

LJUBLJANA, DECEMBER 2001 Vol. 9, No. 2: 113–118

***PRETNERIA METKAE MIRAE* SSP. N.  
(COLEOPTERA: CHOLEVIDAE)  
FROM MOUNT PRISOJNIK, SLOVENIA**

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**Abstract** – *Pretneria metkae mirae* ssp. n. is described from Prisankova Jama, on Mount Prisojnik (Slovenia). The affinity with *Pretneria metkae* Bognolo from Mount Triglav is discussed, as well as the relationships between the distribution and the geological features of the habitats.

**KEY WORDS:** Coleoptera, Cholevidae, new subspecies.

**Izvleček** – *PRETNERIA METKAE MIRAE* SSP. N. (COLEOPTERA: CHOLEVIDAE) S PRISOJNIKA

Podan je opis podvrste *Pretneria metkae mirae* ssp. n. iz Prisankove jame na gori Prisojnik (Slovenija). Nova podvrsta je primerjana s tipično obliko *Pretneria metkae* Bognolo iz nahajališč na Triglavu. Komentirana je povezava med areali, ki jih poseljujejo tipična oblika in nova podvrsta, in geološko sestavo habitata.

**KLJUČNE BESEDE:** Coleoptera, Cholevidae, nova podvrsta.

### **Introduction**

In 1998 some specimens belonging to the genus *Pretneria* Müller, 1931 were found in a cave on Mount Prisojnik. Later on, new findings were recorded in 1999

and 2000. According to the results achieved in the recent revision of the genus *Pretneria* (Bognolo, 2000), the analysis of both the external morphology and male genitalia revealed that the population on Mount Prisojnik represents a new subspecies of *P. metkae* Bognolo, 2000.

The subject of this paper is a description of *P. metkae mirae* ssp. n.; a comparison is made between the new subspecies and the type form of *P. metkae*.

### *Pretneria metkae mirae* ssp. n.

**Type locality:** Slovenia, Prisojnik, Prisankova Jama (not registered).

**Type series:** Holotype ♂, Slovenia, Prisojnik, Prisankova Jama, 4. 7. 1998–17. 7. 1999, leg. M. & B. Kofler (coll. B. Kofler, Škofja Loka). Paratypes: Slovenia, Prisojnik, Prisankova Jama, 4 ♂ and 15 ♀, 15. 8. 1997–4. 7. 1998; 10 ♂, 4. 7. 1998–17. 7. 1999; 5 ♂ and 5 ♀, 17. 7. 1999–17. 8. 2000, leg. M. & B. Kofler (coll. B. Kofler, Škofja Loka; coll. M. Bognolo, Trieste; coll. Biološki Inštitut Jovana Hadžija, Ljubljana).

**Diagnosis:** A medium sized alpine *Pretneria*, closely related to *P. metkae* according to the shape of the aedeagus, but clearly distinguishable for the shape of the elytrae rather more elongated (Fig. 1–5) in the new subspecies. Furthermore, the body length is smaller if compared to the type form; the pronotum is slightly more transverse, with the anterior sides feebly rounded.

**Description:** A medium sized *Pretneria* (♂ 3.00–3.32 mm, ♀ 3.25–3.50 mm). Integument shiny, pubescent, colour dark reddish.

Head anophthalmous, retractile, narrower than pronotum; occipital carina evident and complete. Mouth parts normal, not specialized. Antennae inserted on the posterior third of head, not extending backwards to half of the elytrae.

Pronotum large, transverse (length/width ratio: ♂ 0.73–0.77; ♀ 0.67–0.72), with maximum width at middle; disc convex, lateral sides feebly rounded anteriorly, sinuated basally; basal margin narrower than the base of the elytrae.

Elytra elongate ovate, slightly shorter in the female (length/width ratio: ♂ 1.68–1.76; ♀ 1.60–1.70), with maximum width at middle, separately rounded at apex.

Legs stout, covered by dense, short pubescence. Protibiae widened at apex, protarsi 4-segmented. In males the two basal tarsomeres are dilated; the first basal tarsomere almost as long as the three following ones (Tab. 1).

Aedeagus (Figs. 6, 7) medium sized (0.28–0.30 times the body length), regularly arcuate. Median lobe with lateral sides subparallel in dorsal view, converging forwards; apex with a small, sharp tip. Parameres slightly shorter than the median lobe, each furnished with three apical setae.

**Derivatio nominis:** This new subspecies is dedicated to the indefatigable researcher Mrs Mira Kofler, Professor of biology (Škofja Loka).

**Distribution and ecology:** So far *P. metkae mirae* ssp. n. has been found only in a newly discovered and not yet registered fossil cave on the southern slope of Mount Prisojnik at an altitude of about 2400 m. All specimens have been collected only

using pitfalls. Together with the new subspecies, *Anophthalmus manhartensis manhartensis* Meschnigg has been also found.

According to the features already emphasized in the recent revision of the genus *Pretneria* (Bognolo, 2000), *P. metkae mirae* ssp. n. shows a typical cryophilic attitude. In Prisankova Jama, a 224 m long and 102 m deep cave, it has been found in all parts but mainly in the lower ones. The new finding refers to a locality which lies on the Triassic limestones; this feature seems to be a common point for all alpine species (*P. metkae* and *P. saulii*).

