

**Title: The last *Palaeoproteus* (Urodela: Batrachosauroididae) of Europe**

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## **Supplementary Method M1.**

### Estimation of the body length values

We have reconstructed the values of the total body length and snout-vent length of *P. miocenicus* and *P. gallicus* based on the length of the centra of the trunk vertebra. The publish data on *P. klatti*<sup>1</sup> has been taken as a reference for the calculation of the ratios of the snout-vent length to the total body length. The ratio of the length of the vertebral centrum length to the body total length have been calculated on the complete skeletons of the *P. klatti* (Geiseltal, Germany, Eocene). For the estimation of the body lengths, we have taken the average values of the SVL/TL and VrtL/TL with calculation of their standard deviation values. The estimated values have been considered for the illustration (Figure 5) of the maximum body sizes of *Palaeoproteus* spp.

Supplementary table S1

Table S1. Morphometric measurements and meristic features of the *Paleoproteus* spp. The data on *P. klatti* is given according to Herre<sup>1</sup>. For *P. gallicus*, we have considered only all available trunk vertebrae (C.R. No. 6692) besides the first trunk vertebra (C.R. No. 6693)<sup>2</sup>. The reconstructed (estimated) values of the TL and SVL are indicated in blue and yellow colours accordingly. The highlighted values of TL and SVL are used for the illustration of the body sizes in Fig. 5. Abbreviation: TL, total length; SVL, snout-vent length; VrtL, vertebral centrum length.

species	locality	coll nr.	TL (in mm)	SVL (in mm)	VrtL	SVL/TL ratio (%)	VrtL/TL ratio (%)
<i>P. klatti</i>	Geiseltal	900	122	86	-	70.5	-
		12	134	100	-	74.6	-
		31	134	97	-	71.6	-
		6	150	115	-	76.6	-
		51	165	115	-	69.7	-
		471	165	125	3.3	75.7	1.9
		20	175	125	3.1	74.9	1.7
		74	180	125	-	69.4	-
		323	185	130	3.3	70.3	1.8
		700	185	135	-	73	-
		212	270	198±7	5	-	2
		ranges				69.4-76.6	1.7-2
		mean±SD				73±2.67	1.85±0.01
<i>P. gallicus</i>	Cernay	C.R. No. 6692	162±1	118±4	3	-	-
<i>P. miocenicus</i> sp. nov.	Schernham	NHMW 2018/0290/0003	308±2	225±8	5.7	-	-
		NHMW 2018/0290/0004	389±3	284±10	7.2	-	-
		NHMW 2018/0290/0005	173±1	126±5	3.2	-	-
	Grytsiv	NMNHU-P 22- 2708	389±3	284±10	7.2	-	-

## References

1. Herre, W. Die Schwanzlurche der mitteleoänen (oberlutetischen) Braunkohle des Geiseltales und die Phylogenie der Urodelen unter Einschluß der fossilen Formen. *Zoologica - Original-Abhandlungen aus dem Gesamtgebiete der Zoologie* **87**, 1–85 (1935).
2. Estes, R., Hecht, M. K. & Hoffstetter, R. Paleocene amphibians from Cernay, France. *American Museum Novitates* **2295**, 1–25 (1967).