

Class SARCOPTERYGII

Order COELACANTHIFORMES

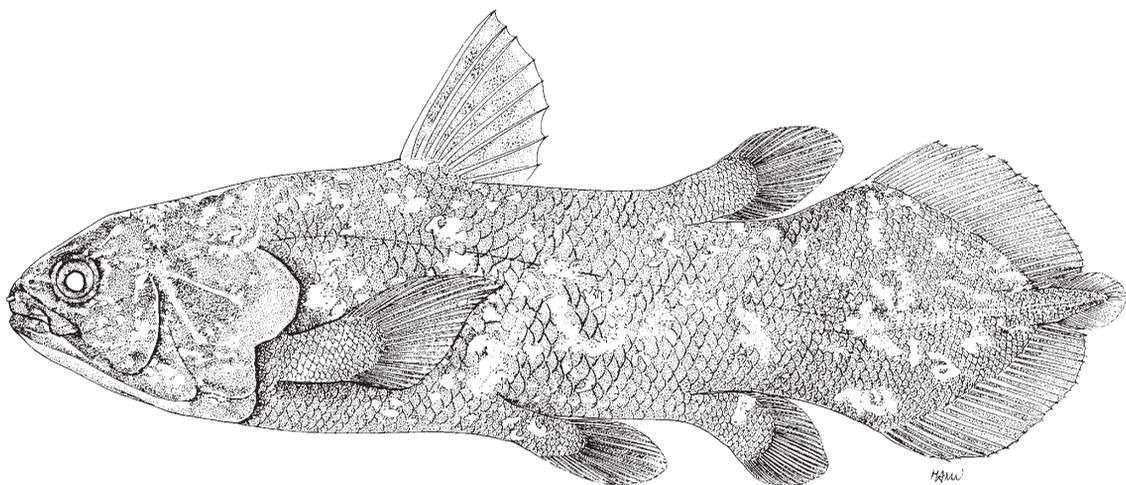
LATIMERIIDAE

(= Coelacanthidae)

Coelacanth

by S.L. Jewett

A single species occurring in the area.

Latimeria menadoensis Pouyaud, Wirjoatmodjo, Rachmatika, Tjakrawidjaja, Hadiaty, and Hadie, 1999**Frequent synonyms / misidentifications:** None / Nearly identical in appearance to *Latimeria chalumnae* Smith, 1939 from the western Indian Ocean.**FAO names:** En - Sulawesi coelacanth.

Diagnostic characters: A large robust fish. Caudal-peduncle depth nearly equal to body depth. Head robust, with large eye, terminal mouth, and large soft gill flap extending posteriorly from opercular bone. Dorsal surface of snout with pits and reticulations comprising part of sensory system. Three large, widely spaced pores on each side of snout, 1 near tip of snout and 2 just anterior to eye, connecting internally to rostral organ. Anterior nostrils form small papillae located at dorsolateral margin of mouth, at anterior end of pseudomaxillary fold (thick, muscularized skin which replaces the maxilla in coelacanth). **Ventral side of head with prominent paired gular plates**, longitudinally oriented along midline; skull dorsally with pronounced paired bony plates, just above and behind eyes, the posterior margins of which mark exterior manifestation of intracranial joint (or hinge) that divides braincase into anterior and posterior portions (found only in coelacanth). First dorsal fin typical, with 8 stout bony rays. **Second dorsal (28 rays), anal (30), paired pectoral (each 30 to 33), and paired pelvic (each 33) fins lobed, i.e. each with a fleshy base, internally supported by an endoskeleton with which terminal fin rays articulate. Caudal fin atypical, consisting of 3 parts:** upper and lower portions with numerous rays more or less symmetrically arranged along dorsal and ventral midlines, and a separate smaller terminal portion (sometimes called epicaudal fin) with symmetrically arranged rays. **Notochord (visible externally as a raised ridge midlaterally on posterior portion of body) extends to end of epicaudal fin. Scales deeply embedded, with rough surface bearing numerous tiny denticles. Colour:** brownish grey with irregular white blotches throughout head, trunk, and lobed portion of fins; **dorsal surface of fresh specimens may appear speckled with gold flecks**, apparently a prismatic effect of light striking denticles on scales; eye of fresh specimens bright green.

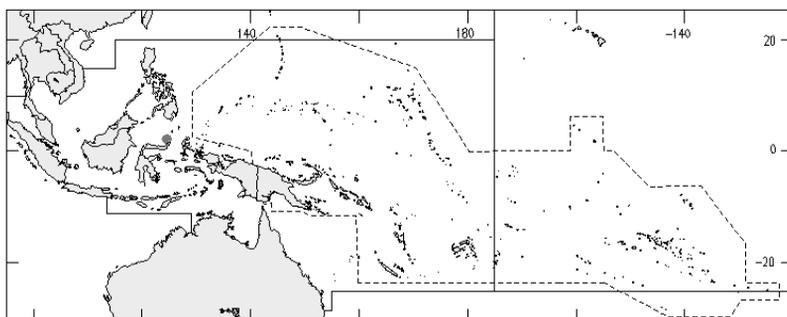
Similar families occurring in the area

None. No other fish in the area has lobed fins and a tripart caudal fin.

Size: Maximum total length at least 1.24 m; most likely attains a larger size (2 specimens captured to date, only one of which examined in detail and found to be an immature female).

Habitat, biology, and fisheries: Known only from 2 captures and 2 additional sightings. Two specimens caught off Manado Tua, a volcanic island off the northern tip of Sulawesi, Indonesia. Specimens were taken at depths of approximately 100 to 150 m, and were captured incidentally using “shark” nets (large gill nets) set overnight approximately 250 to 400 m from shore. Two additional specimens (estimated to be 1.2 to 1.4 m in length) were sighted from a submersible in a deep carbonate cave at 155 m, 360 km southwest of Manado Tua. The species is protected locally by Indonesian regulations and internationally by CITES, which includes all *Latimeria* on its Appendix I.

Distribution: Undetermined. A recent discovery and thus far known only from the northern region of Sulawesi, Indonesia.



References

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Editorial note: This species was recently described and the decision to add this account came after the first WCP volumes were printed. Therefore, the author's address was not included in the list of authors in Volume 1.

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