

Key to *Epectinaspis* species (Scarabaeidae: Rutelinae: Anomalini)
 (after Paucar-Cabrera 2003)

1. Protarsomeres 1-4 subequal in length to protarsomere 5 (Fig. 1). Protarsomere 5 with internomedial protuberance (Fig. 1). Larger claw of protarsus with ventral ramus about 4 times wider than dorsal ramus (Fig. 1). Abdominal sternites weakly concave male

1'. Protarsomeres 1-4 longer than protarsomere 5 (Fig. 2). Protarsomere 5 lacking internomedial protuberance (Fig. 2). Larger claw of protarsus with ventral ramus 1 to 2 times wider than dorsal ramus (Fig. 2). Abdominal sternites weakly convex female



Figure 1. *Epectinaspis guatemalensis*, male
 front leg



Figure 2. *Epectinaspis guatemalensis*,
 female front leg

MALES

2(1). Epipleural expansion extends from base of elytron to middle of metacoxa (Fig. 3). Frons with disc convex (Fig. 5) 3

2'. Epipleural expansion extends from base of elytron to first or second abdominal sternite (Fig. 4). Frons disc flat to weakly concave (Fig. 6) 4

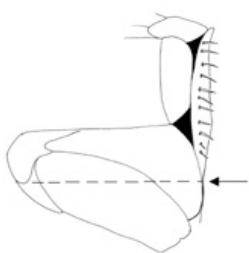


Figure 3

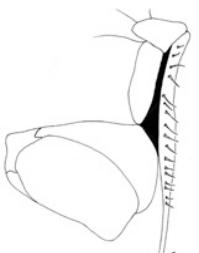


Figure 4

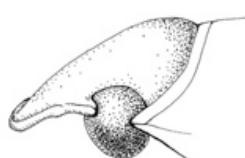


Figure 5



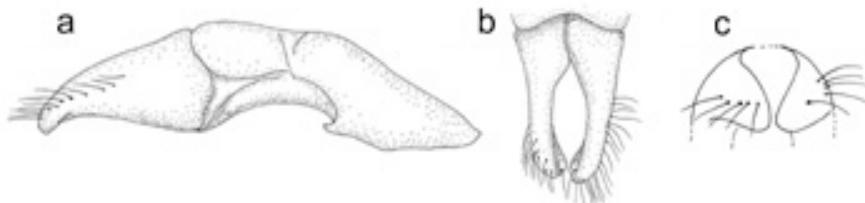
Figure 6

Figures 3-6. Epipleuron of: 3) *Epectinaspis chelifera* and 4) *Epectinaspis mexicana*.

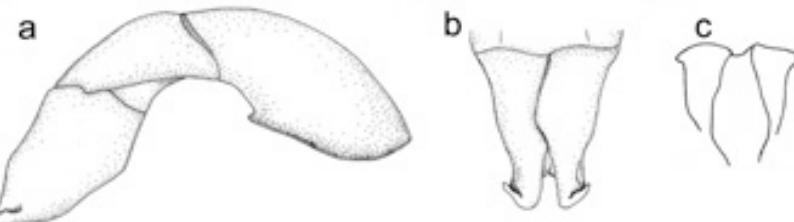
Figures 5-6. Head in lateral view of: 5) *Epectinaspis chelifera* and
 6) *Epectinaspis chalconota*.

3(2). Parameres setose. Frons with disc setose. Pronotum black, rugopunctate, (punctures dense). Pronotum densely setose. Pronotum and venter with reddish setae. Genitalia as in Figs. 7a-c *E. ambigens* Bates

3'. Parameres glabrous. Frons with disc glabrous. Pronotum testaceous, with or without castaneous macula at middle, punctate (punctures moderately dense). Pronotum sparsely to moderately setose. Pronotum and venter with tawny setae. Genitalia as in Figs. 8a- c *E. chelifera* Bates



Figures 7a-c. Male genitalia of *Epectinaspis ambigens* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.



Figures 8a-c. Male genitalia of *Epectinaspis chelifera* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.

