

Fronde 3-4 inches high, much branched, irregularly dichotomous, not fastigiate. *Branches* ending in cuneate, forked segments, whose margins are strongly rolled in and apices obtuse. Upper surface shagrinéd and striate; lower covered with a short, white, woolly down, and dotted all over with minute, dark-coloured, depressed, naked spots. *Ceramidia* large and prominent. *Colour*, a dull brownish purple.

Tab. 41. MASTOPHORA HYPOLEUCA. Fig. 1. Part of a frond:—*the natural size*. 2. Apex of a segment, showing the under surface. 3. A ceramidium, after the removal of the lime by acid:—*both magnified*.

GENUS 5. MELOBESIA, *Lamour*.

Frons libera vel adnata, calcarea, polymorpha; plana, orbicularis vel lobata; vel globosa; vel cylindracea et ramosa. *Ceramidia* hemispherica, sæpius depressa, per totam frondem sparsa. Algæ cosmopolitanæ e mari profundiori enatæ, saxicolæ, vel algis majoribus adnascentes, nunc tenues, membranaceo-crustacæ, nunc incrassatæ et lapidescentes.

1. MELOBESIA mamillaris, *Harv.*; late incrustans, saxicola, suborbicularis, crusta tenui arcte adnata mamillis densissimis brevibus demum elongatis ramosis exasperata, ceramidiis in apicibus mamillarum immersis. (TAB. XLI.)

HAB. Bahia (Brazil) in tidal pools, *Mr. Darwin*, No. 3854, 3855, 3856; also Port Famine, Terra del Fuego, No. 1840, 99, 197; St. Jago, Cape Verde; Algoa Bay, *Herb. Bowerbank*. (*v. s. in Herb. T. C. D. comm. cl. Darwin.*)

Spreading over stones in a thin crust, covered when young with closely set, mamillary tubercles, which gradually lengthen into erect terete branches, becoming divided and massed together, and form eventually a thick crust, composed of interlacing branches. *Ceramidia* sunk in the tips of the mamillæ. "In one case I found a cone (*ceramidium*) placed on one side, instead of on the summit, of a branch. The greater number of the branches have white, rounded ends, and on some of these there were appearances, as if a ceramidium had once existed there, and had since scaled off. In some branches there were traces of cavities low down in them. *Colour*, on the under surfaces of the branches paler than in *Corallina officinalis*, in other parts creamy, with a tinge of flesh-red." *Darw. MSS.*

Tab. 41. MELOBESIA MAMILLARIS. Fig. 1. Frond, on a stone:—*the natural size*. 2. 3. Portions, of different ages. 4. A mamillary fertile branch. 5. A section of its apex, with ceramidium after maceration in acid:—*magnified*.

2. MELOBESIA Darwini, *Harv.*; fruticosa, ponderosa, ramosissima, ramis densissime aggregatis erectis in massam crassam congestis, ramulis verticalibus apice conoideis.

HAB. King George's Sound, *Mr. Darwin*. (*v. s. in Herb. T. C. D. comm. cl. Darwin.*)

Forms large masses of unknown extent, two or three inches in height, wholly built up of cylindrical, branching, stony fronds, soldered together, with all the

divisions very erect; the ultimate ones free, and mamillæform. The whole plant not unlike a mass of stalagmites.

3. MELOBESIA *Brassica-florida*, *Harv.*; fronde lapidescente ponderosa globosa e centro undique ramosissimo, ramis basi anastomosantibus apice multifidis corymboso-fasciculatis fastigiatis apicibus mamillæformibus.

HAB. Algoa Bay, *Herb. Bowerbank.* (v. s.)

Masses globose, 2-3 inches in diameter, branched from the centre, and strongly resembling a petrified head of cauliflower.

4. MELOBESIA *calcareæ*, *Ell. and Sol.*; fruticosa, ramosissima, ramis lapidescentibus gracilibus vage ramosis, ramulis rugosis et papilliferis divaricatis. *Ell. and Sol.* p. 129. t. 23. f. 13.

HAB. New Zealand, *Dr. Hooker.* Galapagos, in 12 fathoms, *Mr. Darwin*, No. 3251. (v. s. in *Herb. T. C. D.*)

Fronde like stony little shrubs, with distant, much divided, slender divisions, spreading on all sides.

I venture to refer these specimens to a British form of the genus, which they nearly resemble.

5. MELOBESIA *polymorpha*, *Linn.*; fronde lapidescente ponderosa polymorpha incrustante lobata, lobis hemisphericis vel amorphis, ceramidiis minutis densissime sparsis.

