

PLATE XXIII.

NITOPHYLLUM BONNEMAISONI, *Grev.*

GEN. CHAR. *Fron*d membranaceous, reticulated, rose-red (rarely purplish), irregularly cleft, veinless, or furnished with irregular veins toward the base. *Fructification*, two-fold, on distinct plants: 1, spherical *tubercles* (*coccidia*) immersed in the frond, and containing a globular mass of angular spores; 2, *tetraspores* grouped into definite *sori* or spots, variously scattered over the frond. NITOPHYLLUM—corruptly formed from *nitor*, to *shine*, and *φύλλον*, a *leaf*; *shining-leaf*.

NITOPHYLLUM *Bonnemaisoni*; frond shortly stalked, fan-shaped or palmate, variously cleft into numerous wedge-shaped segments, furnished near the base with irregular, vanishing nerves; spots of granules roundish, scattered over the surface of the frond.

NITOPHYLLUM *Bonnemaisoni*, *Grev. Alg. Brit.* p. 81. *Hook. Br. Fl.* vol. ii. p. 287. *Harv. in Mack. Fl. Hib.* part 3. p. 193. *Harv. Man.* p. 58.

DELESSERIA *Bonnemaisoni*, *Ag. Sp. Alg.* vol. i. p. 186. *Ag. Syst.* p. 252. *Grev. Sc. Crypt. Fl.* t. 322.

AGLAIOPHYLLUM *Bonnemaisoni*, *Endl. 3rd Suppl.* p. 52.

HAB. Growing on the stems of *Laminaria digitata*; and on rocks and stones in 4–5 fathoms water. Annual. Summer. Orkney, *Rev. C. Clouston*. Bute, *Dr. Greville*. Larne, *Dr. Drummond*. Youghal, *Miss Ball*. Torquay and Ilfracombe, *Mrs. Griffiths*. Tramore, *Miss Taylor*. Miltown Malbay and Kilkee, *W. H. H. Strangford* Lough, *W. Thompson, Esq.* Jersey, *Miss White*.

GEOGR. DIST. Coast of Normandy, *Bonnemaison*. British Islands.

DESC. *Root* a small disc. *Stem* a quarter of an inch long, cylindrical, expanding into a fan-shaped, delicately membranaceous frond, 2–4 inches in length, and rather broader than its length, rarely quite veinless; usually marked toward the base with more or less evident, vanishing nerves, which sometimes extend considerably up the segments, and sometimes are nearly confined to the very base. The habit of the frond varies much in different individuals, in some the lamina is very broad and not deeply cleft; in others cleft nearly to the base in long ribbon-like segments. The division is pretty regularly dichotomous, but the margin in some specimens is proliferous, giving the frond a very compound aspect. *Colour* a fine rosy red, becoming brownish, especially toward the base, in drying. *Reticulations* (fig. 3, 5) smaller than in *N. versicolor*. *Tubercles* small, not very prominent, scattered over the frond. *Spots of tetraspores* oblong or roundish, minute, but larger than those of *N. Hillie*, very abundantly scattered over the surface. It more or less perfectly adheres to paper in drying.

The fan-like outline, scattered groups of tetraspores, and obscure