakes of Somaliland and the Sokotra Islands. *Zoologische Verhandelingen, Leiden* 6: 1-115.

PASTEUR G. 1960. Notes préliminaires sur les Lygodactyles (Gekkonidés). I. Remarques sur les sous-espèces de *Lygodactylus picturatus*. *Bulletin de l'Institut Fondamental d'Afrique Noire (A, Sciences Naturelles)* 22: 1441-1452.

PASTEUR G. 1962. Notes préliminaires sur les Lygodactyles (Gekkonidés). II. Diagnose de quelques *Lygodactylus* d'Afrique. *Bulletin de l'Institut Fondamental d'Afrique Noire (A, Sciences Naturelles)* 24: 606-614.

PERRET J.-L. 1985. Observations sur les espèces africaines du genre *Cnemaspis* Strauch (Lacertilia, Gekkonidae). *Bulletin de la Société Neuchâteloise des Sciences Naturelles* 108: 29-42.

PETERS G. 1982. Eine neue Wirtelschwanzagame aus Ostafrika (Agamidae: *Agama*). *Mitteilungen aus dem Zoologischen Museum in Berlin* 58 (2): 265-268.

PETERS W.C.H. 1844. Einige neue Fische und Amphibien aus Angola und Mozambique. *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 32-37.

PETERS W.C.H. 1854. Diagnosen neuer Batrachier, mit uebersicht der in Mossambique gesammelten Schlangen und Eidechsen. *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 614-628.

PETERS W.C.H. 1867. Herpetologische Notizien. *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 13-37.

PETERS W.C.H. 1868. Über eine neue Nagergattung, *Chiropodomys penicillatus*, so wie, & über einige neue oder weniger bekannte Amphibien und Fische. *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 448-461.

PETERS W.C.H. 1869. Über neue Gattungen und neue oder weniger bekannte Arten von Amphibien (*Eremias, Dicrodon, Euprepes, Lygosoma, Typhlops, Eryx, Rhynchonyx, Elapomorphus, Achalinus, Coronella, Dromicus, Xenopholis, Anoplodipsas, Spilotes, Tropidonotus*). *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 432-447.

PETERS W.C.H. 1871. Über neue Reptilien aus Ostafrika und Sarawak (Borneo), vorzüglich aus der Sammlung des Hrn. Marquis J. Doria zu Genua. *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 566-581.

PETERS W.C.H. 1874. Über einige neue Reptilien (*Lacerta, Eremias, Diploglossus, Euprepes, Lygosoma, Sepsina, Ablepharus, Simotes, Onychocephalus*). *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 368-377.

PETERS W.C.H. 1878. Über die von Hrn. J.M. Hildebrandt während seiner letzten ostafrikanischen Reise gesammelten Säugethiere und Amphibien. *Monatsbericht der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*: 194-209.

REUSS A. 1834. Zoologische Miscellen. Reptilien. Saurier, Batrachier. *Museum Senckenbergianum. Abhandlungen aus dem Gebiete der beschreibenden Naturgeschichte* 1 (2): 27-62.

ROUX J. 1936. Mission scientifique de l'Omo. III. Zoologie. Reptilia et Amphibia. *Mémoires du Muséum National d'Histoire Naturelle, Paris* (2) 4: 157-190.

RÜPPELL E. 1835. Neue Wirbelthiere zu der Fauna von Abyssinien gehörig. Amphibien. *Frankfurt am Main*: *Siegmund Schmerber*, 18 pp.

RÜPPELL E. 1845. Verzeichniss der in dem Museum der Senckenbergischen naturforschenden Gesellschaft aufgestellten Sammlungen. Dritte Abteilung: Amphibien. *Museum Senckenbergianum. Abhandlungen aus dem Gebiete der beschreibenden Naturgeschichte* 3: 293-316.

SCHÄTTI B. 2001. On the type locality and North-east African distribution of *Latastia l. longicaudata* (Reuss, 1834) (Squamata: Lacertidae). *Herpetozoa* 14 (1/2): 5-7.

SCHÄTTI B. & DESVOIGNES A. 1999. The herpetofauna of southern Yemen and the Sokotra archipelago. *Genève*: *Muséum d'Histoire Naturelle*, 178 pp.

