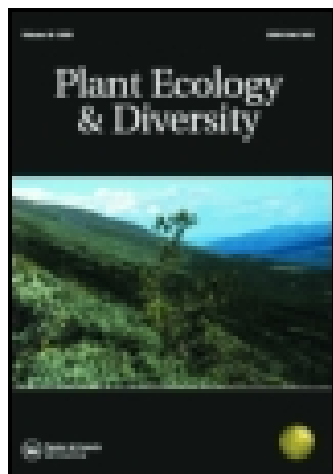


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### III. Account of a Botanical Trip to Ben Ledi, with Pupils, in July 1860

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nut trees are allotted; the contractor paying daily Rs. 2-12-10 to Government for each such shop. There are 63 second-class toddy shops, to each of which 247 coco-nut trees are allotted—each shop yielding daily Rs. 2-2-10 to government; also 205 third-class shops, to each of which 165 trees are allotted—each shop yielding Rs. 1-5-2 to Government; and 81 fourth-class shops, to each of which 110 trees are allotted—each shop paying Rs. 1-2-5 to Government. The gross collections annually upon all the shops amount to about Rs. 2-32-567. It is not always men of the Sānar caste who rent these shops; rich sowcars and natives of other castes generally contract for them, and place men of the Sānar caste in charge. There is nothing very peculiar about the habit, custom, or dress of the Sānars to separate them from other Hindu castes, apart from their occupation, which, being exclusively that of the sale and manufacture of toddy, may be said to distinguish them. Around Madras the Sānars are divided into two classes, the higher and the lower; the latter are called Pully Sānar, and permit their widows to marry. For a brief account of the mode of extracting toddy, illustrated by coloured plates, see “Kew Miscellany,” vol. ii. p. 23. Much information regarding the culture of the coco-nut will be found in Buchanan’s “Journey through Mysore.”\*

#### DESCRIPTION OF PLATES.

##### Plate II.

Coco-nut palm; Sānar preparing to ascend with apparatus.

##### Plate III.

Fig. 1. Coco-nut; end of spathe tied up. 2. Coco-nuts on spadix. 3. Basket (*Arivalpétty*), with apparatus.

##### Plate IV.

Fig. 1. Rope for binding. 2. Toddy vessel (*Eropétty*). 3. Brush (*Palai mattai*). 4. Knife (*Arival*). 5. Mallet (*Pathady*). 6. Pads on feet (*Kalhol*). 7. Circular rope for feet (*Kaltaly*).

#### III. Account of a Botanical Trip to Ben Ledi, with Pupils, in July 1860.

By Professor BALFOUR.

On Saturday 21st July 1860, at 6.30 A.M., a party of about 100 met at the Scottish Central Railway Station, and proceeded to Callander. After breakfasting at Mr M’Gowan’s inn they walked towards Ben Ledi, a mountain which rises to the height of 2863 feet above the level of the sea, and which lies on the junction of two formations—the clay slate and mica

\* For some of the local statistics given above, I am indebted to Mr Breeks, C.S.

slate—being a true mica slate on the northwest, and a clay slate, or rather greywacke, on the south-east declivity. After leaving Callander the party crossed the river in the Pass of Leny, and proceeded towards Loch Lubnaig. On the way they gathered *Corydalis claviculata*, *Hypericum humifusum*, *Galium Mollugo*, *G. boreale*, *Lysimachia Nummularia*, *Carex irrigua*, which was observed by Mr A. Bell, as well as *Vaccinium Oxyccoccus*. In Loch Lubnaig, *Isoetes lacustris*, *Lobelia Dortmanna*, *Subularia aquatica*, were gathered. *Lysimachia vulgaris* was also met with. From Loch Lubnaig the party ascended Ben Ledi: they proceeded by the side of a stream which has cut out a deep passage for itself, and they examined especially the rocks near the summit on the northern side. The best plants were found on the mica slate soil. Among the interesting plants gathered were the following:—*Thalictrum alpinum*, *Draba incana*, *Silene acaulis*, *Alchemilla alpina*, *Rubus saxatilis*, *R. Chamæmorus*, *Sibbaldia procumbens*, *Epilobium alpinum*, *Sedum anglicum*, *Saxifraga aizoides*, *S. hypnoides*, *S. nivalis*, *S. oppositifolia*, *S. stellaris*, *Meum athamanticum*, *Cornus suecica*, *Antennaria dioica*, *Hieracium alpinum*, *Saussurea alpina*, *Vaccinium uliginosum*, *V. Vitis-idea*, *Armeria maritima*, *Oxyria reniformis*, *Polygonum viviparum*, *Salix herbacea*, *Gymnadenia albida*, *Habenaria chlorantha*, *Listera cordata*, *Tofieldia palustris*, *Juncus supinus*, *J. triglumis*, *J. trifidus*, *Rhynchospora alba*, *Carex rigida*, *Poa montana*, *Botrychium Lunaria*, *Allosorus crispus*, *Asplenium viride*, *Hymenophyllum Wilsoni*.

IV. *Letter from Dr Kirk of the Zambesi Expedition, dated 2d December 1860.* Communicated by Professor BALFOUR.

Dr Kirk writes—"Of all the sights I have seen—and I think, from description, of all the sights of that sort in the world—there is nothing to equal the Victoria Falls. Dr Livingstone had greatly understated the depth; I suspect the great fall is 400 feet. I do not know if any description will make the matter intelligible; for you will suppose, in spite of me, that the ground falls in level. No such thing; it is a wide valley with hills, a mile or so off on either side, and about 400 feet high. The Zambesi is about a mile wide, with many islands; its course is suddenly crossed by a fissure in the basalt rock—a mile long, 350 feet deep, and about 80 feet wide. Now, the river falls clear down to the bottom at once—the ground beyond is the same level as that above the Falls. At the bottom of the fissure the water runs transversely, and escapes by a narrow fissure at right angles, placed in the eastern third; but there is another fissure parallel to the first, and into this the water is discharged, and flows west, then doubles again to the east; still, remember, in the bottom of the zig-zag crook, and always 400 feet under the level of the adjacent country. It turns back to the west, and we did not see it again until about five miles below, where it was still in the deep gully cut out of the tolerably level ground; but there the sides slope, so that it would be possible to climb down, and this state of matters continues at least half way down to Sinamane.

"This is a wonder of the world, and no sketch could convey the least idea of it unless by a master painter in oil. There is no fall equal to it for depth, amount of water, and singularity of structure.

"As the water descends it becomes broken up into rain, while masses spout out from the rest and leave tails like comets. In the fissure at noon you see a double rainbow.

"The opposite side is as perpendicular, and the spray falling on the rock runs down in constant streams, but as it flows from some projecting edge it is licked up again with the ascending vapour, once more to form part of the thick rain which constantly falls on which ever side the wind