

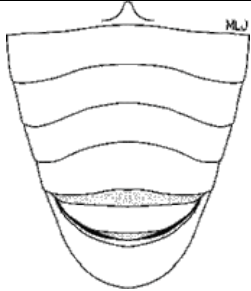
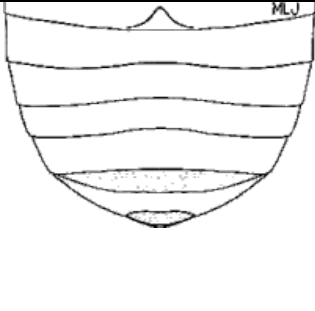
Key to the Genera of Heterosternina (Scarabaeidae: Rutelinae: Rutelini)
(By Jameson 2000. Modified from Morón 1987.)

1. Pronotum with basal bead absent, only lightly impressed near the posterior angles .. 6

1'. Pronotum with basal bead present, complete or nearly complete (occasionally interrupted at middle) 2

2(1). Sternites 2-4 with posterior border deeply sinuate (Fig. 11). Pygidial disc of male (in lateral view) strongly, acutely protuberant (Fig. 12). Elytral epipleuron of female weakly arcuate at mexacoxae (ventral view) (Fig. 13) ***Heterosternus***

2'. Sternites 2-4 with posterior border straight or weakly sinuate (Fig. 14). Pygidial disc of male (in lateral view) not protuberant (Fig. 15). Elytral epipleuron of female straight or notched, not arcuate at metacoxa (ventral view) (Fig. 16) 3

		
Figure 11	Figure 12	Figure 13
		
Figure 14	Figure 15	Figure 16
Figures 11-16. (11) Ventral view of sternites of <i>Heterosternus</i>. (12) Lateral view of abdomen and pygidium of <i>Heterosternus</i>. (13) Ventral view of epipleuron of female of <i>Heterosternus</i>. (14) Ventral view of sternites of <i>Mesosternus</i>. (15) Lateral view of abdomen and pygidium of <i>Mesosternus</i>. (16) Ventral view of epipleuron of female of <i>Homoiosternus</i>.		

3(2). Mesosternal process with apex rounded. Sternum with dense setae. Dorsal color yellow-brown or yellow-orange 4

3'. Mesosternal process with apex acute. Sternum with scarce setae. Dorsal color dark red or mahogany with margins of the pronotum and elytral yellow ***Paraheterosternus***

4(3). Mentum with anterior border sinuate (Fig.17). Sexual dimorphism not distinct. Posterior border of metafemur (male) without medial spine 5



Figure 17. Ventral view of mentum of *Homoiosternus*

4'. Mentum with anterior border emarginate (Fig. 18). Sexual dimorphism distinct. Posterior border of metafemur (male) with medial spine ***Plesiosternus***

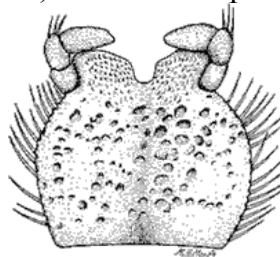


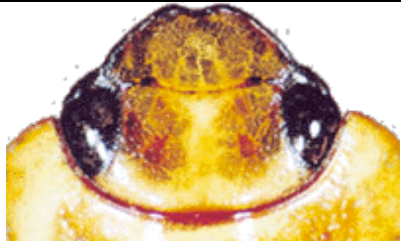
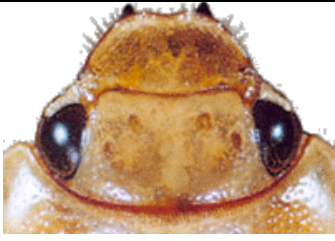
Fig. 18. Ventral view of mentum of *Plesiosternus*

5(4). Metatibia of male with dense setae on the inner margin (Fig. 19). Parameres fused at mid-base. Females with elytral epipleuron parallel throughout, not convergent at apex (ventral view) (Fig.20). Mountains of Chiapas (Mexico) and Guatemala ***Mesosternus***

5'. Metatibia of male with scarce setae on the inner margin (Fig. 21). Parameres not fused at mid-base. Females with elytral epipleuron convergent at apex (ventral view) (Fig. 22). Mountains of Durango, Nayarit, and Jalisco (Mexico) ***Homoiosternus***

			
Figure 19	Figure 20	Figure 21	Figure 16
Fig. 19. Ventral view of metatibia <i>Mesosternus</i> (male). Fig. 20. Ventral view of epipleuron of female of <i>Mesosternus</i> . Fig. 21. Ventral view of metatibia of <i>Homoio sternus</i> (male). Fig. 16. Ventral view of epipleuron of female of <i>Homoio sternus</i> .			

- 6(1). Anterior border of clypeus sinuate (Fig. 22, Fig. 23, Fig. 24, Fig. 25) 7
- 6'. Anterior border of clypeus rounded (Fig. 26) *Macropoides*

		
Figure 22. Head of <i>Elcarmeniella</i>	Figure 23. Head of <i>Parisoleoides</i>	Figure 24. Head of <i>Parisolea</i>
		
Figure 25. Head of of <i>Macropoidelimus</i>	Figure 26. Head of <i>Macropoides</i>	

7(6). Dorsal color green or olive-green without longitudinal markings. Metacoxae of male with long, apical spine (Fig. 27) ***Macropoidelimus***



Figures 27. Posterioventral view of *Macropoidelimus* (male) showing metacoxal spine.

