

Synopsis of Species.

1. Corallum large, laxly branched, irregularly dichotomous; spines large, sub-triangular, much compressed; the upper margin extends subhorizontally, *dichotoma*, Pall.
- (2-3. Definite specific characters for *Antipathes arborea*, Dana, and *Antipathes jœniculacea*, Pallas, cannot be given at present).
4. Corallum large, densely branched, resembling the Broom; the whole gradually tapering towards the apex; spines short, thick, and blunt, often papillose, *virgata*, Esper.
5. Corallum large, spreading, with very long slender branchlets; spines similar to those of *Antipathes dichotoma*, but more numerous and slender, *lentipinna*, n. sp.
6. Corallum small, slender, with repeatedly forked filiform branches; spines short, sub-conical, with a sharp apex, *furcata*, Gray.
7. Corallum very laxly branched, with distant subhorizontal branches; branchlets few and rarely lateral; spines large and thorn-like, without spiral arrangement, *mediterranea*, n. sp.

Antipathes dichotoma Pallas (*non* Gray) (Pl. XII. fig. 16; Pl. XIII. figs. 1, 9; Pl. XIV. figs. 1, 5, 6).

Lithophyte, No. 9, Marsigli, Hist. phys. de la mer, pp. 105 and 168, pl. 21, figs. 101, 102, 103; pl. 40, fig. 179.

Antipathes dichotoma, Pallas, Elench. Zooph., p. 216; Dana, Zooph., p. 585; Milne-Edwards, Coralliaires, t. i. p. 319; *non* Gray, Proc. Zool. Soc. Lond., 1832, p. 41.

“*Antipathes longissima, dichotoma, erecta*” (Pallas, *loc. cit.*).

This species was described by Pallas from the information supplied in Marsigli's *Histoire physique de la mer*. Marsigli obtained his specimen in 140 fathoms, off Marseilles. The corallum is two feet high, and the diameter at the base only $1\frac{1}{2}$ lines. The stem is branched subalternately, the branches, which are not very open, being branched dichotomously at considerable intervals, the ultimate branchlets being usually divided in the same manner. The axis is covered with spines, and in addition a substance, which Marsigli compares to varnish, is developed on the stem, so that in the lower portion of the corallum the spines are almost obscured by it. On the branchlets where this substance is not so thick the spines stand out boldly.

Marsigli, who kept his specimen alive for several days in a jar of sea-water, gives the following account of the polyps:—

“Les extremités des rameaux étoient entournées de petits globes de substance gélatineuse, et jaunâtre, n'ayant aucune union entr'eux, et y semblant plutôt enfilez, comme des grains de chapelets dans de la foye Je vis les petits globes prendre plusieurs figures oblongues, qui sur le haut avoient deux filamens tels que *B. B.*” In the figure referred to (*op. cit.*, pl. xxii. fig. 104), the polyps are shown in two longitudinal subopposite series, each zooid consisting of an oblong body, from the free margin of which a pair of thread-like tentacles take their origin. There must surely be considerable error in this account, both as regards the number of tentacles and the arrangement of the polyps.