4(2). Length of clypeus in ventral view about 1/2 length of mentum (Fig. 9). Genitalia as in Figs. 11a-c *E. mexicana* (Burmeister)

4'. Length of clypeus in ventral view about 1/3 to 1/4 length of mentum (Fig. 10).
Genitalia not as Figs. 11a-c 5

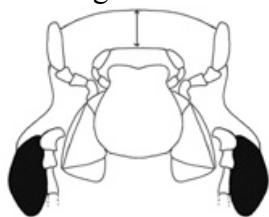
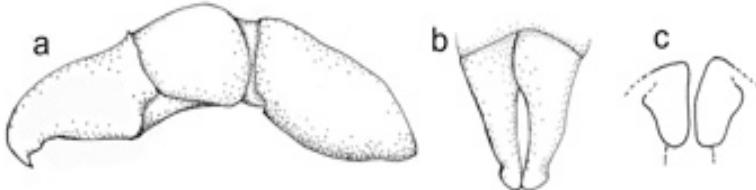


Figure 9. Head in ventral view of *Epectinaspis mexicana*.



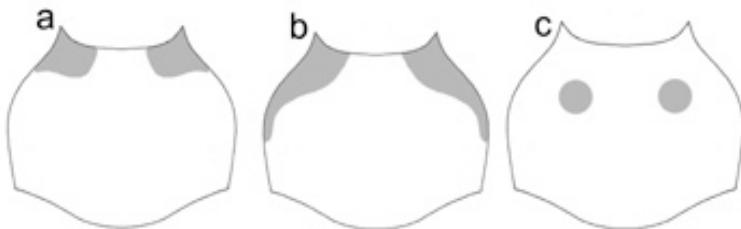
Figure 10. Head in ventral view of *Epectinaspis opacicollis*.



Figures 11a-c. Male genitalia of *Epectinaspis mexicana*: a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.

5(4). Pronotum with setae on entire disc or at apical angles (Fig. 12a) or at apical angles and margins (Fig. 12b) 6

5'. Pronotum glabrous (with or without setae at lateral margins) or with 1-10 setae either side of disc (Fig. 12c) 7



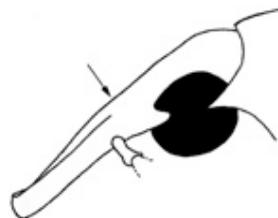
Figures 12a-c. Position of setae on pronotum in a) apical area, b) apical and marginal area, c) circular area at anterior sides of disc.

6(5). Elytron with first 3 intervals punctate in basal half. Base of clypeus in lateral view with weak protuberance (Fig. 13). Elytra with opaque surface. Genitalia as in Figs. 15a-c *E. moreletiana* (Blanchard)

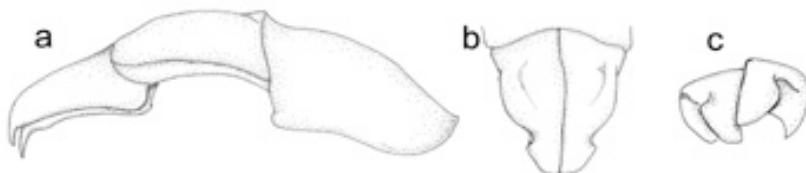
6'. Elytron with impunctate intervals. Base of clypeus in lateral view without protuberance (Fig. 14). Elytra with shiny surface. Genitalia as in Figs. 16a-c *E. opacicollis* Bates



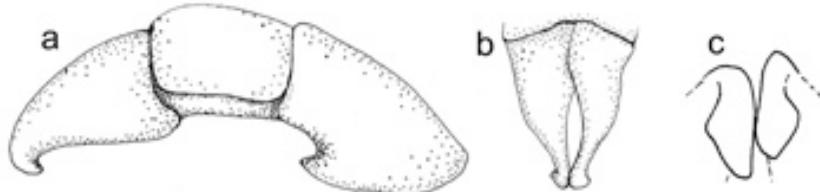
Figures 13. Head in lateral view of *Epectinaspis moreletiana*.



Figures 14. Head in lateral view of *Epectinaspis opacicollis*.



