

Two new genera of *Physocypria sensu lato* (Crustacea, Ostracoda) from Neotropical floodplains

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INTRODUCTION

Only three genera of Cycloocypridinae (Candonidae) have thus far been recorded from Neotropical region: *Cyprria* Zenker, 1854, *Physocypria* Vávra, 1897 and *Keysercypria* Karanovic, 2011.

The two new genera resemble *Physocypria* s.s. in the shape of carapace, the overlap of LV over RV, the presence of marginal tubercles on RV, and the absence of d2-seta on T2.

Here, we describe the type species of the two new genera and re-instated *Keysercypria* Karanovic, 2011 but with a much more restricted diagnosis.

Genus 1 gen. nov. comprises five new species, while Genus 2 gen. nov. comprises two new species. These genera differ from each other specially by the shape of hemipenis (Fig. 2), the Md-palp last segment, the T3 dp-seta and the proximal seta of the Caudal Ramus (Fig. 3).

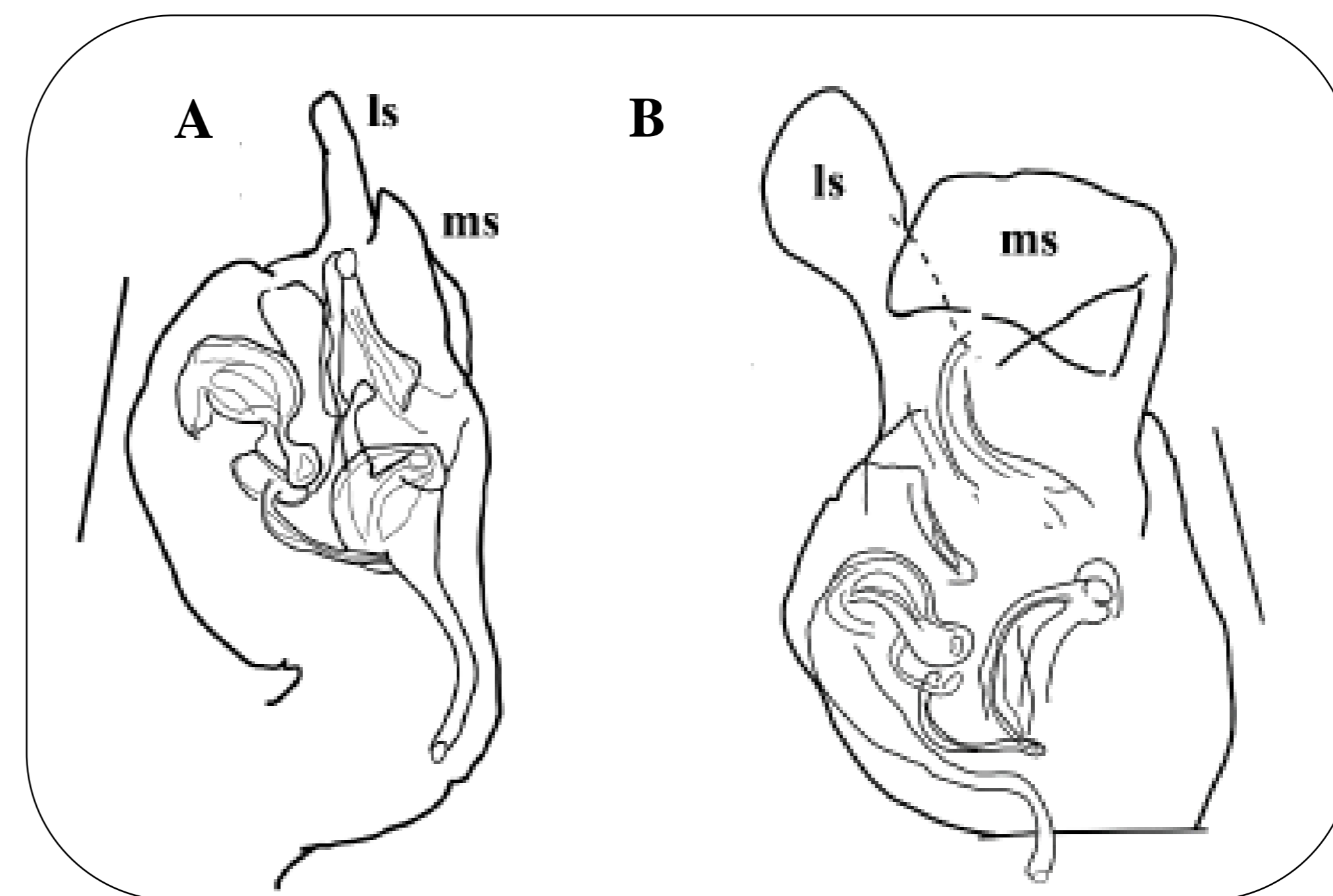


Fig. 2. Hemipenis of A. Genus 1 gen. nov. and B. Genus 2 gen. nov. Scale bars: 50 µm.

MATERIAL AND METHODS

The study area covers three Brazilian floodplains: (1) Amazon; (2) South Matogrossense Pantanal and (3) Upper Paraná (Fig. 1).



Fig. 1. Location of the Brazilian floodplain where the new genera were found.

Ostracods were collected from the roots and submerged leaves of aquatic macrophytes and from sediment using a hand net (160 µm mesh size).

