

PROCEEDINGS
OF THE
ZOOLOGICAL SOCIETY
OF LONDON.



PART XXII.

1854.

PRINTED FOR THE SOCIETY;
SOLD AT THEIR HOUSE IN HANOVER SQUARE,
AND BY MESSRS. LONGMAN, BROWN, GREEN, AND LONGMANS,
PATERNOSTER ROW.

3. MONOGRAPHS OF ELLOBIUM AND MELAMPUS, TWO GENERA
OF PULMONIFEROUS MOLLUSCA. BY H. AND A. ADAMS.

Genus ELLOBIUM, Bolten.

Head ending in a snout; tentacles subcylindrical; eyes situated at their inner bases. Pulmoniferous; respiring free air. Living on the land.

Shell oblong-oval, covered with a brown epidermis; spire short, obtuse; aperture narrow, elongated; inner lip with 2-3 large anterior plaits; outer lip thickened internally.

Otis, Humph., not Linn.—*Auricula*, Lamk., not Klein.—*Auriculus*, Montf.—*Marsyas*, Oken.—*Geovula*, Swains.

The animals of this genus resemble in their habits those of *Pythia*, Bolten (*Scarabus*, Montfort), living in salt marshes and mangrove-swamps.

1. ELLOBIUM AURIS-MIDÆ, Linnæus.

Voluta auris-Midæ, Linn. Syst. Nat. ed. 12, p. 1186.—*Helix auris-Midæ*, Müll. Verm. p. 118. no. 311.—*Bulinus auris-Midæ*, Brug. Dict. no. 76.—*Auricula Midæ*, Lamk. Hist. viii. p. 323.

2. ELLOBIUM AURIS-JUDÆ, Linnæus.

Voluta auris-Judæ, Linn. Syst. Nat. ed. 12, p. 1187.—*Helix auris-Judæ*, Müll. Hist. Verm. p. 109. no. 310.—*Bulinus auris-Judæ*, Brug. Dict. no. 78.—*Auricula Judæ*, Lamk. Hist. viii. p. 324.—*Auric. protracta*, Beck, Ind. (var.).—*Auric. densata*, Beck, Ind. (var.).—*Auric. reticulata*, Anton, Cat. (var.).

3. ELLOBIUM SUBNODOSUM, Metcalfe.

Auricula subnodosa, Metc. Proc. Zool. Soc. 1851; Ann. and Mag. Nat. Hist. ser. 2. p. 67 (1853).

4. ELLOBIUM POLITUM, Metcalfe.

Auricula polita, Metc. Proc. Zool. Soc. 1851; Ann. and Mag. Nat. Hist. ser. 2, p. 67 (1853).

5. ELLOBIUM SHEEPMAKERI, Petit.

Auricula Sheepmakeri, Petit, Journ. de Conch. i. p. 404.

6. ELLOBIUM GRANULINUM, Mühlfeldt.

Auricula granulina, Mühlf. Anton, Verzeich.—*Auric. stagnalis*, Petit, Guér. Mag. 1835, p. 23.—*Auric. papillifera*, Küst. Chemn. Conch. Cab. (Auric.) p. 25. tab. 3. f. 9, 10.

7. ELLOBIUM TORNATELLIFORME, Petit.

Auricula tornatelliformis, Petit, Ann. Nat. Hist. xii. p. 437; Proc. Zool. Soc., Dec. 1842.

8. ELLOBIUM PALLIDUM, Sowerby.

Auricula pallida, Sow., Beechey's Voy. (Moll.) t. 38. f. 27; Küst. Chemn. Conch. Cab. (Auric.) p. 51. tab. 7. f. 8.

9. ELLOBIUM HELVACEUM, Philippi.

Auricula helvacea, Phil. Zeitschr. für Malacozool.

10. ELLOBIUM ELONGATUM, Parreyss.

Auricula elongata, Parr. in litt.; Küst. Chemn. Conch. Cab. (Auric.) p. 53. tab. 8. f. 6-8.

11. ELLOBIUM SUBULA, Quoy & Gaimard.

Auricula subula, Quoy & Gaim. Voy. Astrol. ii. pl. 13. f. 39, 40.

12. ELLOBIUM CEYLANICUM, H. & A. Adams. *E. testa oblongo-ovata, cornea, subdiaphana, longitudinaliter strigosa, transversim tenuissime corrugato-striata; anfractibus supremis punctatis, pallide fuscis; spira elevatiuscula, apice obtuso; apertura oblonga; columella oblique biplicata; labro intus incrassato, postice sinuato.*

Hab. Ceylon (Dr. Gardner). Mus. Cuming.

