

Inner, in several series $\frac{1}{2}$ inch long, $\frac{1}{16}$ inch broad, membranous and glabrous, inner series ciliate on upper half and margins, the whole more or less viscid, rays in 1 series numerous, $\frac{1}{2}$ inch long, narrow, pappus $\frac{1}{8}$ inch long, scabrid. Achene linear, hispid.

Hab.—South Island: Nelson; on the Golden Downs near the head of the Aorere River—*J. Dall*; in compliment to whom as an explorer and collector it has been named.

Plate XXXV., fig. 1, plant $\frac{2}{3}$ nat. size; 2, back view of flower head, showing outer form of flower-bracts; 3, inner form of flower-bracts; 4, fertile floret; 5, rayed floret; 6, pappus hair; 7, stamens.

This singular plant approaches the genus *Senecio* closer than any *Celmisia* hitherto found in New Zealand, especially in the presence of large coriaceous leaf-like bracts on the scape. Its habit of growth, however, especially in the large radical and rosulate leaves, relate it more to *Celmisia*. It may be necessary if other species with this remarkable double form of flower-bracts be discovered that a new genus be constructed for their reception.

ART. XLVIII.—*On some Plants new to New Zealand, and Description of a new Species.* By JOHN BUCHANAN, of the Geological Survey Department.

[Read before the Wellington Philosophical Society, 21st February, 1882.]

Pteris longifolia, Linn.

Specimens of this fern have lately been forwarded to the Museum by Mr. Lascelles, of Napier. They were collected by him in the Tarawera country under circumstances which preclude the possibility of its having been introduced.

This is a fern widely distributed over the globe, having been collected in many countries, and named by each collector with a different name. Hooker gives for it in his "Species Filicum" eighteen synonyms of different authors.

It may be mentioned that the New Zealand plant has the pinnæ serrated, which may claim for it the position of a variety.

On a Genus of Orchidaceæ new to New Zealand.

The following short description of a new Orchid, which proves to belong to an Australian genus not previously represented in New Zealand, is taken from Bentham's "Flora Australiensis," vol. vi., p. 324. The plant was collected by W. T. L. Travers, Esq., near the Mungaroa Swamp, and was sent by him to the Museum for examination.



J.B. del. et lith.

CELMISIA DALLII, Buchanan, n. s.



Epiblema grandiflorum, R. Br.

Stem erect, 1–15 inches high, with one long narrow leaf and two short sheathing leaves. Flowers 3–4, pedicillate in a short raceme, dark purple, bracts shorter than the ovary. Sepals and petals alike, $\frac{1}{2}$ inch long, narrow-linear, acute, finely veined. Labellum as long as the sepals. Anther erect, or slightly bent forward, the cells distinct, with a short recurved point.

Brachyglottis rangiora, Buch., n.s.

A small branching tree, 8–12 feet high; branches, petioles, leaves below, and inflorescence, covered closely with white or pale buff tomentum. Leaves large, 6–8 inches long, ovate or oblong, irregularly sinuato-dentate along the margin, often tapering to an acute point, coriaceous, or stoutly membranous, young leaves generally lobulate and dentate, covered on both sides with soft pale buff tomentum. Panicles as large as the leaves, spreading, drooping, or erect, covered with appressed tomentum. Heads numerous, sessile, $\frac{1}{7}$ inch long, involucreal scales 7, in one series, linear, obovate, obtuse or acuminate, or pilose on top. Florets 9, of which 5 are fertile.

This is a very distinct plant from Forster's *Brachyglottis repanda*, differing in its smaller size, coriaceous leaves, which have generally deeper sinuations and more acute angles; the flower-heads are also constantly sessile. Its geographical distribution is also distinct, being apparently limited to the lands of both islands abutting on Cook Strait. The Maoris also distinguish the two plants by different names, the present plant being known as Rangiora, while the northern plant described by Forster, is called Wharangita-whita. Both plants are poisonous to horses.

ART. XLIX.—On new Species of New Zealand Diatoms. By JOHN INGLIS.
Plate XXII.

Nitzschia nova-zealandia, sp. nov.

[Read before the Philosophical Institute of Canterbury, 1st July, 1880.]

Nitzschia nova-zealandia, sp. nov.

Frustule: front view linear, narrowing at the truncated extremities, opposite side of each end obliquely sloping. Valve: linear on side view and sigmoid, attenuated towards the extremities, and rounded at the ends; one row of puncta round the margin of the valve. Puncta: there are twenty-four puncta or beads to $\cdot 001$ of an inch.

I have been unable to make out any striæ or keel under Beck's $\frac{1}{10}$ th immersion. The valves of *Nitzschia nova-zealandia* resemble *Homæocladia sigmoidea*, but the latter is frondose and the frustules are sigmoidal on the front view, while the former is free and sigmoidal on the side view.