

Key to the species of *Megalastrum* in Central America

1. Indusia present and conspicuous, circular, 0.5–0.7 mm diam.; sori restricted to the apical portion of the segments; Costa Rica *M. apicale*
1. Indusia absent or inconspicuous, hair-like, minute; sori throughout the length of the segments; Costa Rica and elsewhere
 2. Laminae at base 1-pinnate-pinnatifid to 2-pinnate-pinnatisect, medially 1-pinnate-pinnatifid to 2-pinnate
 3. Pinna rachises densely pubescent adaxially *M. macrotheca*
 3. Pinna rachises glabrous to subglabrous adaxially, the hairs when present only at base of pinnae rachis)
 4. Hairs on both surfaces of the leaf rachises 0.1–0.2 mm long, 1- or 2-celled, acicular *M. reductum*
 4. Hairs on both surfaces of the leaf rachises ca. 1 mm long, 6–8-celled, strongly jointed (twisted at the septae) *M. ctenitoides*
 2. Laminae at base 3-pinnate-pinnatifid to 4-pinnate-pinnatisect, medially 2- to 3-pinnate-pinnatisect
 5. Hairs on the pinna rachises adaxially 0.1–0.2 mm long, 1- or 2(–4)-celled
 6. Laminae between the veins on both surfaces puberulent, the hairs ca. 0.1 mm long, acicular, erect *M. intermedium*
 6. Laminae between the veins on both surfaces glabrous
 7. Leaves up to 1.5 m long; laminae 3-pinnate-pinnatisect at base; scales on the abaxial surface of the pinna rachises inconspicuous, entire, flaccid, appressed; adaxial surface of the veins non-glandular *M. palmense*
 7. Leaves up to 4 m long; laminae 4-pinnate-pinnatisect at base; scales on the abaxial surface of the pinna rachises conspicuous, strongly denticulate, firm, spreading; adaxial surface of the veins glandular, the glands sessile, spherical *M. heydei*
 5. Hairs on the pinna rachises adaxially 0.3–2.0 mm long, 4–12-celled
 8. Stalked glands present on the lamina abaxially (these glands ca. 0.1–0.3 mm long, hairlike with apical cell shiny, enlarged, spherical or clavate)

9. Leaves up to 4 m long; laminae 4-pinnate-pinnatisect at base; basal pinnae up to 1 m long; scales of the pinna rachises abaxially strongly and conspicuously denticulate..... *M. pulverulentum*
9. Leaves up to 1.5 m long; laminae 3-pinnate-pinnatisect at base; basal pinnae up to 0.15–0.4 m long; scales of the pinna rachises abaxially entire to denticulate
10. Lamina tissue between the veins adaxially pubescent; scales of the pinna rachises ca. 1.5 mm wide, ovate to lanceolate, flaccid..... *M. lunense*
10. Lamina tissue between the veins adaxially not pubescent; scales of the pinna rachises ca. 0.2–0.4 mm wide, filiform to lanceolate, linear or oblong, firm
11. Lamina abaxially between the veins pubescent with long-stalked glandular hairs only (not intermixed with non-glandular ones); pinna rachis scales dark brown, filiform; Costa Rica (endemic to Osa Peninsula)..... *M. longiglandulosum*
11. Lamina abaxially between the veins pubescent with long-stalked glandular hairs mixed with acicular ones; pinna rachis scales golden, lanceolate, linear or oblong; Costa Rica, Panama *M. atrogriseum*
8. Stalked glands absent on the lamina abaxially
12. Scales of the pinna rachises abaxially usually filiform, 1–2 × 0.05–0.3 mm
13. Pinna rachises abaxially pubescent, often conspicuously and evenly so
14. Hairs on the pinna rachises abaxially 0.6–1.3(–2) mm long, 4–7(–12)-celled; veins adaxially pubescent, the hairs 0.5–1.5 mm long, 3–7-celled *M. longipilosum*
14. Hairs on the pinna rachises abaxially 0.2–0.6 mm long, 2–5-celled; veins adaxially glabrous to pubescent, the hairs 0.2–0.3(–0.5) mm long, 2–4-celled *M. costipubens*
13. Pinna rachises abaxially glabrous to sparsely pilose
15. Pinna rachises abaxially without hairs; laminar tissue between veins abaxially puberulent, the hairs 0.1–0.2 mm long, 1–3-celled, acicular. erect or (rarely) glabrous *M. galeottii*

15. Pinna rachises abaxially sparsely pilose; laminar tissue between veins abaxially glabrous to sparsely pilose, the hairs 0.5–0.8 mm long, 2–5-celled, spreading
16. Lamina tissue between the veins abaxially glabrous; hairs of the lamina margins 0.2–0.3 mm long; scales of the pinna rachises abaxially 0.2–0.3 mm wide, golden brown, not tortuous *M. glabrum*
16. Lamina tissue between the veins abaxially sparsely pilose; hairs of the lamina margins 0.4–0.8 mm long; scales of the pinna rachises abaxially 0.1–0.2 mm wide, brown, tortuous..... *M. mexicanum*
12. Scales of the pinna rachises abaxially usually lanceolate, (0.2–)2–6 × (0.2–)0.5–0.7 mm
17. Lamina tissue between the veins abaxially hairy
18. Hairs of the veins adaxially typically 0.3–0.4 mm long, 3- or 4-celled *M. squamosum*
18. Hairs of the veins adaxially typically 0.7–1.0 mm long, 4-6-celled
19. Lamina tissue between the veins adaxially pubescent (especially toward segment apices); scales of the pinna rachises abaxially brown, tortuous *M. dentatum*
19. Lamina tissue between the veins adaxially glabrous; scales of the pinna rachises abaxially golden brown, flat, firm..... *M. atrogriseum*
17. Lamina tissue between the veins abaxially hairless or nearly so (sometimes with uniseriate, reddish appressed proscapes)
20. Leaves to 4.6 m long; basal pinnae up to 1 m long; scales of the pinna rachises abaxially strongly denticulate; hairs of the costules adaxially 1.5–2.0 mm long, 8–12-celled *M. sparsipilosum*
20. Leaves to 2 m long; basal pinnae up to 0.4–0.6 m long; scales of the pinna rachises abaxially entire to denticulate; hairs of the costules adaxially 0.4–1.0 mm long, 3–8-celled
21. Hairs of the pinna rachises and costules abaxially 0.7–1.0 mm long, 6–8-celled; scales of the pinna rachises abaxially golden brown; leaves up to 1 m long; Costa Rica, Panama *M. glabrum*

21. Hairs of the pinna rachises and costules abaxially 0.2–0.3(–0.5) mm long, 6–8-celled; scales of the pinna rachises abaxially dark to light brown; leaves up to 2 m long; Mexico, Guatemala, Honduras
22. Scales of the pinna rachises abaxially light brown, appressed to loosely ascending, lanceolate..... *M. subincisum*
22. Scales of the pinna rachises abaxially dark brown, patent, abruptly expanded at base..... *M. gompholepis*

