

**Key to Adult Males and Females of the Genus *Megasoma*
(Scarabaeidae: Dynastinae) (female of *M. lecontei* unknown)**
by Matthew Robert Moore 2007

1. Posterior sternite emarginate at apex (males)	2
1'. Posterior sternite rounded at apex (females)	16
2 (1). Elytra with vestiture	3
2'. Elytra without vestiture	11
3 (2). Anterior tibia arcuate (Fig. 1)	4
3'. Anterior tibia straight (Fig. 2)	6



Fig. 1. *M. nogueirai*
arcuate foretibia



Fig. 2. *M. mars*
straight foretibia

4 (3). Anterior angles of pronotum produced into antero-laterally projecting horns (Fig. 3)	5
4'. Anterior angles of pronotum produced into laterally projecting horns (Fig. 4). Southwestern Mexico (Sierra Madre Occidental) <i>M. occidentalis</i> Bolívar y Pieltain, Jiménez-Asúa, and Martínez	



Fig. 3. *M. elephas* pronotum produced into
antero-laterally projecting horns.



Fig. 4. *M. occidentalis* pronotum produced
into laterally projecting horns.

- 5 (4). Apices of anterior angles (horn) of pronotum curving inward (Fig. 5). Side of elytron, behind humerus with short, recumbent setae. Mexico (southern Sinaloa: Pacific slopes of Sierra Madre Occidental) *M. nogueirai* (Morón)
 5'. Apices of anterior angles (horns) of pronotum not curving inward (Fig. 6). Side of elytron, behind humerus velutinous (short, erect setae). Southern Mexico to Venezuela *M. elephas* (Fabricius)



Fig. 5. *M. nogueirai* apices of pronotal horns curving inwards



Fig. 6. *M. elephas* apices of pronotal horns not curving inwards

- 6 (3'). Elytra velutinous (short, erect setae) 7
 6'. Elytra pilose 8

- 7 (6). Mid-prothoracic horn narrowly emarginate at apex. Anterior angles of pronotum produced into elongate, acute horns (Fig. 7). Brazil *M. gyas* Herbst
 7'. Mid-prothoracic horn broadly-bifurcate at apex. Anterior angles of pronotum produced into short, acute horns (Fig. 8). Brazil *M. anubis* Chevr.



Fig. 7. *M. gyas* median pronotal horn narrowly emarginate at apex, anterior angles of pronotum produced into elongate, acute horns.



Fig. 8. *M. anubis* median pronotal horn broadly-bifurcate at apex, anterior angles of pronotum produced into short, acute horns.

- 8 (6'). Anterior margin of clypeus with acute, spiniform teeth separated by 3 tooth widths or more 9
- 8'. Anterior margin of clypeus with acute, spiniform teeth separated by 1 tooth width or less. Argentina and Paraguay *M. joergenseni* Bruch
- 9 (8). Pronotum with median, anteriorly directed horn 10
- 9'. Pronotum without median, anteriorly directed horn. Mexico (central Baja California: Cedros Island) *M. cedrosa* Hardy
- 10 (9). Distance between apices of anterior angles (horns) of pronotum nearly twice width of head (Fig. 9). Mexico (southern Baja California) *M. thersites* LeConte
- 10'. Distance between apices of anterior angles (horns) of pronotum less than 1 1/2 width of head (Fig. 10). Texas and northern Mexico *M. vogti* Cartwright



Fig. 9. *M. thersites* distance between apices of anterior angles (horns) of pronotum nearly twice width of head.



Fig. 10. *M. vogti* distance between apices of anterior angles (horns) of pronotum less than 1 1/2 width of head.

- 11 (2'). Pronotum with median, anteriorly directed horn. Mexico (Sonora and Sinaloa) *M. pachecoi* Cartwright
- 11'. Pronotum without median, anteriorly directed horn; anteromedial tubercle or swelling may be present 12
- 12 (11). Cephalic horn at base on dorsal surface with tooth or process (Fig. 11) 13
- 12'. Cephalic horn at base on dorsal surface without tooth or process (Fig. 12) 14



Fig. 11. *M. mars* cephalic horn at base on dorsal surface with tooth or process.



Fig. 12. *M. thersites* cephalic horn at base on dorsal surface without tooth or process.

13 (12). Anterior angles of pronotum produced into acute, anteriorly projecting horns (Fig. 13). Color dull or shiny black. Scutellum on disc rugose. Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Venezuela .. ***M. actaeon*** (L.)
 13'. Anterior angles of pronotum produced into acute, antero-laterally projecting horns (Fig. 14). Color shiny black. Scutellum on disc punctate. Brazil ***M. mars*** Reiche



Fig. 13. *M. actaeon* anterior angles of pronotum produced into acute, anteriorly projecting horns.



Fig. 14. *M. mars* anterior angles of pronotum produced into acute, antero-laterally projecting horns.