The subspecific differences between *P. metkae mirae* ssp. n. and the type form of *P. metkae* are likely due to their segregation. According to the geological map (Fig. 8), a relationship can be found between the distribution and the type of limestone of the specific habitat. The findings of *P. metkae* are related to caves or endogean sites located on limestones and dolomitic limestones of the Upper Triassic. On the opposite, the only finding known so far for *P. metkae mirae* ssp. n. refers to an alpine cave situated on limestones and dolomites of the Middle Triassic.

The new discovery adds further relevant data for a better understanding of the ecology of the genus *Pretneria*. Finally, the distribution of both *P. metkae* (s. lat.) and the whole genus *Pretneria* has been slightly enlarged northwards.

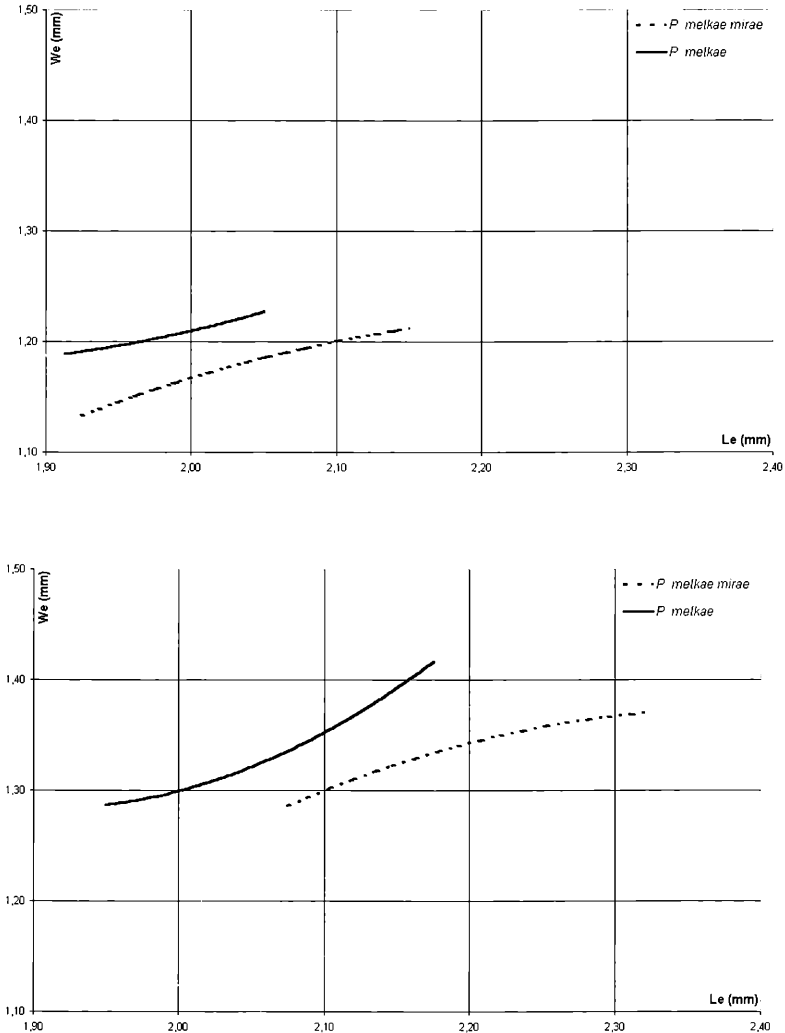
**Tab. 1:** Morphological variability in *Pretneria metkae* (s. lat.).  $L_T$ : body length.  $L_P/W_P$ : ratio length/width of pronotum.  $L_E/W_E$ : ratio length/width of elytra.  $L_A/L_T$ : length of antenna/body length.  $L_1/W_1$ : ratio length/width of the first protarsomere.  $L_1/L_{pr}$ : length of the first protarsomere/length of protarsus.  $L_{ed}/L_T$ : length of aedeagus/body length.

		<i>P. metkae mirae</i>	<i>P. metkae</i>
$L_T$ (mm)	♂	3,00–3,32	3,25–3,45
	♀	3,25–3,50	3,50–3,73
$L_P/W_P$	♂	0,73–0,77	0,76–0,78
	♀	0,67–0,72	0,70–0,73
$L_E/W_E$	♂	1,68–1,76	1,61–1,67
	♀	1,60–1,70	1,49–1,61
$L_A/L_T$	♂	0,56–0,63	0,57–0,62
	♀	0,51–0,54	0,48–0,50
$L_1/W_1$	♂	2,1–2,3	1,8–2,2
$L_1/L_{pr}$	♂	0,46–0,49	0,46–0,48
$L_{ed}/L_T$	♂	0,28–0,30	0,25–0,29