SCHLEICH H.H., KÄSTLE W. & KABISCH K. 1996. Amphibians and reptiles of North Africa. *Koenigstein*: *Koeltz Scientific Publishers*, 627 pp.

SCHMIDT K.P. 1919. Contributions to the herpetology of the Belgian Congo based on the collection of the American Museum Congo Expedition, 1909-1915. Part I. Turtles, crocodiles, lizards, and chameleons. *Bulletin of the American Museum of Natural History* 39: 385-624.

SCHMIDT K.P. 1952. Diagnoses of new amphibians and reptiles from Iran. *Natural History Miscellanea* 93: 1-2.

SCHMIDT K.P. 1953. Amphibians and reptiles of Yemen. *Fieldiana*: *Zoology* 34 (24): 253-261.

SCORTECCI G. 1928. Rettili dell'Eritrea esistenti nelle collezioni del Museo Civico di Milano. *Atti della Società Italiana di Scienze Naturali, e del Museo Civico di Storia Naturale, Milano* 67: 290-339.

SCORTECCI G. 1930. Contributo alla conoscenza dei rettili e degli anfibi della Somalia, dell'Eritrea e dell'Abissinia. *Bollettino dei Musei di Zoologia e di Anatomia Comparata della R. Università di Torino* (3) 41 (10): 1-26.

SCORTECCI G. 1935. Il genere *Pristurus* nella Somalia italiana. *Atti della Società Italiana di Scienze Naturali, e del Museo Civico di Storia Naturale, Milano* 74: 118-156.

SCORTECCI G. 1940. Reptilia, pp. 125-150. In: Missione Biologica nel paese dei Borana. Raccolte zoologiche, Vol. 2, parte I. *Roma*: *Reale Accademia d'Italia, Centro Studi per l'Africa Orientale Italiana*, 791 pp.

SCORTECCI G. 1943. Reptilia, pp. 267-305. In: Missione Biologica Sagan-Omo. Zoologia 1, Vol. 7. *Roma*: *Reale Accademia d'Italia, Centro Studi per l'Africa Orientale Italiana*, 373 pp.

SMITH A. 1849. Illustrations of the zoology of South Africa, consisting chiefly of figures and descriptions of the objects of natural history collected during an expedition into the interior of South Africa in the years 1834, 1835 and 1836. Reptilia. *London: Smith, Elder & Co*., Appendix pp. 1-28.

SPAWLS S. 2000. The chameleons of Ethiopia: an annotated checklist, key and field notes. *Walia* 21: 3-13.

SPAWLS S., HOWELL K., DREWES R. & ASHE J. 2002. A field guide to the reptiles of East Africa. *San Diego, San Francisco, New York, Boston, London, Sydney, Tokyo*: *Academic Press,* 543 pp.

STEINDACHNER F. 1891. Ueber neue und seltene Lacertiden aus den herpetologischen Sammlungen des k. k. Hofmuseums. *Annalen des Naturhistorischen Museums in Wien* 6: 371-378.

STEINDACHNER F. 1907. Herpetologische Notizen III. *Anzeiger Akademie der Wissenschaften, Wien* 44: 355-356.

STEJNEGER L. 1893. On some collections of reptiles and batrachians from East Africa and the adjacent islands, recently received from Dr. W.L. Abbott and Mr. William Astor Chanler, with descriptions of new species. *Proceedings of the United States National Museum, Washington* 16: 711-741.

TILBURY C. 1998. Two new chameleons (Sauria: Chamaeleonidae) from isolated Afromontane forests in Sudan and Ethiopia. *Bonner Zoologischer Beiträge* 47 (3-4): 293-299.

TOLLITT M.E. 1986. Dates and authorship of the text volumes of the Histoire Naturelle section of Savigny's Description de l'Egypte. *Bulletin of Zoological Nomenclature* 43 (1): 107-111.

TORNIER G. 1896. Die Thierwelt Ost-Afrikas und der Nachbargebiete. Lief. IV. Die Kriechthiere Deutsch-Ost-Afrikas. *Berlin*, XIII + 163 pp.

TORNIER G. 1901. Die Crocodile, Schildkröten und Eidechsen in Togo. *Archiv für Naturgeschichte* 67: 65-88.