13. ELLOBIUM SIMPLEX, H. & A. Adams. *E. testa oblongo-ovali, crassiuscula, pallide fusca, nitida, spira elata, obtusa, anfractibus convexiusculis, postice decussatim striatis, ad suturas marginatis, ultimo longitudinaliter strigato; apertura oblonga; columella triplicata, plica postica evanida; labro vix incrassato, postice vix sinuato.*

Hab. —? Mus. Cuming.

14. ELLOBIUM INCRASSATUM, H. & A. Adams. *E. testa elongato-ovata, crassa, lævi, nitida, alba; spira elata, anfractibus quinque, convexiusculis; apertura oblonga, angusta; columella biplicata; labro incrassato, postice tenui et valde sinuato.*

Hab. Loon, island of Bohol. Mus. Cuming.

15. ELLOBIUM SEMIPLICATUM, H. & A. Adams. *E. testa subulato-cylindracea, spira obtusa, apice eroso, olivacea, lævi, nitida, anfractibus planis, longitudinaliter plicatis, ultimo postice plicato, antice lævigato; apertura angusta, postice coarctata; columella triplicata, plica postica valida, spirali; labro acuto, simplice, postice coarctato.*

Hab. Singapore (Lieut. Taylor). Mus. Cuming.

16. ELLOBIUM PUSILLUM, H. & A. Adams. *E. testa subulato-ovata, alba, nitida, lævi, spira producta, apice acuto; apertura oblonga, angusta; columella subcallosa, triplicata, plica postica valida, anterioribus parvis, obliquis; labro margine subincrassato, postice vix sinuato.*

Hab. Bais, island of Negros. Mus. Cuming.

17. ELLOBIUM ORYZA, H. & A. Adams. *E. testa elongato-ovali, alba, solida, nitida; spira elata, acuta; anfractu ultimo fascia alba, opaca cincto; apertura angusta; columella triplicata, plica postica valida, anterioribus parvulis, subobsoletis; labro intus incrassato vix bilirato, postice subsinuoso.*

Hab. Island of Annaa, Society Islands, under loose coral, high water. Mus. Cuming.

18. *ELLOBIUM OPARICUM*, H. & A. Adams. *E. testa subulato-ovali, gracili, lævi, fulva; spira elata, apice acuto; apertura angusta; columella antice vix truncata, triplicata, plica postica valida, duabus anterioribus subobsoletis, obliquis; labro acuto, simplice.*

Hab. Island of Opara, Society Islands. Mus. Cuming.

19. *ELLOBIUM SEMISculPTUM*, H. & A. Adams. *E. testa oblongo-ovata, subfusiformi, spira elata, obtusiuscula, pallide fusca; anfractibus convexiusculis, superne lineis granulosis, confertis, transversis, inferne lævibus, anfractu ultimo superne granuloso, inferne (sub lente) minutissime granulato; apertura oblonga, antice dilatata; columella biplicata, plica postica valida, spirali; labro antice intus marginato, postice tenui, subsinuato.*

Hab. Gambier's Islands, South Seas. Mus. Cuming.

Genus MELAMPUS, Montfort.

Foot bifid posteriorly.

Shell ovato-conical, spire short, obtuse; aperture narrow, linear; inner lip with several transverse plaits; outer lip acute, internally plicate.

Pedipes, Blainv., not Adans.—*Melampa*, Schweigg.—*Conovula*, Féruss.—*Conovulus*, Lamk.—*Conovulum*, Sow.

1. MELAMPUS COFFEUS, Linnæus.

Voluta coffea, Linn. Syst. Nat. ed. 12, p. 1187.—*Voluta minuta*, Gmel. p. 3436. no. 6.—*Bulimus coniformis*, Brug. Dict. no. 72.—*Conovulus coniformis*, Encycl. pl. 459. f. 2, A. B.—*Conovula coniformis*, Bowd. Elem. of Conch. t. 6. f. 25.—*Tornatella coniformis*, Blainv. Malac. t. 27 bis, f. 4.—*Auricula coniformis*, Féruss. Prod. p. 739.—*Conovulus coffeus*, Beck, Ind. Moll.—*Auricula coniformis*, Pfeiff. Wiegman. Arch. 1840, Heft 3. p. 251. no. 39.