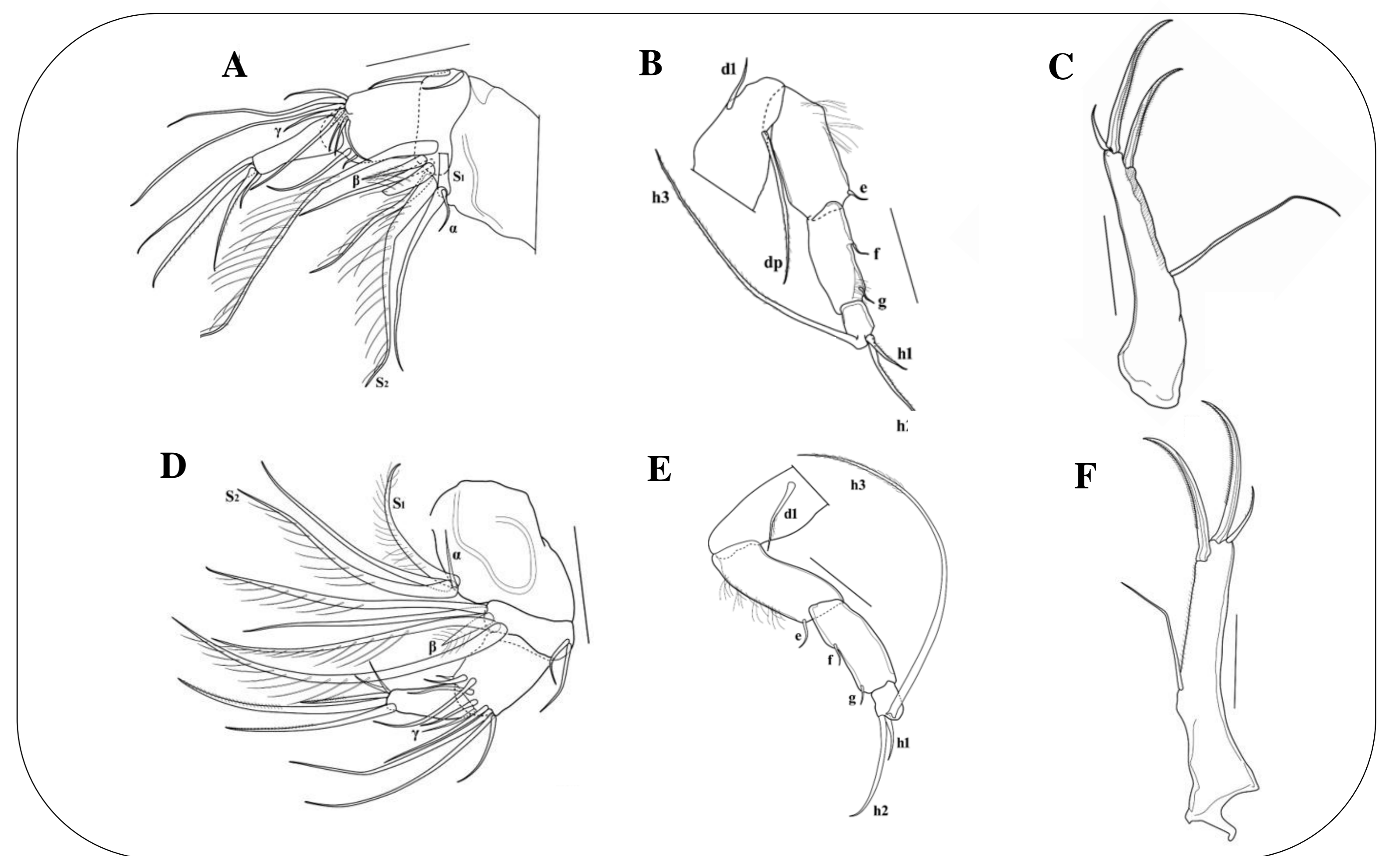


Fig. 3. A–C. Genus 1 gen. nov. D–F. Genus 2 gen. nov. A, D. Md-palp. B, E. T3. C, F. CR. Scale bars: 50 µm.

RESULTS AND DISCUSSION

The two new genera share some similarities and differences with other Neotropical genera (Table 1).

The two new genera can also be distinguished by the shape of carapaces (Fig. 4). Both new genera have a rounded dorsal margin, however Genus 1 gen. nov. is smaller (Fig. 4A–B) than Genus 2 gen. nov. (Fig. 4C–D), and the lastest has a larger overlap of LV over RV.

Table 1. Comparative morphology amongst the genera *Physocypria* s.s., *Keysercypria*, and the two new genera here described.

Character	<i>Physocypria</i> s.s.	<i>Keysercypria</i>	Genus 1 gen. nov.	Genus 2 gen. nov.
LV antero-ventral tooth	unknown	unknown	present	present
A2 short accompanying nat. seta	present	absent	absent	absent
Md palp beta seta	very short, thick	unknown	broad, elongated	broad, elongated
Md palp length last segment	L=2xW	L=>5xW	L = 3xW	L = 2xW
Md palp last segment chaeto	3 claws + 2 setae	unknown	3 claws + 1 seta	3 claws + 1 seta
Mx1-palp last segment chaeto	6 claws and setae	4 claws and setae	5 claws and setae	5 claws and setae
T1 setae b	long	unknown	short	short
T1 setae d	long	unknown	long	long
T2 setae d1	present	absent	absent	absent
T2 seta d2	absent	absent	absent	absent
T2 seta e (male)	short	short	short	short
T2 seta h3 (male)	short	long	short	short
T3 seta d2	present	absent	absent	absent
T3 seta dp (male)	present	present	present	absent
T3 setae h2 vs h1	subequal	h2 > 2x h1	h2 > 2x h1	h2 > 2x h1
ovarium posteriorly	down /forwards	up/backwards	up/backwards	up/backwards
CR proximal seta	medium	medium	long	short

