

PELOMEDUSA (KEILLERCHELYS)**DARRENKEILLERI SP. NOV.**

LSIDurn:lsid:zoobank.org:act:81A502CF-4748-4F12-8DCE-501E65570872

Holotype: A preserved specimen at the Zoologisches Forschungsmuseum Alexander Koenig, Bonn, Germany, specimen number ZFMK 15171, collected from Mokolo, Margui-Wandala, Extreme North Province, Cameroon, Africa. This facility allows access to its holdings.

Diagnosis: *Pelomedusa (Keillerchelys) darrenkeilleri sp. nov.* is similar in most respects to *P. (Keillerchelys) schweinfurthi* Petzold, Vargas-Ramirez, Kehlmaier, Branch, Du Freez, Hofmeyr, Meyer, Schleicher, Siroky and Fritz, 2014, as defined by them, but is readily separated from that taxon by having triangular pectoral scutes that don't reach the plastral midseam, versus relatively squarish ones that do partially contact the midseam in *P. schweinfurthi*.

P. darrenkeilleri sp. nov. is a moderately dark-coloured helmeted species with large, mainly undivided temporal head scales, two small barbells under the chin and a relatively short tail.

Turtles in the subgenus *Keillerchelys subgen. nov.* are readily separated from nominate subgenus *Pelomedusa* Wagler, 1830 by having light or brown coloured dorsums versus black or dark grey in subgenus *Pelomedusa* Wagler, 1830.

Keillerchelys subgen. nov. are further separated from the nominate subgenus in that the widely separated pectorals are usually not in contact in the plastral midline (except in some east African forms), versus pectorals usually in contact in the nominate subgenus.

Turtles in the genus *Pelomedusa* Wagler, 1830 are separated from all other species by the following unique suite of characters: Large-sized, often dark-coloured helmeted turtles with an exceptional maximum straight carapacial length of 32.5 cm (Hewitt 1935, discussed in Branch *et al.* 1990). However, the normal shell length of adults is around 26 cm. Shell covered with epidermal shields. Pectoral scutes may or may not be in contact at plastral midseam (depending on subgenus). In approximately 50 percent of all specimens there are two small temporal scales present on each side of head, the others having one large undivided temporal scale. Two small barbells below the chin; alveolar surface of the upper jaw with a very indistinct median ridge; a pair of shields, separated by a longitudinal suture, between the eyes, followed by a large interparietal. Soft parts dorsally darker than ventrally. Carapace and plastron of adults often mainly or entirely dark but in western and northwestern populations the carapace of adults may be light-coloured with a mainly or entirely yellow plastron. Plastral bones eleven, mesoplastron being present, small and lateral, being wedged between the hyoan and the hypoplastra. No bony temporal roof; neck completely retractile within the

shell; second cervical vertebra is convex. A bony temporal arch; no parieto-squamosal arch; palatine bones in contact; no nasals; praefrontals in contact; dentary single. Digits very short, mostly with only two

phalanges; feet and toes with five claws.

The nominate subgenus from southern Africa includes the species *Pelomedusa galeata* (Schoepff, 1792) as the type species, *Pelomedusa nigra* Gray, 1863 and *P. subrufa* (Bonnaterre, 1789).

All other species in *Pelomedusa*, being from central sub-Saharan Africa are in the subgenus *Keillerchelys subgen. nov.*

Based on Cyt b distances published by Petzold *et al.* (2014) it is reasonable to infer divergence between the two subgenera of somewhere between 10 and 20 MYA.

Distribution: *Pelomedusa (Keillerchelys) darrenkeilleri sp. nov.* is known only from the type region and is believed to be a species confined to this specific region.

Noting the rapid increase in human population and associated environmental destruction accompanying this within this part of Africa, *P. darrenkeilleri sp. nov.* should be treated as a seriously threatened or possibly endangered species.

Etymology: *Keillerchelys subgen. nov.* and the species *P. (Keillerchelys) darrenkeilleri sp. nov.* are both named in honour of well known snake catcher, Darren Keiller from Geelong, Victoria, Australia in recognition of his services to herpetology, including through his diligent efforts in dealing with online fraud in the reptile relocation and dog training businesses conducted by scammers.

PELOMEDUSA (KEILLERCHELYS)**ALEXSTASZEWSKII SP. NOV.**

LSIDurn:lsid:zoobank.org:act:9EF125E2-3B0E-4724-A35A-B32E4BC26CF3

Holotype: A preserved specimen at Naturhistorisches Museum, Wien, Austria, specimen number NMW 24451, collected at Al-Ubayyid (El Obeid), North Kurdufan, Sudan, Africa. This facility allows access to its holdings

Diagnosis: *P. (Keillerchelys) alexstaszewskii sp. nov.* is similar in most respects to *P. (Keillerchelys) schweinfurthi* Petzold, Vargas-Ramirez, Kehlmaier, Branch, Du Freez, Hofmeyr, Meyer, Schleicher, Siroky and Fritz, 2014 as diagnosed by them..

In contrast to *P. schweinfurthi*, *P. alexstaszewskii sp. nov.* is a species with a light coloured carapace at large size, with an entirely yellow pastron, versus a darkish carapace and dark plastron in *P. schweinfurthi*. Pectoral scutes of *P. alexstaszewskii sp. nov.* are triangular but just reach the plastral midline, versus more rectangular with broad midline contact on the plastron in *P. schweinfurthi*.

P. alexstaszewskii sp. nov. has large, mostly undivided temporal scales, two small barbells under the chin and with soft body parts lighter than above.

Turtles in the subgenus *Keillerchelys subgen. nov.* are readily separated from nominate subgenus *Pelomedusa* Wagler, 1830 by having light or brown coloured dorsums versus black or dark grey in subgenus *Pelomedusa* Wagler, 1830.

Keillerchelys subgen. nov. are further separated from the nominate subgenus in that the widely separated