

might prove fatal. After a laborious effort of three hours, however, we gained the tableland, and there discovered, to our mortification, that the upper region of the mountain was completely obscured. Urged by a strong west wind, the cloud broke from time to time against the sides of the dome, and gave us a transient glimpse of the peak at a height and distance that were by no means encouraging. After resting for a few minutes, we proceeded across the base of the dome, trusting that the cloud would be dissipated by the meridian sun; nor were we in this respect altogether disappointed. In the meantime, we found the ground, as we advanced, a perfect swamp, studded with tufts of small rushy plants, that gave way under the slightest pressure. Here also we had to pass through extensive patches of *Lomaria robusta* [*Lomaria boryana*], the stems of which, like junks of old cable, trail along the ground, and cross and recross each other in such an intricate manner, that it required all our circumspection to avoid stumbling over them. Further on the ground becomes more firm, but is perforated in all directions by the various species of petrel, which resort in myriads to the island during the season of incubation.

“The surface of the dome is furrowed on every side with ravines, which take their rise among the scoria of the peak, deepen as they descend, and open in tremendous chasms on the edge of the precipice. The various portions of the surface, thus cut off in a great measure from all mutual communication, grow narrower and narrower as you approach the base of the peak, and dwindle at last into bare ridges of scoria, so sharp and so steep that the wild goats of the mountain dare hardly venture to thread them. That ridge in particular, over which we must either have passed or returned without accomplishing our object, is for at least fifty yards not more than twelve inches in diameter. The wind blowing in violent gusts at the time rendered it the more difficult to maintain that strict equilibrium of body the slightest bias from which, either to the one side or the other, would precipitate any of us in an instant to the depth of several hundred feet. We got safely over it, however, though with some trepidation, and in a manner as various, I believe, as the number of the party would admit of.

“A short way beyond this ridge vegetation ceases; not so much owing to the elevation of the ground, as to the total want of any kind of soil wherein plants could fix their roots. From this point to the summit, a distance of about a mile and a half, the whole is a mass of scoria, fragments of cellular lava, and all sorts of volcanic refuse, slipping under your feet, and rendering the toil of ascending excessive. . . . The crater is nearly a mile in circumference: its border is irregular, the south side being two or three hundred feet higher than the north, by which we ascended. At the bottom of it there is a pool of water about 150 yards in diameter, to which the descent by the north side is gradual and easy. . . . I found several mosses on the summit of the peak, and some lichens, among others the *Lichen paschalis*.”

Altogether, Carmichael collected fifty-five species of vascular plants, or only sixteen more than Thouars, excluding two, *Lactuca sativa* and *Raphanus sativus*, which the latter found as the remains of cultivation. Indeed, after making certain other necessary reductions, as the exclusion of *Sonchus oleraceus*, on account of its being an introduced plant, and the elimination of two of the species of *Isolepis* (*Scirpus*), in consequence of their being mere varieties of the species collected by Thouars, the total result of four months' observation is an addition of about a dozen species to those collected by Thouars in as many days. On the other hand, Carmichael found and recognised all the vascular plants