

## Morphology, ecology and distribution of *Typhlocypris cavicola* (KLIE, 1935) and *Fabaeformiscandona aemonae* (KLIE, 1935), two triangularly shaped ostracods from Slovenia (Crustacea, Ostracoda)

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Triangular species *Fabaeformiscandona aemonae* (KLIE, 1935) and *Typhlocypris* (*T.*) *cavicola* (KLIE, 1935) from the family Candonidae (Ostracoda, Podocopida, Cypridoidea) have been poorly described (Fig. 1, Tab. 1).

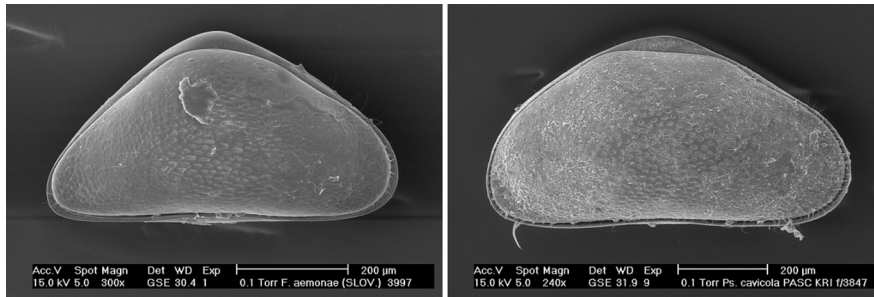


Fig. 1: SEM of *F. aemonae* (left photo) and *T. cavicola* (right).

*Fabaeformiscandona aemonae* (KLIE, 1935) was known until present only from type locality in Podpeška jama cave and from a spring of the Ižica River (PETKOVSKI & MEISCH 1994), both locations being near Ljubljana in Slovenia. *Typhlocypris* (*T.*) *cavicola* (KLIE, 1935) was known only from type locality – cave Krška jama (KLIE 1935), southeast from Ljubljana. During the extensive sampling within the European project PASCALIS where caves, springs and interstitial habitats were sampled in the Dinaric area south of Ljubljana in 2002 and within the additional sampling of the Sava River sediments and another extensive sampling campaign of the epikarst in 2005, several specimens of both species were collected. It appears that those two species are widely distributed in the Dinaric karstic area of south Slovenia. Both species were frequently collected in the shallow porous aquifers as well as in the karstic springs, while they rarely occurred in the caves (Fig. 2).

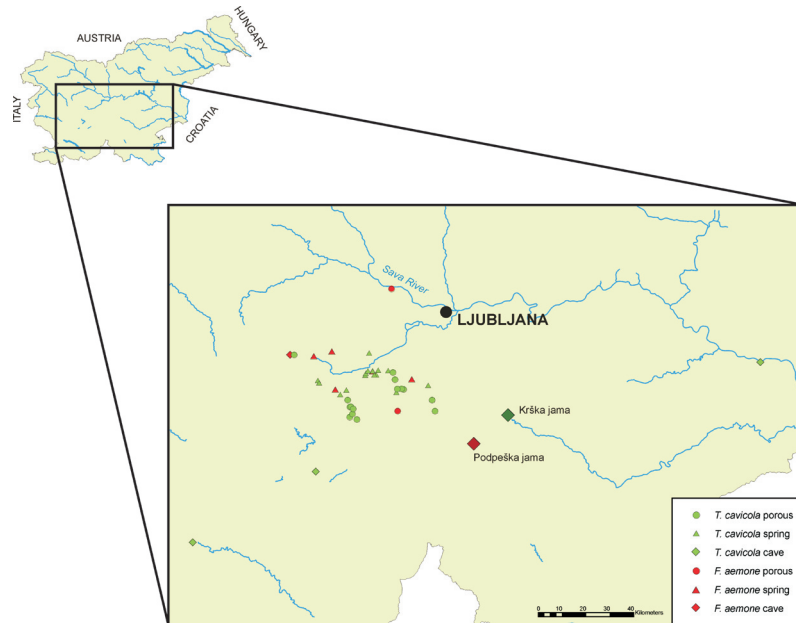


Fig. 2: Geographical distribution of *F. aemoneae* and *T. cavicola* in different habitats in Slovenia. Type localities are named on the map.

It seems that they prefer saturated karstic aquifers and inhabit also the adjacent porous aquifers. *T. cavicola* seems more wide spread, whereas *F. aemoneae* was collected most up north, in the porous aquifer north of Ljubljana, which is already connected with alpine region. They occurred in well oxygenated waters ( $10 \text{ mg l}^{-1}$ ), as well as in the waters with low oxygen concentrations ( $2 \text{ mg l}^{-1}$ ).

	<i>F. aemoneae</i>	<i>T. cavicola</i>
carapace shape	distinctly triangular	more roundly triangular
right valve	the top is always slightly rounded	the top is flatted
left valve	triangular, dorsal expansion is oval not extending much over RV	triangular, dorsal expansion of LV variable, sometimes distinctly higher than RV
valve setae	valves with "normal" setae only	valves with long, stiff and perpendicularly attached setae
valve pits	in the central valve area only, oval shaped	rounded pits on almost the entire valve surface
female antenna A2	penultimate segment long, terminal claws G1, G3 and GM relatively short, ca. 2 x as long as the penultimate segment	penultimate segment short, those terminal claws ca. 5 x as long as the penultimate segment
cleaning leg	basal segment with 2 setae (d1 and d2)	basal segment with 3 setae (d1, d2 and dp)
uropod	the claws are short ( $< 1/2$ uropod)	the claws are longer ( $> 1/2$ uropod)

Tab. 1: The main differences between *F. aemoneae* and *T. cavicola*.

## References

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