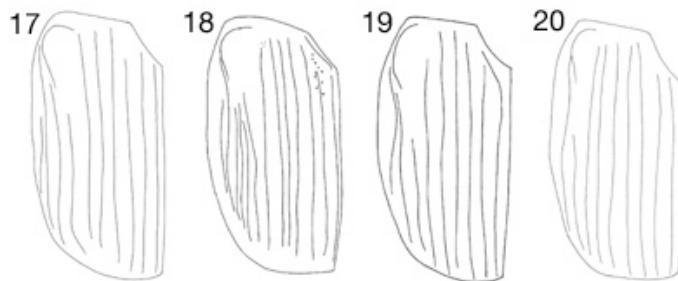
Figures 15. Male genitalia of *Epectinaspis moreletiana* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.



Figures 16. Male genitalia of *Epectinaspis opacicollis* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.

7(5). Elytron with 10 striae (Fig. 17), last stria extends from near apical border of elytron to metacoxal area (Fig. 17). Pronotum strongly convex in lateral view (more protuberant than head in lateral view) (Fig. 21). Genitalia as in Fig. 23a-c *E. chalconota* Bates

7'. Elytron with 9 or 11-13 striae (Figs. 18-20), last stria extends from near apical border of elytron to laterad of humerus (Figs. 18-20). Pronotum weakly convex in lateral view (Fig. 22). Genitalia not as in Figs. 23a-c 8



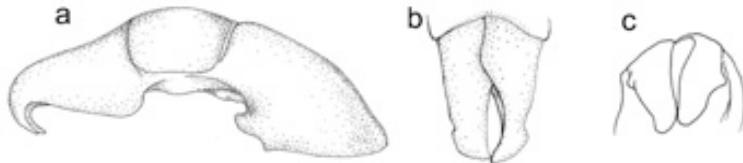
Figures 17-20. Left elytron of: 17) *Epectinaspis chalconota*, 18) *Epectinaspis pictipennis*, 19) *Epectinaspis bisyrica*, and 20) *Epectinaspis guatemalensis*.



Figure 21. Pronotum in lateral view of *Epectinaspis chalconota*.



Figure 22. Pronotum in lateral view of *Epectinaspis chelifera*.



Figures 23a-c. Male genitalia of *Epectinaspis chalconota* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.

8(7). Parameres with notch in apical 1/3 (Figs. 24b-c). Elytron with 11-13 striae (Fig. 18). Genitalia as in Fig 32a-c *E. pictipennis* Bates

8'. Parameres without notch in apical 1/3 (Figs. 25a-c, 26a-c). Elytron with 9 striae (Figs. 19-20). Genitalia not as in Fig 24a-c 9



Figure 18

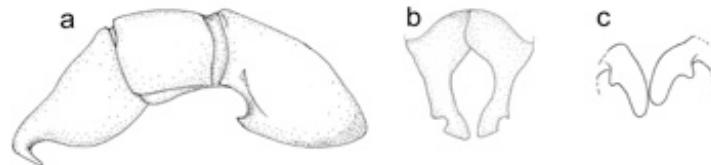


Figure 19

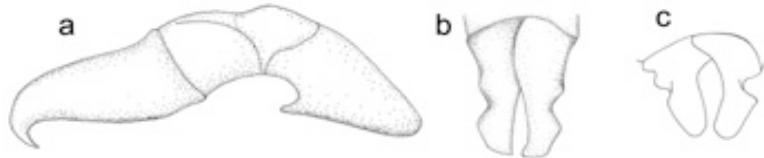


Figure 20

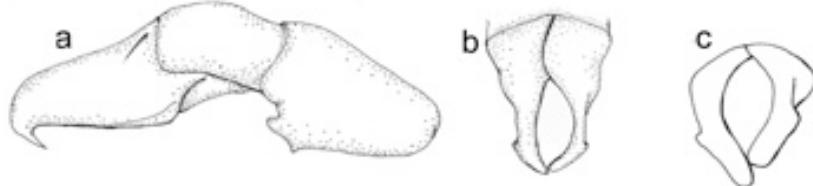
Figures 18-20. Left elytron of: 18) *Epectinaspis pictipennis*, 19) *Epectinaspis bisyrica*, and 20) *Epectinaspis guatemalensis*.