HAB. Algoa Bay, *Herb. Bowerbank.* Chonos, *Mr. Darwin.* No. 2478? (v. s. in *Herb. T. C. D.*)

Several inches in diameter, an inch or two thick, forming an amorphous crust, or rising into short lumpy lobes. *Ceramidia* very minute, densely aggregated.

6. MELOBESIA *scabiosa*, *Harv.*; late effusa, saxicola, orbicularis, crusta tenui rugis minutis asperata, ceramidiis minutissimis punctiformibus numerosis sparsis.

HAB. On stones, at Bahia, *Mr. Darwin.* No. 3857. (v. s. in *Herb. T. C. D.*)

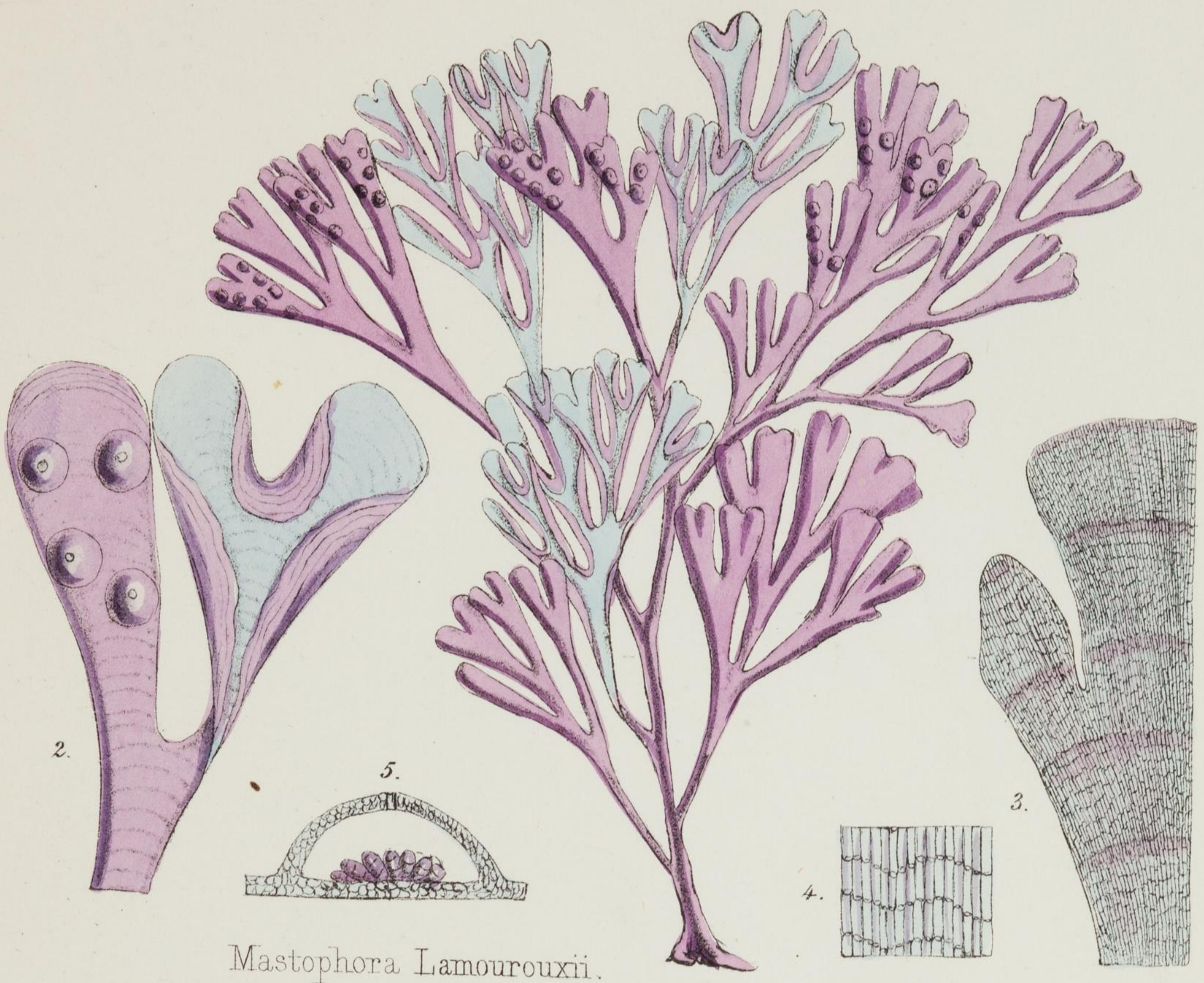
“A distinct and very common species, coating smooth surfaces in tidal pools: colour darkish.” *Darw.*

7. MELOBESIA *pustulata*, *Lamour.*; fronde crassiuscula incrustante polymorpha algicola, ceramidiis minutis pustuliformibus densissime sparsis.

