

Scientific note

## A record of the chameleon *Rhampholeon* cf. *temporalis* in West Usambara, eastern Tanzania

(Squamata: Chamaeleonidae)

Frank Glaw, David Prötzel & Carlos Zanolli

To date, the East Usambara Pygmy Chameleon (*Rhampholeon temporalis*) is only recorded from the East Usambara Mountains and the Magrotto Hill in eastern Tanzania, where it occurs between 900–1500 m a. s. l. in highly fragmented forests, which are impacted by human activities (Tolley & Menegon 2014, Tilbury 2018). The species has been classified as Endangered with an estimated Extent of Occurrence of 786 km<sup>2</sup> and a decreasing population trend (Tolley & Menegon 2014).

During a night excursion in the West Usambara Mountains on 8 October 2023, we discovered four individuals of *R. cf. temporalis* within a few square meters next to a small stream in a fragment of primary forest (4°46'9"S, 38°17'3"E, 1740 m a. s. l.), on the outskirts of Lushoto town, in a distance of about 40 km to the closest localities in East Usambara. The two adults were found sleeping on small branches in the low vegetation with their heads directed upwards, ca. 20 cm above the forest floor. The two juveniles were sleeping at the base of small leaves in a more horizontal position at similar distance from the ground. On the next evening, 9 October 2023, we found one individual at the same locality, but no further individuals at the few other visited sites in West Usambara, confirming previous observations that *R. temporalis* can be locally abundant but appears to be patchy in its distribution in the forests (Tilbury 2018).

Our new record in the West Usambara Mountains suggests that the distribution of this species may be substantially larger than previously thought and that its elevational limit is 240 m higher than previously known. However, given that the Eastern and Western Usambara Mountains are separated by lowland savanna and represent two different centers of endemism for chameleons (see distribution maps in Tilbury 2018), future genetic studies should investigate if both populations belong to the same species or rather represent two closely related cryptic species, or if the population from Western Usambara



Fig. 1. Adult female of *Rhampholeon* cf. *temporalis* in West Usambara.

can be attributed to the morphologically similar species *Rhampholeon viridis*, which is known from this mountain massif as well (Mariaux & Tilbury 2006).

An additional record possibly from West Usambara has been published on iNaturalist (<https://www.inaturalist.org/observations/365611>), but since this record is obscured (accuracy 31.39 km), it is not clear if this record was taken in the East or West Usambara.

### References

- Mariaux, J. & Tilbury, C. R. 2006. The pygmy chameleons of the eastern Arc range (Tanzania): Evolutionary relationships and the description of three new species of *Rhampholeon* (Sauria: Chamaeleonidae). *The Herpetological Journal* 16(3): 315–331.
- Tilbury, C. 2018. *Chameleons of Africa*. 634 pp., 2<sup>nd</sup> revised edition, Frankfurt (Edition Chimaira).
- Tolley, K. & Menegon, M. 2014. *Rhampholeon temporalis*. The IUCN Red List of Threatened Species 2014: e.T172529A1344396. <https://dx.doi.org/10.2305/IUCN.UK.2014-3.RLTS.T172529A1344396.en> [accessed on 16 August 2025].

Managing editor of this article: Roland R. Melzer

---

Frank Glaw (corresponding author) & David Prötzel, SNSB – Zoologische Staatssammlung München, Münchhausenstr. 21, 81247 München, Germany; e-mail: [glaw@snsb.de](mailto:glaw@snsb.de)  
Carlos Zanolli, Chameleon Asset Management AG, Theaterstr. 4, 4051 Basel, Switzerland