Figures 24a-c. Male genitalia of *Epectinaspis pictipennis* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.



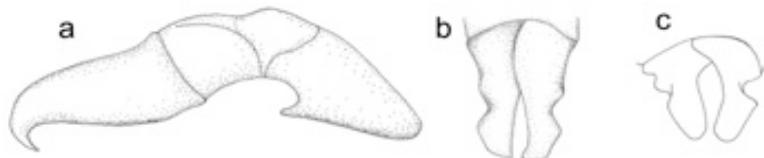
Figures 25a-c. Parameres of *Epectinaspis bisyrica* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.



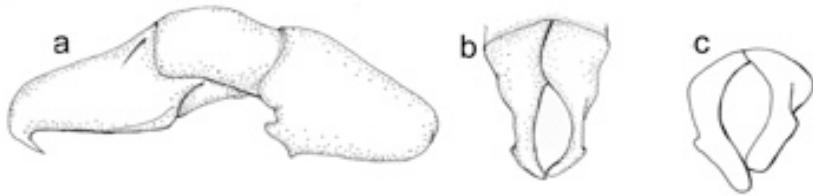
Figures 26a-c. Parameres of *Epectinaspis guatemalensis* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.

9(8). Genitalia as in Fig. 29a-c. Pronotum with about 10 whitish setae at anterior sides of disc *E. bisyrica* Paucar-Cabrera

9'. Genitalia as in Figs. 30a-c. Pronotum with or without 1-8 tawny setae at anterior sides of disc *E. guatemalensis* Ohaus



Figures 25a-c. Parameres of *Epectinaspis bisyrica* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.



Figures 25-26. Parameres of *Epectinaspis guatemalensis* in a) lateral view, b) parameres in dorsal view, c) parameres in caudal view.

FEMALES

10(1). Epipleural expansion extends from base of elytron to middle of metacoxa (Fig. 3) 11

10'. Epipleural expansion extends from base of elytron to first or second abdominal sternite (Fig. 4) 12

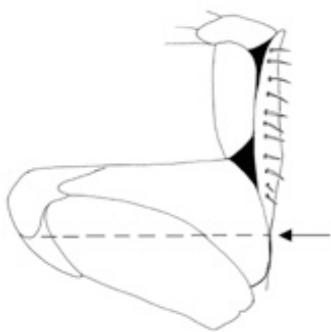


Figure 3

Figures 3-4. Epipleuron of: 3) *Epectinaspis chelifera* and
4) *Epectinaspis mexicana*.



Figure 4

11(10). Pronotum black, rugopunctate, punctures dense, densely setose. Pronotum and venter with reddish setae. Metafemur black *E. ambigens* Bates

11'. Pronotum testaceous, with or without castaneous macula at middle, punctate, punctures moderately dense, sparsely to moderately setose. Pronotum and venter with tawny setae. Metafemur testaceous *E. chelifera* Bates

12(10). Pronotal disc entirely setose 13

12'. Pronotal disc glabrous (with or without lateral margins setose) or with 1-10 setae at anterior sides of disc (Fig. 12c) or with sparse setae 14

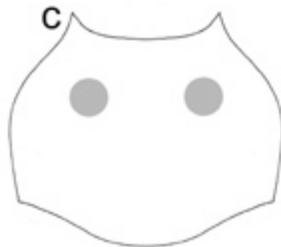


Figure 12c. Position of setae on pronotum in circular area at anterior sides of disc.

13(12). Elytron with first 3 intervals punctate in basal half. Pronotum black, with or without brown macula, opaque. Elytron with opaque surface. Terminal abdominal sternite quadrate or rounded at apex (Fig. 27) *E. moreletiana* (Blanchard)

13'. Elytron with impunctate intervals. Pronotum dark brown with greenish reflections, with or without testaceous base. Elytron with shiny surface. Terminal abdominal sternite sinuate at apex (Fig. 28) *E. opacicollis* Bates



Figure 27



Figure 28

Figures 27-28. Last abdominal sternite of: 27) *Epectinaspis moreletiana* and 28)
Epectinaspis opacicollis.

