

sion almost of other trees, and with this were associated huge clumps of the giant fern, *Angiopteris evecta*, and masses of the Bird's-nest Fern (*Asplenium nidus*). With these grew a trailing Screwpine and a *Dracæna*, but the three ferns together formed a greater proportion of the entire vegetation than I have observed to be the case elsewhere.\*

The second camp was made at an elevation of about 1,800 feet, at a native hut in the upper part of Punaru Valley. The natives had not forgotten their religion since the time of Darwin's visit.† Our guides said their prayers every evening before sleeping, even when huddled together out of the rain, all repeating the words together, and the native family at the hut did the same. The temperature at this hut sank at daybreak to 59° F. We suffered much from cold in the night, and still more from Mosquitoes. We had an old piece of canvas lent us to spread on the ground to sleep on, but we crept together under it for warmth.

In the morning we attempted to cross over a high ridge at the head of Punaru Valley, and so reach our destination, the Papeno Valley, but the attempt failed, the guides, after we had toiled up to an elevation of about 3,000 feet, proving not to know the way at all. One of the guides had been over the pass many years before, but all he seemed to know was that he had been up a stream, so we spent the day in wading through pools, and clambering over slippery boulders in the stream beds, creeping along under the overhanging branches. We kept making attempts in various impracticable places, and at last made a hurried descent in the evening into the valley, and had to prepare a camp almost entirely in the dark, and in heavy rain, at a height of 2,500 feet.

This was above the limit of the growth of the wild Banana in any abundance, so the shelter for the night was made of the fronds of the Bird's-nest Fern (*Asplenium nidus*). These are tougher and more durable than the leaves of the Banana, and hence are used for permanent thatching, but from their smaller size require much more time in arrangement.

We had to put up with a very small hut, which sheltered our bodies as we lay down, but would not cover our legs, and had to feel in our baggage in the pitch darkness for our food, and eat it by the help of the sense of touch alone. The unfortunate guides who had constructed our hut first, could find scarcely any more fern leaves in the dark, and they squatted

\* This statement concerning the preponderance of ferns in the vegetation of Tahiti is referred to by Mr. Wallace from my MS. "Tropical Nature," p. 269.

† C. Darwin's "Journal of Researches," p. 411.