

Stalk, branches, and twigs are yellowish-white; the polyps are red, the tentacles yellowish-white.

*Habitat*.—Station 212, off Samboangan; lat. 6° 54' N., long. 122° 18' E.; depth, 10 fathoms; bottom, sand.

*Spongodes bicolor*, n. sp. (Pl. XXXVIc. figs. 1a, 1b).

The colony consists of an elongated, rather slender, barren trunk, continued above into a broader stem-portion, from which latter larger and smaller branches come off, ramifying and being covered at the ends with polyps. The branches are of various sizes, so that the polyp-bearing head thereby acquires an irregularly lobose form.

Height of the colony 120 mm.; greatest breadth of the head portion 76 mm.; length of the barren trunk 60 mm.; diameter of the same 13 mm.; height of the head portion 60 mm.; length of a main branch 34 mm. The stalk arises from a flat expansion as a cylindrical trunk, which in spirits appears to be strongly plicated, and has a rough, granular surface. It is somewhat flabby and flexible. On passing into the head-portion it increases in thickness, gives off larger and smaller branches at right angles, and radiates at the apex into an umbel of divergent branches.

The branches are sometimes cylindrical, but frequently, especially in the lower division of the head, flattened, forming flat, projecting expansious rather than branches, which surround a portion of the periphery of the stem. At the end they give off, often after further ramification, small, divergent twigs which bear bundles of sixteen to twenty polyp heads. Each of these, together with its peduncle, is isolated for a short distance and surmounted by a bundle of needles which projects for 2 or 3 mm. above the head. The branches do not arise very close to one another, and the ramification is sufficiently loose to show the main stem and the branches between. The polyp heads are surrounded by eight rows of spicules, each of which projects above the folded tentacles.

The spicules of the barren trunk are thickly packed together in the outer covering, so as to give it a tough consistency and a rough surface. Their shape and size vary very much, scarcely any two spicules being alike. All, however, are provided with stout warts and spines, which are often branched, by means of which their margins mutually interlock.

The principal forms are as follows:—Straight spindles with blunt ends and covered all over with large warts directed towards the two ends; size, 0·79 to 0·8 by 0·12 to 0·2 mm. Curved, warty spindles, sometimes bow-shaped, sometimes geniculate, and provided at the angle with rather sharp, often branched spines; size, 0·5 by 0·13 mm.; 0·4 by 0·1 mm. Simple clubs or spiny clubs with branched spines; size, 0·7 by 0·17 mm.; 0·34 by 0·17 mm.; 0·5 by 0·13 mm. Straight spicules, sharpened at one end and provided at the other with two or three diverging processes, covered on all sides with