2. MELAMPUS UMLAASIANUS, Krauss.

Auricula Umlaasiana, Krauss, in litt.; Küst. Chemn. Conch. Cab. (Auriculacea) p. 43. tab. 6. f. 16–20.

3. MELAMPUS FUSCUS, Philippi.

Conovulus fuscus, Phil. in litt.—*Auricula fusca*, Küst. Chemn. Neuer Conch. Cab. (Auriculacea) p. 38. tab. 5. f. 18–20.—*Auric. leucodon*, Beck; Adams & Reeve, Zool. Voy. Samarang.

4. MELAMPUS FLAVUS, Gmelin.

Voluta flava, Gmel. Syst. Nat. p. 3436. no. 5.—*Auricula monile*, Quoy & Gaim. Voy. Astrol. ii. p. 166. tab. 13. f. 28–33.—*Voluta flava*, Dillw. Cat. i. p. 506. no. 17.—*Bulimus monile*, Brug. Encycl. Méth. no. 70.

5. MELAMPUS TABOGENSIS, C. B. Adams.

Auricula Tabogensis, C. B. Adams, Shells of Panama, p. 211. no. 314.

6. MELAMPUS BIDENTATUS, Say.

Melampus bidentatus, Say, Amer. Conch.—*Auricula cornea*, Desh. Encycl. Méth. Vers, p. 90. no. 9; Lamk. Hist. ed. Desh. tom. viii. p. 339. no. 28.

7. MELAMPUS PYRIFORMIS, Petit.

Auricula pyriformis, Petit, Proc. Zool. Soc. 1842; Ann. & Mag. Nat. Hist. xii. p. 437.

8. MELAMPUS PALLESCENS, Sowerby.

Melampus pallescens, Sow. Zool. Beechey's Voy. tab. 38. f. 11.—*Auricula pallescens*, Küst. Chemn. Neuer Conch. Cab. (Auriculacea) p. 51. tab. 5. f. 11.

9. MELAMPUS PHILIPPII, Küster.

Auricula Philippii, Küst. Chemn. Conch. Cab. (Auriculacea) p. 50. tab. 7. f. 23–25.—*Auricula Ceylanica*, Petit, Proc. Zool. Soc. 1842, p. 42.

10. MELAMPUS CORONULUS, C. B. Adams.

Auricula coronulus, C. B. Adams, Contrib. to Conch.

11. MELAMPUS BOREALIS, Conrad.

12. MELAMPUS LIVIDUS, Linnæus.

Voluta livida, Linn. Syst. Nat. ed. 12, p. 1187.—*Auricula livida*, Desh. Encycl. Méth. Vers, p. 91. no. 10.

13. MELAMPUS ATER, Mühlfeldt.

Conovulus ater, Mühlf. in litt.; Anton, Verzeich. p. 48. no. 1773.—*Auricula caffra*, Küst. Chemn. Conch. Cab. (Auriculacea) tab. 5. f. 6–8.—? *Conovulus Sciari*, Lesson.

14. MELAMPUS LUTEUS, Quoy & Gaimard.

Auricula lutea, Quoy & Gaim. Voy. Astrol., Zool. ii. p. 163. pl. 13. f. 25–27.—*Conovulus luteus*, Anton.—*Auricula Columbiensis*, Mühlf.

Subgenus TRALIA, Gray.

Foot posteriorly acute, entire.

Shell ovate, smooth; spire elevated; aperture narrow, linear, dilated anteriorly; inner lip usually with three oblique plaits; outer lip acute, sinuated posteriorly, internally with one or more transverse elevated ridges.

15. MELAMPUS (TRALIA) PUSILLUS, Gmelin.

Voluta pusilla, Gmel. p. 3436. no. 7.—*Bulimus ovulus*, Brug. Dict. no. 71.—*Auricula ovula*, Féruss. Prod. p. 104. no. 21.—*Auric. nitens*, Lamk. viii. 333.—*Conovulus nitens*, Cuv.—*Voluta triplicata*, Donovan. B. S. t. 138.—*Auric. leucodonta*, Nuttall, MSS.

16. MELAMPUS (TRALIA) PANAMENSIS, C. B. Adams.

Auricula Panamensis, C. B. Adams, Shells of Panama, p. 209. no. 312.

17. MELAMPUS (TRALIA) OLIVULA, Moricand.

Auricula olivula, Moric. Mém. de la Soc. de Genève, viii. ; Küst. Chemn. Conch. Cab. (Auriculacea) p. 33. tab. 3. f. 11-13.—*Auric. oliva*, D'Orb. Moll. p. 189. t. 12. f. 8-10.