14(12). Lateral margin of elytron narrow in dorsal view (Fig. 29). Elytron with 12 striae, striae 9 and 10 closely paired *E. mexicana* (Burmeister)

14'. Lateral margin of elytron broad at middle in dorsal view (Fig. 30). Elytron with 9-11 or 13 striae 15



Figure 29



Figure 30

Figures 29-30. Lateral margin of elytron of: 29) *Epectinaspis mexicana* and 30)
Epectinaspis guatemalensis.

15(14). Terminal abdominal sternite sinuate at apex (Fig. 28). Pronotum yellowish brown with dark brown macula at middle *E. pictipennis* Bates

15'. Terminal abdominal sternite quadrate or rounded at apex (Fig. 27). Pronotum reddish brown (with or without dark brown macula), dark brown, or shiny black 16



Figure 27

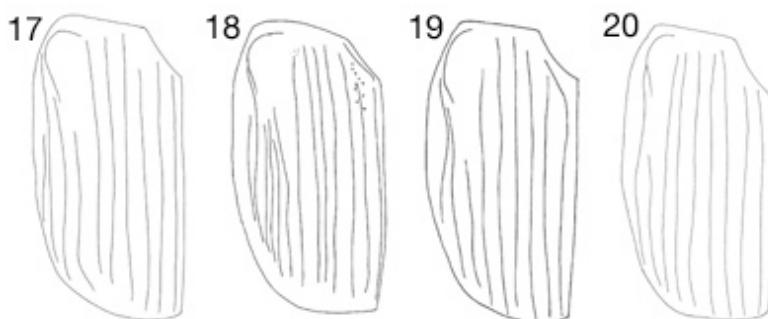


Figure 28

Figures 27-28. Last abdominal sternite of: 27) *Epectinaspis moreletiana* and 28) *Epectinaspis opacicollis*.

16(15). Elytron with last 2 striae closely paired (last striae extends from metacoxal area to near apical border of elytron) (Fig. 17) *E. chalconota* Bates

16'. Elytron with last 2 striae not paired (Figs. 18-20) 17



Figures 17-20. Left elytron of: 17) *Epectinaspis chalconota*, 18) *Epectinaspis pictipennis*, 19) *Epectinaspis bisyrica*, and 20) *Epectinaspis guatemalensis*.

17(16). Apex of metatibia with last 3 external spinules with their apices weakly curved (Fig. 31). Apex of metafemur with internal area weakly projected (Fig. 33). Elytral striae arranged as in Fig. 19. Pronotum with about 10 setae at anterior sides of disc (Fig. 12c) *E. bisyrica* Paucar-Cabrera

17'. Apex of metatibia with external spinules with their apices straight (Fig. 32). Apex of metafemur with internal area projected (Fig. 34). Elytral striae arranged as in Fig. 20. Pronotum with or without 1-8 tawny setae at anterior sides of disc (Fig. 12c) *E. guatemalensis* Ohaus

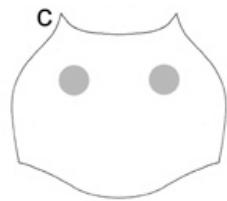


Figure 12c



Figure 31



Figure 32



Figure 33



Figure 34

Figure 12. Position of setae on pronotum in circular area at anterior sides of disc.
Figures 31-32. Metatibial spinules of: 31) *Epectinaspis bisyrica* and 32) *Epectinaspis guatemalensis*. Figures 33-34. Apex of metafemur of: 33) *Epectinaspis bisyrica* and 34) *Epectinaspis guatemalensis*.

Paucar-Cabrera, A. 2003. Systematics and phylogeny of the genus *Epectinaspis* Blanchard (Coleoptera: Scarabaeidae: Rutelinae) and description of a new genus of Anomalini from Mexico. Coleopterists Society Monographs 2:1-60.

URL: <http://www-museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Scarabaeidae/Rutelinae/Rutelinae-Tribes/Anomalini/Anomalini-generic-pages/Epectinaspis/Epectinaspis-Key/EpectinaspisK.html>