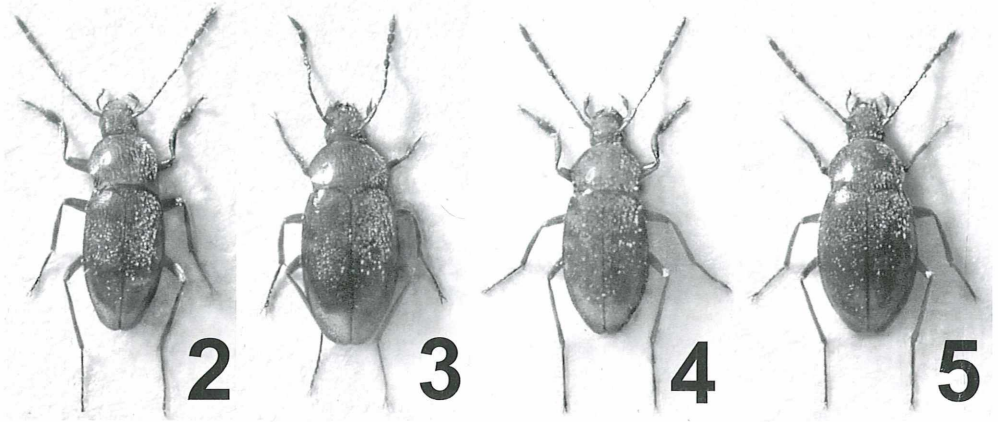
## Acknowledgements

Many thanks to Mrs Mira Kofler, Professor of biology, for her help in research during the last 28 years.

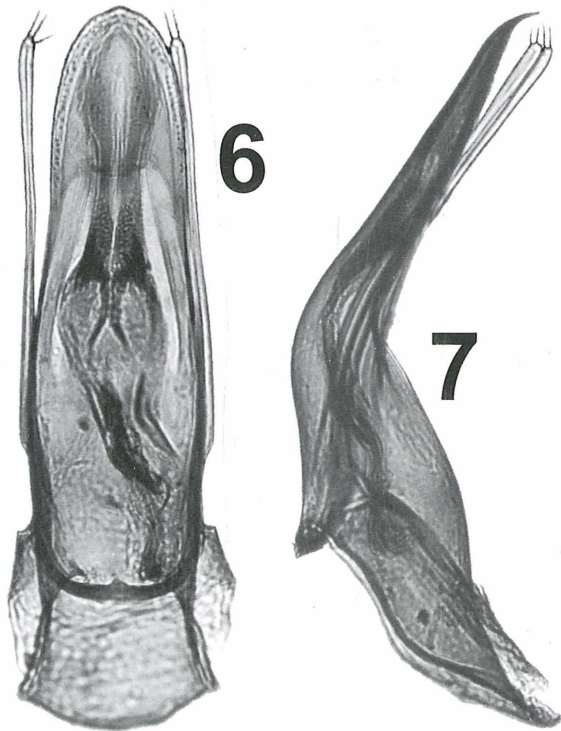
The authors are also much obliged to Peter Jeram, Marko Zakrajšek and Walter Zakrajšek, members of the caving club DRP Škofja Loka, as well as Guido Sussa, author of the pictures in this paper.



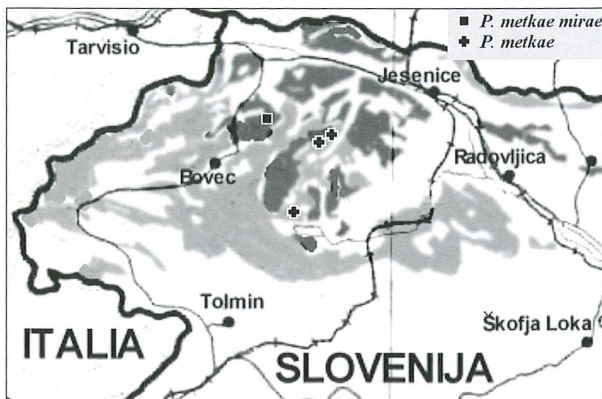
**Fig. 1:** Shape of elytra in *Pretneria melkai* (s. lat.).  $L_E$ : length.  $W_E$ : maximum width.



**Figs. 2–5:** *Pretneria metkae mirae* ssp. n., habitus: 2. holotype ♂; 3. paratype ♀. *Pretneria metkae* Bognolo, habitus: 4. paratype ♂; 5. paratype ♀.



**Figs. 6, 7:** Aedeagus of *Pretneria metkae mirae* ssp. n. from Mount Prisojnik: 6. paratype, dorsal view; 7. paratype, lateral view.



**Fig. 8:** Distribution of *Pretneria metkai* (s. lat.) and its relationship with Triassic limestones. Light grey: Upper Triassic, limestones and dolomitic limestones of neritic and shelf facies with levels of evaporites. Dark grey: Middle Triassic, limestones and dolomites of neritic and shelf facies.

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Received / Prejeto: 12. 4. 2001

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Zeitschrift/Journal: [Acta Entomologica Slovenica](#)

Jahr/Year: 2001

Band/Volume: [9](#)

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Artikel/Article: [Pretneria metkae mirae ssp. n. from Mount Prisojnik, Slovenia \(Coleoptera: Cholevidae\) Pretneria metkae mirae ssp. n. s Prisojnika \(Coleoptera: Cholevidae\) 113-118](#)