18. MELAMPUS (TRALIA) INFREQUENS, C. B. Adams.

Auricula infrequens, C. B. Adams, Shells of Panama, p. 209. no. 311.

19. MELAMPUS (TRALIA) EXIGUUS, Lowe.

Melampus exiguus, Lowe, Mon. Melamp. Zool. Journ. v. p. 291. pl. 13. f. 6, 7.

20. MELAMPUS (TRALIA) PELLUCIDUS, Cooper.

Conovulus pellucidus, Cooper, MSS. Mus. Brit.

21. MELAMPUS (TRALIA) FASCIATUS, Chemnitz.

Voluta fasciata, Chemn. ix. pt. 2. p. 44. tab. 121. f. 1041.—*Auricula fasciata*, Desh. Encycl. Méth. Vers, p. 90. no. 8.—*Conovulus fasciatus*, Anton, Verzeich. p. 48. no. 1774.

22. MELAMPUS (TRALIA) KÜSTERI, Krauss.

Auricula Küsteri, Krauss ; Küst. Chemn. Neuer Conch. Cab. (Auriculacea) p. 34. tab. 4. f. 10-13.—*Auric. monile*, Reeve, Conch. Syst. t. 187. f. 8.

23. MELAMPUS (TRALIA) MAURUS, Mühlfeldt.

Conovulus maurus, Mühlf. in litt. ; Anton, Verzeich. p. 48. no. 1778 ; Küst. Conch. Cab. (Auriculacea) tab. 5. f. 12-14.

24. MELAMPUS (TRALIA) ELONGATUS, Petit.

Conovulus elongatus, Petit, Mag. de Zool. ser. 2. vii. pl. 138.

25. MELAMPUS (TRALIA) ANGIOSTOMA, Deshayes.

Auricula angiosstoma, Desh. Encycl. Méth. Vers, ii. p. 92. no. 16 ; Mag. de Zool. 1830, i. tab. 11.

26. MELAMPUS (TRALIA) FLORIDIANUS, Shuttleworth.

Auricula Floridiana, Shuttleworth.

27. MELAMPUS (TRALIA) CINGULATUS, Pfeiffer.

Auricula cingulata, Pfeiff. Wieg. Archiv, 1840, p. 251. no. 40 ; Küst. Chemn. (Auriculacea) tab. 6. f. 4, 5, 6 ?—*Auric. oliva*, D'Orb. Hist. de l'île de Cuba, t. 13. f. 8-10.

28. MELAMPUS (TRALIA) GLOBULUS, Férussac.

Conovulus globulus, Féruss. ; D'Orb. Voy. dans l'Amér. Mérid. ; Mag. de Zool. 1833.

29. MELAMPUS (TRALIA) PULCHELLUS, Petit.

Auricula pulchella, Petit, Proc. Zool. Soc. 1842 ; Ann. & Mag. Nat. Hist. xii. p. 437.

30. MELAMPUS (TRALIA) GRANIFER, Mousson.

Auricula granifera, Mouss. Land- und Süßwass. Moll. v. Java, p. 46. pl. 5. f. 9.

31. MELAMPUS (TRALIA) COSTATUS, Quoy & Gaimard.

Auricula costata, Quoy & Gaim. Voy. Astrol. ii. p. 173. pl. 13. f. 43-46; Küst. Chemn. Conch. Cab. (Auriculacea) tab. 7. f. 5-7.

32. MELAMPUS OBOVATUS, H. & A. Adams. *M. testa obversim conica, basi attenuata, spira obtusa, nitidiuscula, corneo-fusca, sæpius fasciis inæqualibus transversis ornata, longitudinaliter strigosa; anfractu ultimo basi transversim striato, postice gibboso; apertura angusta; columella biplicata, plica postica valida, transversa; labro acuto, intus bilirato.*

Hab. Liberia (Dr. Parkins). Mus. Cuming.

33. MELAMPUS ZEALANDICUS, H. & A. Adams. *M. testa ovata, cornea, castanea, subpellucida, nitida, longitudinaliter strigosa; spira elevatiuscula, apice acuto; anfractibus planis, ultimo postice subgibboso; apertura angusta; columella biplicata, plica postica validiori; labro margine acuto, intus valde lirato, liris multis albidis.*

Hab. New Zealand. Mus. Cuming.

