

***Sterkia gittenbergeri* new species from Northern Peru  
(Gastropoda, Pulmonata, Vertiginidae)**

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*Sterkia gittenbergeri* n. sp. from the Departamento Amazonas in northern Peru is characterized by an ovoid-conical shell with a strong, protruding angularis that fuses with the upper insertion of the palatal wall. The relations of *Sterkia* and *Nesopupa* are discussed.

Key words: Gastropoda, Stylommatophora, Vertiginidae, *Sterkia*, *Nesopupa*, new species, South America, Peru.

INTRODUCTION

*Sterkia* Pilsbry, 1898 is an imperfectly known American genus of the Vertiginidae. Based on the lack of anatomical differences between *Sterkia* and *Nesopupa* Pilsbry, 1900, Tillier (1980) suggested that *Sterkia* might be included into *Nesopupa* as a subgenus. *Nesopupa* is widespread throughout the tropics in the Ethiopian and Oriental region and the Pacific islands. Also two Neotropical species have been classified in *Nesopupa*, namely *N. galapagensis* Vagvolgyi, 1974 from the Galapagos Islands and *N. maasseni* van Regteren Altena, 1975 from Suriname. Both species are rather similar. Tillier (1980) noted that the latter species differs from *Sterkia* only in the more conic shell shape. A new species of the *Sterkia/Nesopupa* group is described from northern Peru in the following.

MATERIAL AND METHODS

The counting of the shell whorls (exactness 0.25) follows Kerney & Cameron (1979: 13). The measurements were taken with an ocular micrometer (exactness 0.05 mm). The material on which this study is based is kept in the National Museum of Natural History 'Naturalis', Leiden (RMNH) and the Zoological Museum of the University Hamburg (ZMH). Additional abbreviations: D = shell diameter; da = diameter of the aperture; H = shell height; ha = height of the aperture.

SYSTEMATICAL PART

Family Vertiginidae Fitzinger, 1833

*Sterkia* Pilsbry, 1900

*Sterkia gittenbergeri* spec. nov. (fig. 1)

Material. – Peru, Departamento Amazonas: Balsas, Rio Maranon bridge 20 km towards Leymebamba: on rocks, 6°50'47"S 77°57'44"W (holotype: ZMH 37952, paratypes: RMNH.Mol.110811, ZMH 37934; collected by J. Hemmen 07.10.2005).

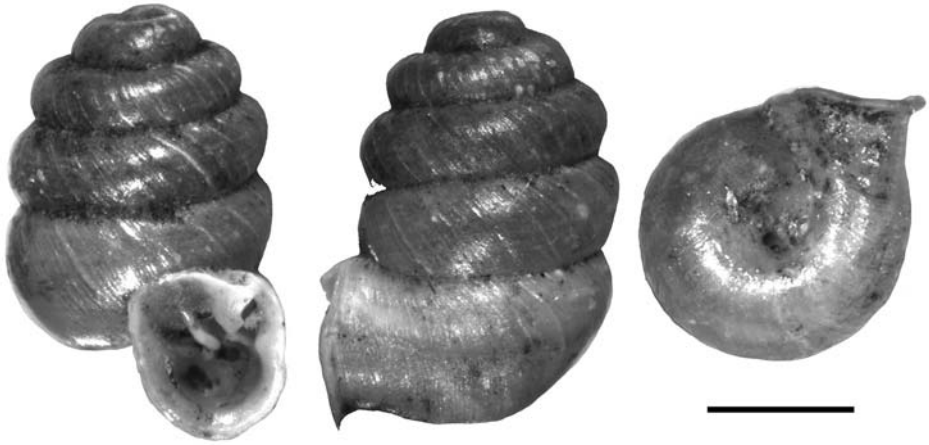


Fig. 1. *Sterkia gittenbergeri*, holotype, Peru, Balsas, Rio Maranon bridge 20 km towards Leymebamba (ZMH 37952). Scale bar 0.5 mm.

Diagnosis. – *Sterkia gittenbergeri* differs from other species of the *Sterkia/Nesopupa* group in the ovoid-conical shell with a strong, protruding angularis that fuses with the upper insertion of the palatal wall.

Shell (fig. 1). – Shell ovoid-conical; with 4.5-4.75 strongly inflated whorls separated by a deep suture; perforate; protoconch smooth; teleoconch irregularly rib-striated with finer growth striae between the ribs; light corneous; subtranslucent; body whorl slightly ascending towards the aperture, basally slightly compressed; aperture rounded-trapezoid; peristome expanded, reflected and thickened inside; the protruding angularis fuses with the upper insertion of the palatal wall and is connected with the columellar margin by a thin callus; there is a high parietal lamella; there is a prominent columellaris in the upper third of the columellar edge; opposite to the angularis there is a tubercle-like thickening of the peristome; there is a short suprapalatalis within the sinulus that is formed by the angularis and the peristome; the high palatalis superior projects into the space between parietalis and angularis; the long palatalis inferior is situated slightly deeper and bends downward at its inner end; there is a depression corresponding to the positions of the palatalis superior and the palatalis inferior at the outside of the body whorl.

Measurements. Holotype: D=1.00 mm, H=1.50 mm, D/H=0.67, da=0.60 mm, ha=0.60 mm; paratype: D=0.95 mm, H=1.45 mm, D/H=0.66, da=0.55 mm, ha=0.55 mm; paratype: D=1.05 mm, H=1.55 mm, D/H=0.68, da=0.60 mm, ha=0.60 mm.

Distribution. – So far *S. gittenbergeri* is known only from the type locality in the Departamento Amazonas in northern Peru.

Remarks. – *Sterkia gittenbergeri* is superficially more similar to some *Nesopupa* species from the Pacific islands (e.g., *N. wesleyana* Ancey, 1904, *N. pleurophora* (Shuttleworth, 1852); see Pilsbry, 1920a) than to the more cylindrical *Sterkia* species in which the angularis just reaches the palatal wall or is not connected to it. However, there is also no Pacific *Nesopupa* species in which the angularis is as strongly developed and protruding as in *S. gittenbergeri*. The other Neotropical species of the *Sterkia/Nesopupa* group, *S. (Metasterkia) eyriesii* (Drouet, 1859), *N. galapagensis* Vagvolgyi, 1974 and *N. maasseni* van Regteren Altena, 1975 have smoother shells with a weaker armature. *S. gittenbergeri* is classified preliminarily as

*Sterkia*, because this would be the valid name for the group, if *Sterkia* Pilsbry, 1898 and *Nesopupa* Pilsbry, 1900 are considered congeneric and because it is possible that *S. gittenbergeri* is actually more closely related to the American *Sterkia* species in the strict sense than to the Pacific *Nesopupa* species despite the conchological differences. The ovoid-conical shell and the strong apertural armature might just be symplesiomorphies. According to the subgeneric classification of Pilsbry (1920b), *S. gittenbergeri* should be placed in *Sterkia* s. str., so far only known from California, because of the rib-striated shell and the strong armature. However, given the uncertainties in the classification of the *Sterkia/Nesopupa* group, such a subgeneric assignment seems to be unwarranted at the present state of knowledge.

Derivatio nominis. – I dedicate this species with great pleasure to my friend and distinguished colleague Edi Gittenberger whom I owe much.

#### ACKNOWLEDGEMENTS

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