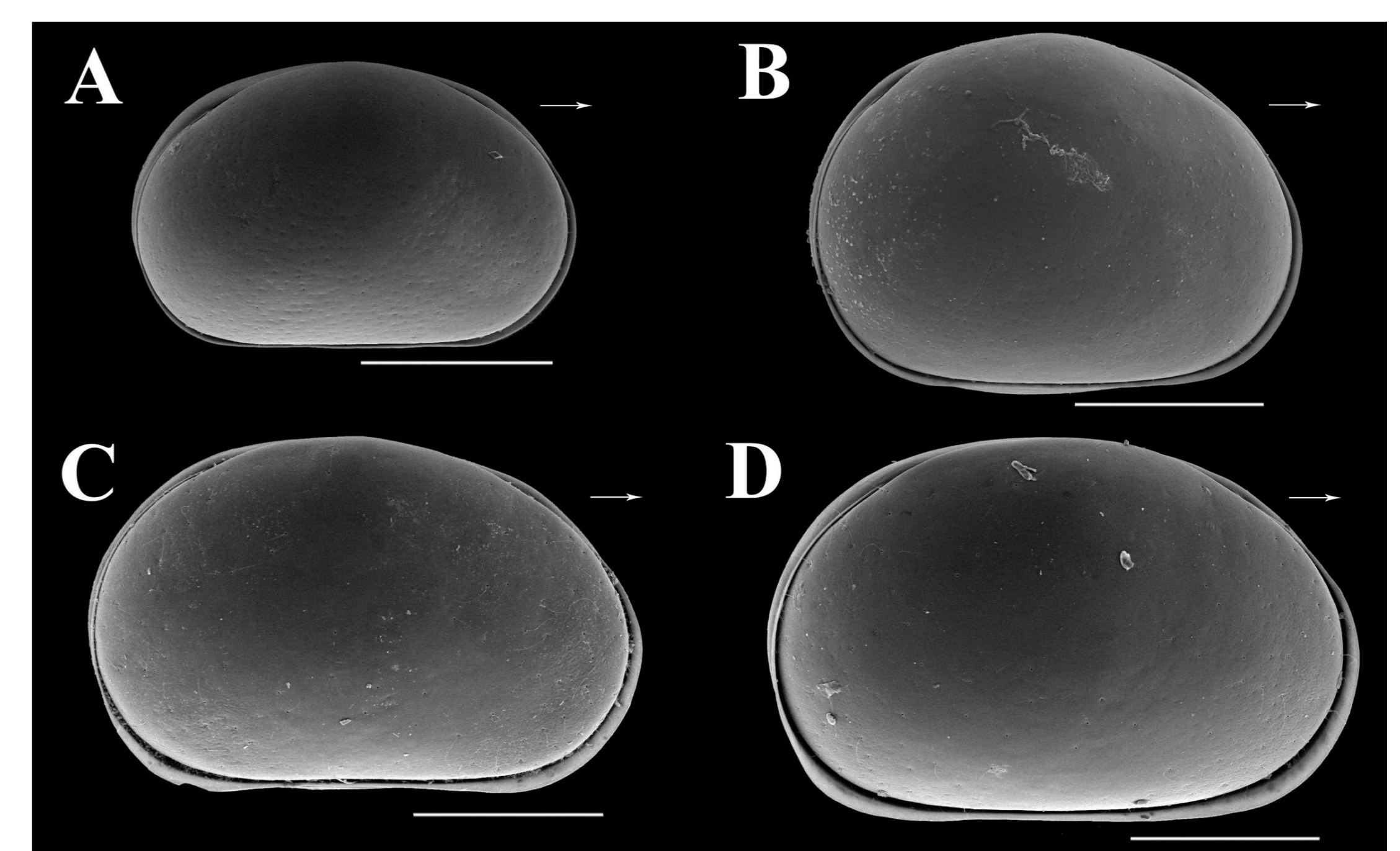


Fig. 4. Carapace lateral view of the new genera. A-C, male and B-D, female. A–B. Genus 1 gen. nov. C–D. Genus 2 gen. nov. Scale bars: 250 µm.

Most (all?) Neotropical species described until this moment as *Physocypria*, do not belong to this genus. We re-instated the following species in *Keysercypria*: *K. affinis* (type species), *K. deformis* and *K. schubarti*.