34. MELAMPUS COMMODUS, H. & A. Adams. *M. testa oblongo-ovata, castanea, nitidiuscula; spira elata, acuta; anfractibus longitudinaliter plicatis, ultimo lævigato, vel substrigato; apertura angusta, oblonga; columella antice uniplicata; labro acuto, intus liris tribus elevatis, transversis instructo.*

Hab. New Zealand. Mus. Cuming.

35. MELAMPUS LIBERIANUS, H. & A. Adams. *M. testa oblonga, ovato-conica, spira brevi, olivaceo-fusca, fasciis pallidis, transversis, inæqualibus ornata, lævigata, nitidiuscula, postice et antice transversim striata; apertura angusta, in medio coarctata; columella biplicata, plica antica subobsoleta; labro acuto, in medio inflexo, intus multilirato.*

Hab. Liberia, W. Africa (Dr. Parkins). Mus. Cuming.

36. MELAMPUS COSTELLARIS, H. & A. Adams. *M. testa ovata, brunnea, longitudinaliter costata; spira subelevata, apice obtuso; anfractu ultimo postice vix angulato; apertura oblonga; columella biplicata, plica postica transversa, valida; labro acuto, antice incrassato, albido-marginato, intus lævi.*

Hab. New Zealand (Mr. Strange). Mus. Cuming.

37. MELAMPUS (TRALIA) NITIDULUS, H. & A. Adams. *M. testa elongato-ovali, lævissima, fusca, spira elata; apertura angusta, elongata; columella triplicata, plica postica callosa; labro margine vix incrassato, intus unilamellato.*

Hab. Island of Bohol. Mus. Cuming.

38. MELAMPUS (TRALIA) MITRALIS, H. & A. Adams. *M. testa elongato-ovali, spira producta, apice obtuso, livido, pallide castanea, fusco-fusciata, lævi, nitida; anfractibus supremis longitudinaliter plicatis, ultimo basi subgibboso; apertura angusta; columella antice uniplicata, plica spirali; labro acuto.*

Hab. —? Mus. Cuming.

39. MELAMPUS (TRALIA) EXARATUS, H. & A. Adams. *M. testa ovata, fusca, spira elata, apice obtuso; anfractibus planis, transversim liratis, longitudinaliter decussatim striatis; apertura oblonga, in medio subdilatata; columella biplicata, plicis validis, postica spirali; labro margine acuto, in medio subangulato.*

Hab. Catbalonga, island of Samaar. Mus. Cuming.

4. DESCRIPTIONS OF NEW SPECIES OF SHELLS, FROM
THE COLLECTION OF H. CUMING, ESQ.
BY M. G. P. DESHAYES.

1. BATISSA INSIGNIS, Desh. *B. testa ovato-orbiculari, oblique inæquilaterali, tumida, tenui, intus violacea, epidermide nigro-virescente, nitida vestita, in latere antico late sulcata, sulcis remotis, ad lunulam sæpius inter se conjungentibus; umbonibus prominentibus, erosis, antice inclinatis; cardine angusto, obliquo, inæqualiter tridentato; dentibus in valva sinistra angustioribus, mediano bifido, in dextra crassioribus, simplicibus; dentibus lateralibus angustis, postico valvæ sinistræ laminato, apice regulariter serrulato.*

Hab. Calamang, Island of Luzon, Philippines.

2. BATISSA TRIQUETRA, Desh. *B. testa trigona, obliqua, inæquilaterali, cuneiformi, lævigata, epidermide nigra vestita, depressiuscula; margine antico rectilineo, postico valde convexo, dilatato, inferiore vix arcuato; umbonibus profunde erosis; lamina cardinali angusta, dentibus cardinalibus tribus, inæqualibus, brevibus, subcanaliculatis; lateralibus elongatis, angustis, subæqualibus, antico cardine adnato, postico remoto; valvis tenuibus, intus albis.*

Hab. Philippine Islands; Australia.

3. BATISSA PRODUCTA, Desh. *B. testa suborbiculari, valde obliqua, inæquilaterali, depressiuscula, crassa, solida, transversim late et obsolete plicata, vel subundulata, epidermide polita, atrovirescente vestita, intus superne alba, postice inferneque violacea; umbonibus magnis, productis, antice obliquatis; cardine lato, crasso, valde obliquo, inæqualiter tridentato, dentibus majoribus superne obsolete canaliculatis, lateralibus validis, antico crasso, obsolete rugoso vel striato, postico compressiore et paulo longicre; latere antico brevi, rotundato, postico dilatato.*

Hab. Philippine Islands.