

A NEW SPECIES OF DIPLOPOD FROM ROMANIA:  
*STENOPHYLLUM TABACARUI* N. SP. (DIPLOPODA, JULIDAE)

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The author describes a new species of the Genus *Stenophyllum* (Verhoeff, 1897):  
*Stenophyllum tabacarii*.

1. INTRODUCTION

Between the 10<sup>th</sup> and 18<sup>th</sup> of May, 2002, along with our colleagues Eugen Nițu, Andrei Giurginca and Victoria Ilie, we made a field trip into the area of the Meledic Plateau and Vârghișului Keys (Covasna county). This trip provided us the opportunity to collect what proved to be a new species of *Stenophyllum* (Diplopoda, Julidae).

*Stenophyllum* is an endemic genus for Romania and until now three species belonging to this genus were described. Two of these species were described by Verhoeff in 1897 (*S. hermannimuelleri* and *S. primitivum*); both species were found in a little forest near the city of Brașov, under dead leaves. The third species (*S. semenicensis*), collected from Mount Semenic, was described by Traian Ceuca in 1989.

*STENOPHYLLUM TABACARUI*. NOVA SPECIES

Holotype: Adult male. 16. 05. 2002. Vârghișului Keys, on the rocky slope called "Also Maltetö", in a cave of 6 meters development, located at approximately 42 meters below the Urșilor Cave (Cave no. 18). Leg. L. Vănoaica.

Short description of the habitat: mixed forest (coniferous and deciduous forest). The cave is situated on a steep slope with an inclination of more than 45°, at an altitude of approximately 65 meters above the talweg.

Etymology: this species is dedicated to Dr. Ionel Tabacaru.

Body length: approximately 14 mm.

Horizontal diameter of midbody segments: 1.81 mm.

Vertical diameter of midbody segments: 1.75 mm.

Number of podous segments: 52.

Number of apodous segments: 4.

Number of legs: 101 pairs.

Body shape: cylindrical; the vertical diameter slightly larger than the horizontal one.

Colour: brown-reddish, ventrally lightly coloured (yellow-brownish).

The head: occipital rods present; approximately 26 ocelli on five rows (2:4:6:6:8). Labrum tridentate, slightly hollowed on the medial side, 4 labral, 14 marginal setae; the basal part of the gnathochilarium sides hollowed out. The anterior-external corner of each stipes with 3 setae (2 marginal, 1 on the surface); 3 setae on the surface of the lingual lamella. The external palpus of the stipes with 8 papillae, the internal palpus with approximately 10 papillae, each palpus of the lingual lamellae with 4 papillae.

Antenna (Fig. 1): the longest article is the second one; the length of the articles compared to the second one is: 0.40 : 1 : 0.80 : 0.69 : 0.85 : 0.57 : 0.28 : 0.04.

Collum: twice as long as the first segment; slightly curved anteriorly.

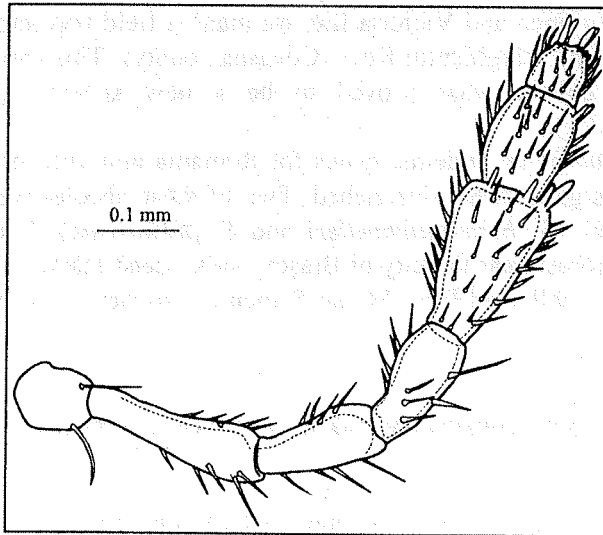


Fig. 1 – The antenna.

The midbody segments have verticilla of approximately 14 setae. Longitudinal striations hardly visible only on the ventral side. There are 3 apodous segments.

The telson has long setae and anal valves.

The accessory claw is longer than the principal claw at all legs. The second pair of legs has quite strong setae.

First pair of legs (Figs. 2, 3, 4): is very characteristic for this genus as well as for each of the known species. The coxa has a rounded prolongation on its external side. The leg has three pairs of prolongations: one anterior-basal pair, which probably correspond to Verhoeff's "femoral part" ("Femoralabschnitt" – Verhoeff, 1997). These prolongations are rounded and each has a seta on its surface; another pair of prolongations in the middle part, which are oriented toward the lateral in their upper part (Verhoeff's "Tibialabschnitt"); the other pair (Verhoeff's "Tarsalabschnitt") is the longest. On its posterior side presents prolonged proeminences which made the end

of the piece to look like having a number of papillae on it. The last two pairs of prolongations have strong setae on their basis.

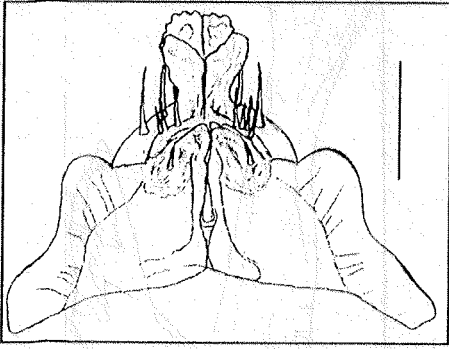


Fig. 2 – First pair of legs. Front view  
(bar = 0.1 mm).