7'. Dorsal color tan, cream, or yellowish with or without longitudinal markings. Metacoxae of male without apical spine 8

8(7). Metatibia of male with long, inner spine. Body length 30-35 mm . ***Promacropoides***

8'. Metatibia of male without inner spine. Body length 15-20 mm 9

9(8). Metatrochanter with apex not produced beyond posterior border of femur (Fig. 28). Metatibia of male straight (Fig. 29) 10

9'. Metatrochanter with apex weakly spine-like and produced beyond posterior border of femur (Fig. 30). Metatibia of male curved (Fig. 31) ***Elcarmeniella***

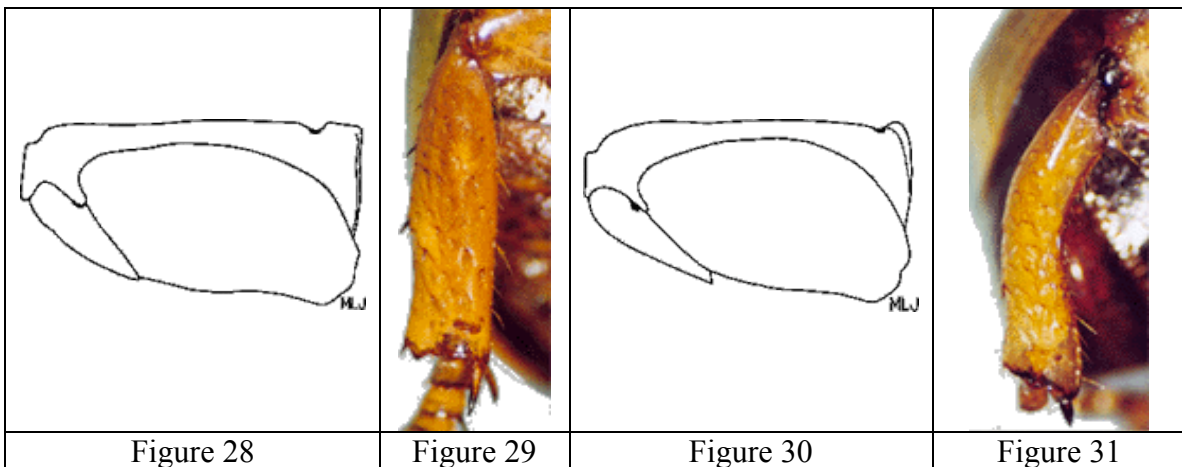


Fig. 28. Metatrochanter of *Parisolea*. Fig. 29. Metatibia *Parisolea* or *Parisoleoides*.
Fig. 30. Metatrochanter of *Elcarmeniella*. Fig. 31. Metatibia of *Elcarmeniella*.

10(9). Clypeus near apex punctostriate (Fig. 23). Mesotarsomeres of male thickened and foreshortened (Fig. 32). Modified mesotarsal claw of male wider than modified protarsal claw; apex bulbous and widely split (Fig. 32) ***Parisoleoides***

10'. Clypeus near apex punctate or rugopunctate (Fig. 24). Mesotarsomeres of male not thickened and foreshortened (Fig. 33). Modified mesotarsal claw of male subequal in width to modified protarsal claw; apex not bulbous and widely split (Fig. 33) .. ***Parisolea***

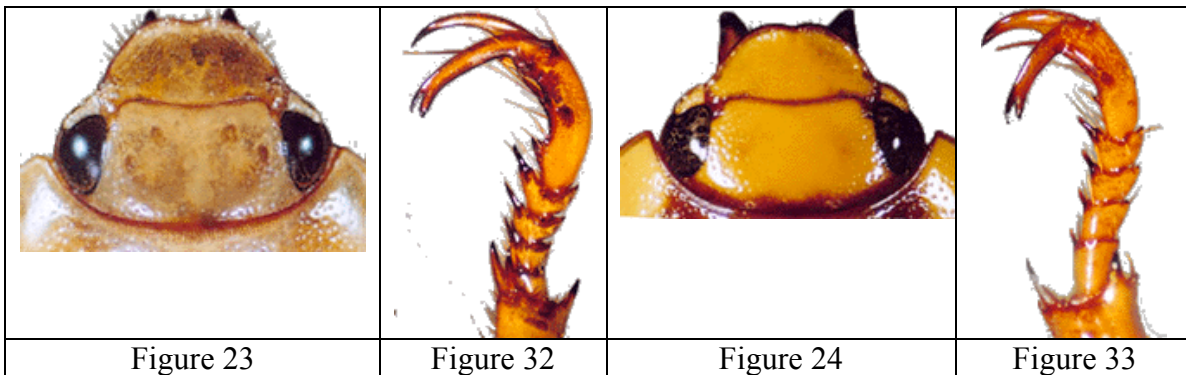


Fig 23. Head of *Parisoleoides*. Fig. 32. Modified mesotarsal claw of male *Parisoleoides*.
Fig. 24. Head of *Parisolea*. Fig. 33. Modified mesotarsal claw of male *Parisolea*.

URL: <http://www-museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Scarabaeidae/Rutelinae/Rutelinae-Tribes/Rutelini/Heterosternina/Heterosternina-Key/HeterosterninaK.html>