TORNIER G. 1905. Schildkröten und Eidechsen aus Nordost-Afrika und Arabien. *Zoologische Jahrbücher (Abteilung für Systematik, Ökologie und Geographie der Tiere), Jena* 22: 365-388.

VAILLANT L. 1882. Mission G. Révoil aux pays çomalis. Reptiles et batraciens, pp. 1-25. In: Révoil G. Edit. Faune et flore des pays çomalis (Afrique orientale) 4. *Paris: Challamel Ainé*.

VALENCIENNES A. 1861. Note sur les animaux d'Abyssinie rapportée par M. Courbon. *Comptes Rendus hebdomadaires des Séances de l'Accadémie des Sciences, Paris* 52: 433-434.

VINCIGUERRA D. 1930. Spedizione di S.A.R. il Duca degli Abruzzi alle sorgenti dell'Uebi Scebeli. Risultati zoologici (Rettili). *Annali del Museo Civico di Storia Naturale Giacomo Doria* 55: 40-42.

VINCIGUERRA D. 1931. Spedizione del Barone Raimondo Franchetti in Dancalia. Rettili, Batraci e Pesci. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 55: 96-108.

WERNER F.J.M. 1907. Ergebnisse der mit Subvention aus der Erbschaft Treitl unternommenen zoologischen Forschungsreise Dr. Franz Werner's nach dem ägyptischen Sudan und Nord-Uganda. XII. Die Reptilien und Amphibien. *Sitzungsberichten der Kaiserlichen Akademie der Wissenschaften in Wien (Mathematische-Naturwissenschaftliche Klasse)* 116: 1823-1926.

WERNER F.J.M. 1913. Neue oder seltene Reptilien und Frösche des Naturhistorischen Museums in Hamburg. *Jahrbuch Hamburg Wissenschaft Anstalt* 30 (2): 1-51.

WIEGMANN A.F.A. 1828. Beiträge zur Amphibienkunde. *Isis von Oken, Jena* 21: 364-383.

WIEGMANN A.F.A. 1837. Herpetologische Notizen. *Archiv für Naturgeschichte* 3: 123-136.

WITTE G.-F. DE 1965. Les caméléons de l'Afrique Centrale (République Démocratique du Congo, République du Rwanda et Royaume du Burundi). *Annales du Musée Royal de l'Afrique Centrale (8vo), Sciences Zoologiques, Tervuren* 142: 1-215.

YALDEN D.W. 1983. The extent of high ground in Ethiopia compared to the rest of Africa. *Sinet*: *Ethiopian Journal of Science* 6 (1): 35-39.

YALDEN D.W., LARGEN M.J., KOCK D. & HILLMAN J.C. 1996. Catalogue of the mammals of Ethiopia and Eritrea. 7. Revised checklist, zoogeography and conservation. *Tropical Zoology* 9: 73-164.

YIRMED DEMEKE 1996. Notes on breeding, tail growth and other aspects of the biology of the red-headed agama *Agama agama* (Sauria: Agamidae) in Mago National Park, Ethiopia. *British Herpetological Society Bulletin* 58: 19-25.

Fig. 1. — *Agama doriae* (NHMAA 2003.09: male) from the Mugher River gorge.

Fig. 2. — *Agama doriae* (NHMAA 2003.08: female) from the Mugher River gorge.

Fig. 3. — *Agama robecchii* (NHMAA 2000.01) from Aware.

Fig. 4. — *Xenagama batillifera* from Gildessa.

Fig. 5. — *Xenagama taylori* (NHMAA 2000.07: male) from Dagah Bur.

Fig. 6. — *Chamaeleo affinis* from Goba.

Fig. 7. —*Chamaeleo africanus* from Lefe Isa.

Fig. 8. — *Chamaeleo balebicornutus* (part of the series ZFMK 63050-63058) from near the Shawe River.

Fig. 9. — *Hemidactylus isolepis* from near Turmi.

Fig. 10. — *Hemidactylus ophiolepis* from the Awash National Park.

Fig. 11. —*Hemitheconyx taylori* (NHMAA 2000.05) from Dagah Bur.

Fig. 12. — *Tarentola annularis* from Kereyu Lodge, Awash National Park.

Fig. 13. — *Mabuya brevicollis* (neonate) from Dagah Bur.

Fig. 14. — *Mabuya wingatii* from Bahar Dar.