14 (12). Pygidium on disc glabrous (some setae basally). Body color black. Southern Arizona ***M. punctulatus*** Cartwright
 14'. Pygidium on disc uniformly setose. Body color reddish-brown. 15

15 (14). Anterior angles of pronotum (horns) with apices rounded. Pronotum lacking median tubercle. Southern California ***M. sleeperi*** Hardy
 15'. Anterior angles of pronotum (horns) with apices spiniform. Pronotum with median, binodose tubercle. Mexico (southern Baja California) ***M. lecontei*** Hardy

16 (1'). Pronotum on disc rugose or rugopunctate 17
 16'. Pronotum on disc punctate 23

17 (16). Elytra with vestiture 18
 17'. Elytra without vestiture 22

18 (17). Scutellum at base rugose 19
 18'. Scutellum at base finely punctate 21

19 (18). Pronotum with longitudinal, posteromedian carina (Fig. 15). Mexico (southern Sinaloa: Pacific slopes of Sierra Madre Occidental) ***M. nogueirai*** Morón
 19'. Pronotum without longitudinal, posteromedian carina (Fig. 16) 20

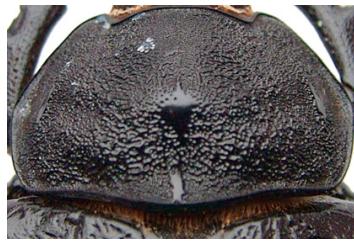


Fig. 15. *M. nogueirai* pronotum with longitudinal, posteromedian carina



Fig. 16. *M. elephas* pronotum without longitudinal, posteromedian carina

20 (19'). Side of elytron, behind humerus velutinous (short, erect setae). Southern Mexico to Venezuela. ***M. elephas* (Fabricius)**
20'. Side of elytron, behind humerus with short, recumbent setae. Southwestern Mexico (Sierra Madre Occidental) .. ***M. occidentalis*** Bolívar y Pieltain, Jiménez-Asúa, and Martínez

21 (18'). Pronotum with longitudinal, posteromedian carina (Fig. 17). Brazil ***M. gyas* (Herbst)
21'. Pronotum without longitudinal, posteromedian carina (Fig. 18). Brazil. ***M. anubis*** Chevrolat**



Fig. 17. *M. gyas* pronotum with longitudinal, posteromedian carina



Fig. 18. *M. anubis* pronotum without longitudinal, posteromedian carina

22 (17'). Frontoclypeal suture with acute tubercle. Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Venezuela ***M. actaeon* (L.)
22'. Frontoclypeal suture with binodose tubercle. Brazil, Colombia, Paraguay, Uruguay ***M. mars*** Reiche**

23 (16'). Elytra with vestiture 24
23'. Elytra with out vestiture. 26

24 (23). Anterior margin of clypeus with acute, spiniform teeth. 25
24'. Anterior margin of clypeus with out acute, spiniform teeth. Argentina and Paraguay ***M. joergenseni*** Bruch

25 (24). Frontoclypeal suture with transverse, blunt tubercle. Tubercls impressed on top. Mexico (southern Baja California) *M. thersites* LeConte
 25'. Frontoclypeal suture with blunt tubercle. Tubercls not impressed on top. Mexico (central Baja California: Cedros Island) *M. cedrosa* Hardy

26 (23'). Frontoclypeal suture with tubercle on distinctly convex, raised surface (Fig. 19). Texas and northeastern Mexico *M. vogti* Cartwright
 26'. Frontoclypeal suture with tubercle on flat surface (Fig. 20). Southern Arizona, Southern California, Mexico (Sonora and Sinaloa)..... 27



Fig. 19. *M. vogti*. Frontoclypeal suture with tubercle on convex, raised surface



Fig. 20. *M. pachecoi*. Frontoclypeal suture with tubercle on flat surface

27 (26'). Ocular canthus subquadrate with length medially subequal to length distally. Ocular canthus with anterior margin weakly oblique (10° angle from perpendicular). Southern California *M. sleeperi* Hardy
 27'. Ocular canthus subtriangular with length medially 1.5 – 2.0 times larger than length distally. Ocular canthus with anterior margin strongly oblique (45° angle from perpendicular). Southern Arizona or Mexico 28

28 (27'). Elytral punctuation near base with sparse, small punctures mixed with moderately dense, moderately large punctures (Fig. 21). Mexico (Sonora and Sinaloa) *M. pachecoi* Cartwright
 28'. Elytral punctuation near base with dense, small punctures mixed with moderately dense, moderately large punctures (Fig. 22). Southern Arizona *M. punctulatus* Cartwright



Fig. 17. *M. pachecoi*
elytral punctuation



Fig. 22. *M. punctulatus*
elytral punctuation

URL: <http://www-museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Scarabaeidae/Dynastinae/Dynastinae-Tribes/Dynastini/Megasoma/Megasoma-Key/MegasomaK.html>