

**CATALOGUE OF  
LITHOPHYTES OR STONY  
CORALS IN THE COLLECTION  
OF THE BRITISH MUSEUM**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649308309

Catalogue of Lithophytes Or Stony Corals in the Collection of the British Museum by J. E. Gray

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.  
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

[www.triestepublishing.com](http://www.triestepublishing.com)

**J. E. GRAY**

**CATALOGUE OF  
LITHOPHYTES OR STONY  
CORALS IN THE COLLECTION  
OF THE BRITISH MUSEUM**





CATALOGUE  
OF  
LITHOPHYTES OR STONY CORALS  
IN THE  
COLLECTION  
OF THE  
BRITISH MUSEUM.

BY  
J. E. GRAY, F.R.S. ETC.



LONDON:  
PRINTED BY ORDER OF THE TRUSTEES.  
1870.

PRINTED BY TAYLOR AND FRANCIS,  
RED LION COURT, FLEET STREET.

## P R E F A C E.

---

THE object of the present Catalogue is to give a List of all the genera and species of the family of the Stony Corals, or Lithophytes, known to exist in the collections of Europe and America. The letters B.M. after the specific names denote those species that are now contained in the Collection; and the absence of those letters indicates the species which are desiderata, and therefore desirable to be procured for the collection.

This is the second part of the 'Catalogue of Polypes and their Corals.' The other Parts are in preparation.

J. E. GRAY.

British Museum,  
July 8, 1870.





CATALOGUE  
OF  
LITHOPHYTES OR STONY CORALS.

Class POLYPPES OR CORALLIARIA.

Order I. ZOOPHYTARIA.

Suborder II. RUPICOLÆ.

Coral social, tree-like or expanded, fixed by an expanded base, supported by more or less abundant, fusiform, calcareous spicules. The mass of polypes or corals often supported by a central calcareous or horny tree-like axis with an expanded base. Living attached by the base of the coral and axis to rocks &c. on the sea-shore.

Polypiers corticifères, *Lamk. A. s. V.* ii. p. 288.

Polypes corticaux, *Cuvier, R. A.* 1817, iv. p. 78.

Coralles, *Blaine, D. S. N.* lxx. p. ; *Man. d'Act.* p. 501.

Gorgoninidæ, *Johnston, B. Z.* p. 182; *Gray, List of Brit. An. in B. M.* i. p. 55.

Gorgonidæ, *Dana, Zooph.* p. 637. n. 181.

Ceratacorallina, *Ehrenb. Corall. r. M.* 1834, p. 142.

Coralliadæ, *Gray, Syn. B. M.* 1840, p. 134.

Gorgonidæ, *Milne-Edw. & Haime, Corall. i.* p. 134; *Kölliker, Ic. Hist.* p. 135.

I. *Polypes social, growing closely side by side, forming a fleshy crust, the young polypes being developed from the ends of the branches, or in the centre of the disk.*

Section I. *Axifera.*

Social polypes, supported by a central horny or calcareous axis, and attached to marine bodies by the expanded base of the axis, and the mass of polypes.

Gorgoninae, *Milne-Edw. & Haine, Corall. i.* p. 134; *Kölliker, Ic. Hist.* p. 135.

"The polypes are short, cylindrical, connected laterally by a porous coenenchyma at their bases, by a common membrane, and by specialized longitudinal canals, and arranged around a firm central axis, which is secreted from the common basal membrane. The communities are attached to foreign bodies by the expanded base of the central axis."—*Ferrill, Mem. Boston Soc. Nat. Hist.* 1862, i.

*Synopsis of Suborders.*

- I. **Lithophyta.** The axis calcareous, continuous or separated transversely into joints.
- II. **Ceratophyta.** The axis horny, continuous.
- III. **Solenophyta.** The axis expanded, coriaceous, foliaceous, folding into a more or less perfect tube, with tubular branchlets.
- IV. **Suberophyta.** The axis soft, cork-like, with interspersed spicules, sometimes so numerous as almost to form the entire axis.

**Suborder I. LITHOPHYTA or LITHOPHYTES.**

Coral ahorescent. Axis calcareous, continuous or jointed, effervescing with muriatic acid.

Lithophyta (Lithophytes), *Gray, P. Z. S.* 1857, p. 282.

The axis is generally entirely stony and hard, and usually of a white colour; but in *Corallium* it is generally deep bright red, but sometimes pink or white. It is usually solid, and formed of concentric laminae. In *Melithaea* it is cavernous, pierced with cylindrical tortuous canals.

*Synopsis of Families.*

I. *Axis jointed, calcareous; articulations spongy, swollen.*

1. MELITHÆADÆ. Joints and articulations with tubular canals.
2. MOPSELLADÆ. Joints solid, reddish, articulations red, spongy; branches from the spongy articulations.
3. TRINELLADÆ. Joints solid, white, articulations spongy; branches from the solid joints.

II. *Axis jointed, calcareous; articulations narrow, horny, or cork-like.*

4. MOPSEADÆ. Branches from the cartilaginous articulations. Bark thick; cells conical.
5. ACANELLADÆ. Branches from the cartilaginous articulations. Bark and cells spinous.

6. KERATOISIDÆ. Branches from the stony joints. Bark and cells spinous.
7. ISIDÆ. Branches from the stony joints. Bark thick; cells minute, scattered over all the surface, sunken.
- III. *Axis continuous, calcareous; the apex of the branchlets calcareous.*
8. CORALLIDÆ.
- IV. *The axis continuous, hard, corneo-calcareous; the apex of the branchlets often horny and flexible.*
- a. *Bark granular, thin; polype-cells more or less prominent.*
9. ELLISELLADÆ.
- b. *Bark formed of imbedded calcareous spicules; cells prominent, covered with spicules, and adpressed to the sides of the stem.*
10. HYPNOGORGIDÆ.
- c. *Bark formed of scales; polype-cells prominent.*
11. CALLIGORGIDÆ. Polype-cells tubular, in series on the sides or round the branches.
12. CALYPTROPHORADÆ. Polype-cells peduncled, formed of two cones, in whorls round the stem.
13. PRIMNOADÆ. Polype-cells peduncled or sessile, covered with scales, in whorls round the stem.

Section I. *Axis articulated, calcareous, stony; articulations swollen, spongy or cork-like; buds and branches from the swollen articulations.*

## Fam 6. MELITHÆADÆ.

Coral branched, on a plane; branches furcate, often anastomosing. Axis articulated, permeated by flexuous cylindrical canals, interrupted by harder swollen calcareous articulations; the joints and articulations at length solidifying into a continuous hard axis permeated by small tubular canals. Bark granular. Polypiferous cells small, in series on the *edge of the stem and branches.*

Melitæa, *Lamx. Polyp. Flex.* 1816, p. 461; *Lamk. Mém. Mus.* i. p. 410; *A. s. V.* ii. p. 270.

Melithæa, *Milne-Edw. Corall.* i. p. 190.

Melitæa, *Warne, Corall.* p. 229.

Melithæadæ, *Gray, P. Z. S.* 1857, p. 284; *Ann. & Mag. Nat. Hist.* 1859, iv. p. 442.

Dr. Külliker calls the canals in the axis "food-canals."