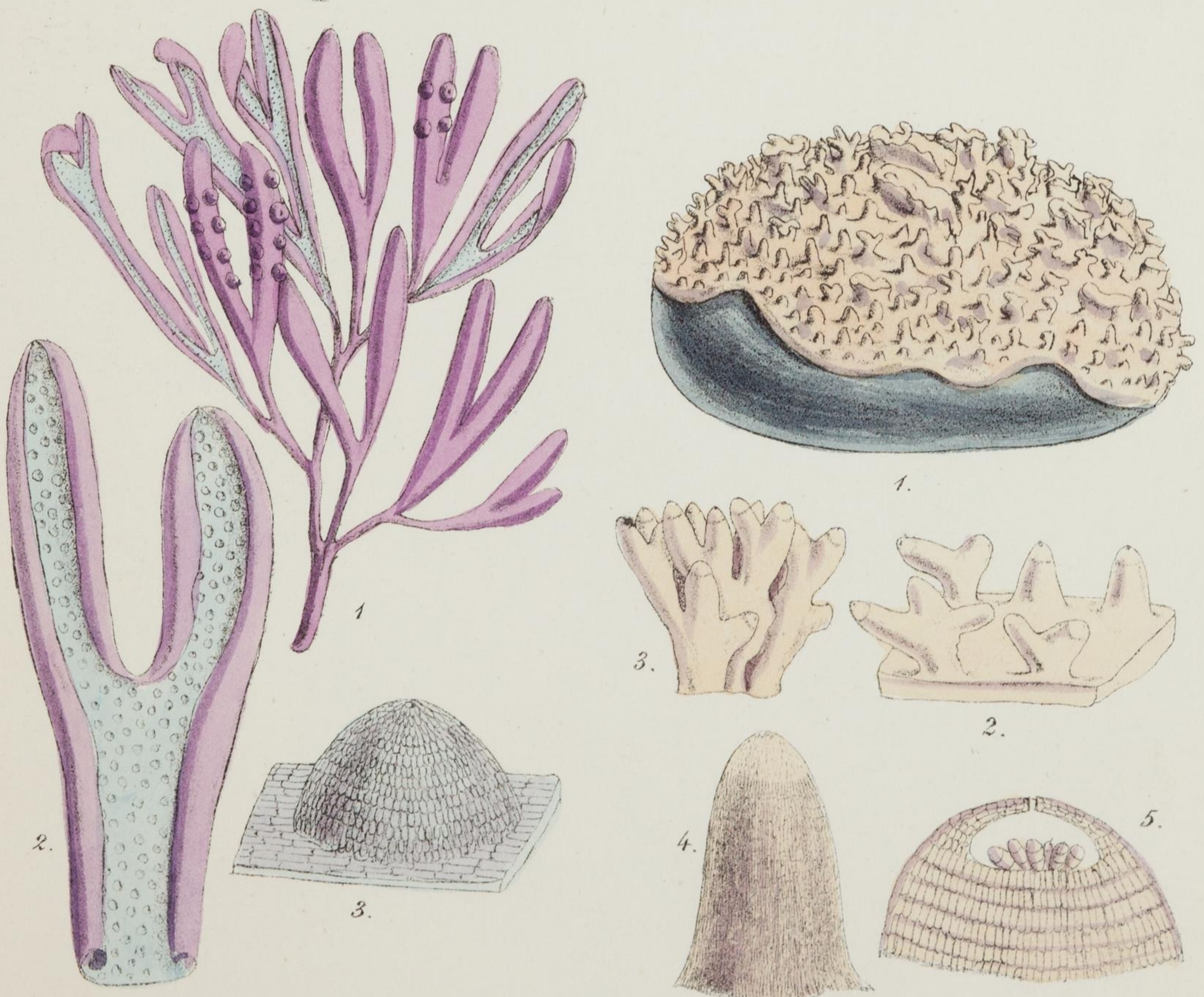
HAB. Parasitical on various Algæ. Norfolk Island. *Dr. M. William.* (v. s. in *Herb. T. C. D. comm. cl. Hooker.*)

Fronde half an inch to an inch long, spreading over the surface of Algæ or clasping the filiform ones, smooth, of indeterminate figure, densely warted with minute pimple-like ceramidia. *Colour*, lurid purple or greenish.

8. MELOBESIA *amplexifrons*, *Harv.*; fronde laxè amplexente crassa lobata rugosa, ceramidiis minutissimis immersis umbilicatis fere poriformibus.



Mastophora Lamourouxii.



Mastophora hypoleuca

Melobesia mammillaris