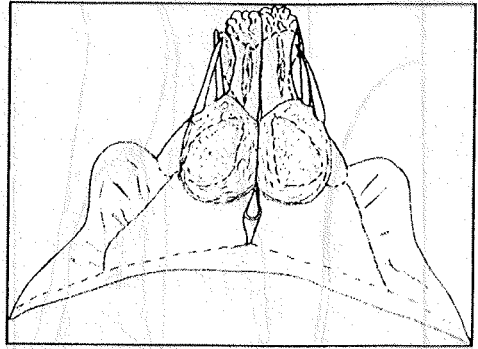


Fig. 3 – First pair of legs. Back view.



Fig. 4 – First pair of legs. Lateral view  
(bar = 0.1 mm).

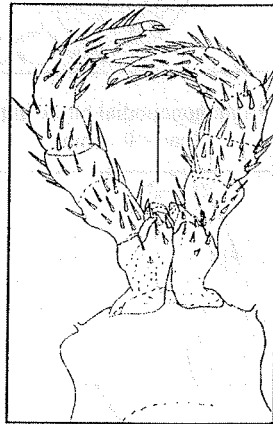


Fig. 5 – Second pair of legs. Front view  
(bar = 0.1 mm).

Second pair of legs (Fig. 5): the internal part of the coxa has a prolongation.

Gonopods (Figs. 6–10): narrow and prolonged; the mesomerit (Fig. 6) is short, just a little longer than the half of the promerit. It ends in an angular shape, the internal side almost follows a straight line, and the external side is slightly convex. The promerit with nearly parallel margins, slightly narrowed toward basis, rounded at the apex. In mesial view (Fig. 8), as Verhoeff noticed, one teeth (Z) and one femoral remnant (R) are visible. The opisthomerit (Figs. 7, 9) is longer than the promerit, suddenly gets broader toward the terminal part (Figs. 9, 10); its shape is very similar to the shape of the *S. hermannimuelleri* opisthomerit. Apically there is a deep hollow which splits the piece into two parts: an anterior narrow part, recurved toward posterior and an posterior part which is broader toward its end and has many little teeth.

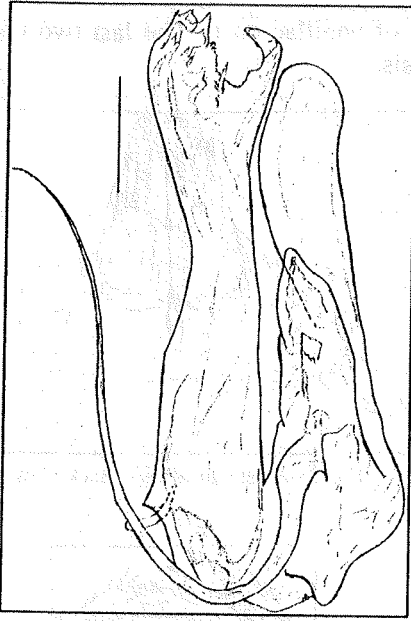


Fig. 6 – Right gonopodial block. Internal view  
(bar = 0.1 mm).

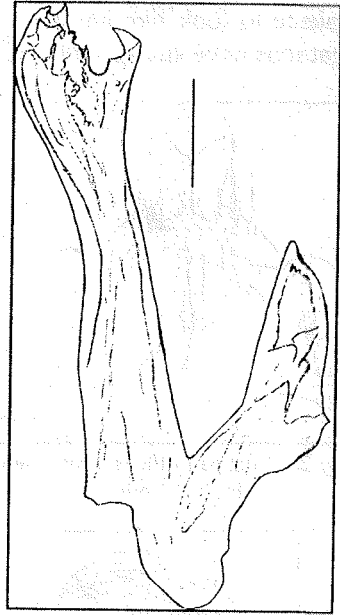


Fig. 7 – Left opisthomerit and mesomerit.  
Lateral view (bar = 0.1 mm).

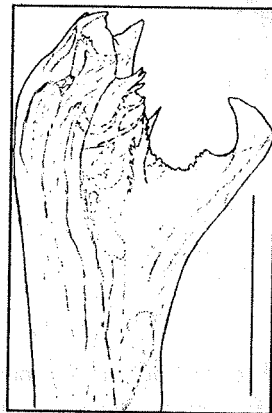
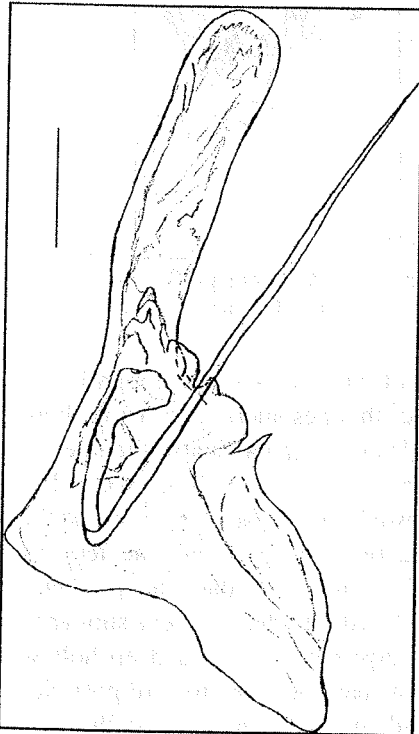


Fig. 9 – Terminal part of the  
left opisthomerit. Lateral  
view (bar = 0.1 mm).



Fig. 10 – Terminal part of  
the left opisthomerit. Internal  
view.

← Fig. 8 – Left promerit. Mesial view  
(bar = 0.1 mm).

Among the species of the *Stenophyllum* genus, *S. tabacaru* has the most similarities with the type species (*S. hermannimuelleri*). The most important differences consist in the conformation of the first pair of legs.

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