

further of innumerable kinds of sea-weed as growing upon the rocks. Mr McCormick, in Ross's Antarctic Voyage, speaks of a conferva of which the sea-birds build their nests. Sir Joseph Hooker, in his Flora Antarctica, refers to Darwin's admirable account of the island.

"I spent about twenty-four hours on the rocks during our two days' stay, and searched carefully for botanical specimens. The sea-weeds, instead of being present in innumerable kinds, are, as far as I could ascertain, comparatively few in number, very few species apparently being able to hold their own in the constant heavy surf.

"About tide-mark, and indeed forming the mark, there is, as at St Vincent, a band of dense pinkish-white incrustation, consisting of a calcareous alga, which is bored in all directions by a small tubicolous annelid. This is evidently the reddish band referred to by Mr McCormick as the work of coral insects. In some places the incrustation is white, with a different surface, and probably consisting of a different species of alga.¹ Above the line of incrustation the rocks are covered for several feet with a dark red stain, consisting of an alga² of which specimens were preserved in fluid; and here, where the rock is alternately covered and left bare by the surf, grows a short filamentous alga, which has tufts of a green conferva adhering to it. The rocky bottom in the small, comparatively sheltered bay formed by the circlet of rocks is covered with a dense growth of a green alga, which extends out a short distance beyond the mouth of the bay to the depth of twenty fathoms (whence I got up specimens on a fishing-line), and also grows abundantly on the exposed side of the island, as I saw on looking down into the water from the summit of the highest peak. The alga (*Caulerpa clavifera*) is constantly loosened by the surf from the bottom, and, floating to the surface, is gathered by the noddies (*Sterna stolidus*) to build their nests; the boobies (*Sula fusca*) apparently do not use it. A second smaller but similar species grows with this alga in the bay. I found only one or two other algæ, and when looking down into the water from above could see only the larger green species covering the bottom. The water deepens so very rapidly around the rock that it is improbable that many species of algæ grow on it; in fact, the marine flora seems to be remarkably poor.

"On the aerial surface of the rock I found a green *Chlorococcus* growing in sheltered crevices, on concretionary masses formed of guano mixed with the pupæ of the pupiparous fly *Olfersia*, discovered by Darwin on the island, and spiders' webs. The *Chlorococcus* is the only aerial plant on the island, and it is not abundant. In some pools of stagnant water are some few diatoms and *Oscillatoria*. In some places there are a few bushels of guano to be found in hollows in the rock. I boiled some of this with nitric acid; it was almost wholly soluble, and I could find no diatoms in the small residue. Peruvian guano contains abundance of diatoms. A *Coscinodiscus* has occurred sparingly of late upon the surface of the sea; and it might have been expected to find its way through the small surface-animals into the fish and thus into the guano. Diatoms have as yet, however, never been abundant either at the surface or on the sea bottom. In the curious veins of conglomerate which traverse the rock in all directions, and are described by Darwin and Mr McCormick, are fossil fragments of nulliporic incrustation mingled with pebbles and broken shells." —*H. N. Moseley*.

Altogether only seventeen species of vegetable organisms have been collected on and in the vicinity of the Rocks, and they are all algæ.

¹ *Lithothamnion polymorphum*.

² *Hildenbrandtia expansa*.