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NAMES! NAMES! NAMES!

("Those Troublesome Names" by Prof. Arnold Wall: This cyclostyled pamphlet, Bulletin No.1 of the Auckland Botanical Society, appeared in July. Financed by the Gore Adams Publication Fund, it is available at 1/- per copy. Orders may be left with the Secretary or Editor.)

Yes, "Those Troublesome Names" of our plants! How shall we pronounce them, why were they given, what do they mean, why are they so often changed, why cannot we be content with the familiar popular names? Question upon question arises, and what an entertaining and enlightening book could be written to supply the answers. Clematis marata, now, what on earth did the younger Armstrong mean? What essays have been written to discuss how we should pronounce Clematis!

Away back in 1919 I listened to a delightful address by Professor Wall on the pronunciation of our plant names. You may read it, shorn of some of the shrewd asides, in the Transactions of the New Zealand Institute for that year, and perhaps the complexity of the problem will surprise you. And yet, is it not worth while, as Wall suggests, to make some effort to break out of the Tower of Babel? For as we move through the green shade of the forest path, or climb the high hills on a day of hot weather, what memories of the heroes of old come thronging in, of our plant finders and our plant namers. Banks and Solander, pioneers of pioneers; the Forsters father and son, and Sparrmann; Menzies, D'Urville, Lesson, Richard; the gallant Cunninghams, the venturesome Bidwill and Dieffenbach; Raoul, Wilkes, Hocker's giant figure making straight the path; the amazing Colenso, the ill-fated Sinclair; Lyall, Monro, Travers, Haast, Lindsay, Buchanan, Hector -- the pages of history unfold before us, the plants enshrine the names of those who told us something of their story. To the bead-roll of fame we add those nearer our own time as we pause to gaze on Senecio kirkii, Cheesemanian ensyii, and gibbsii, Ranunculus berggrenii, Stellaria roughii, Aciphyllia trailii, Astelia cockaynei, Agrostis petriei, and so many more.

The peoples of the world have contributed as namers -- the branches of our own race, Frenchmen, Germans, Swedes, Italians, Danes, Maori, and more. The languages of the world have been called on to provide the names; from the Greek, Hydrocotyle, the Latin Spinifex, the Italian Marattia, the German Gleichenia, the French Danthonia, the Dutch Korthalsella, the English Doodie (did you know?), the Maori Corokia, from -- but see for yourselves what Wall has to say. There are hybrids too, but never mind. And we pronounce them in ways that make scholars wince, foreigners shrug, the latinist to dissolve into tears, and ourselves to poke fun at one another.

And now Wall, as who could better?, has begun to tell us the origin of these names. Alas, his space was short and he had to omit many exciting details. Alsophilla recalls the shady groves it delights in, Alseuosmia perfumes the glades. We learn of Athyrium, the doorless, of the many-footed Polypodium, of the tearful Dacrydium, of Arundo the reed shaken by the wind, of Luzula the firefly (why did De Candolle christen it so, perhaps your guess is the right one).

Libertia we love; let us now salute the Belgian lady, Madame Libert, student of liverworts, from whom it derived its pleasant name. Selliera with its gleaming eyes ("Corolla oblique, split to the base at the back" says the presaic taxonomist) brings back the tang of the sea to our nostrils. Let it now also recall Natalie Sellier, who drew its picture for Cavanilles, who described it and gave it its name. How appropriate are the names Gastrodia, Stellaria, Callitriche, Leptospermum! Here in Wall's pamphlet is wealth a-plenty, but as we read are we

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not eager for more? What do most of us know of Gaultier, of Sutton, of Parsons, of Zammitelli? Can any of you throw light on the elusive Paeser?

Thank you, Professor Wall; more please! And maybe we shall crown you with a Wallia, for Arnoldia we cannot bestow on you. Alas! I find that Wallia is gone too, stolen away back in 1861 by Alefeld to name a walnut! But honour you, we do.

E.H.Allan.

SOIL MICROBIOLOGY.

On Monday, May 15th, Mr. Warcup, a research student at Victoria College gave a lecture to the Botanical Society on Soil Microbiology. He explained to us at the beginning that the soil actually consisted to a considerable extent of living organisms. Many kinds of worms and insects, large and small, and many smaller animals scarcely visible to the human eye lived within the soil. A great variety and a very large number of microscopic plants were also represented. These were soil bacteria, soil algae and soil fungi, and the growth was largely concerned with the decay and breaking down of all the waste organic material which came from the death of larger plants and animals. It was realised that within the soil there lived a very complex community.

Very little work has so far been done in New Zealand in exploring the soil fungi but Mr. Warcup showed that he had made a good beginning. By taking samples of soil from different localities and growing small amounts in petri dishes on sterilised nutrient jelly he had discovered the presence of many different fungi. Particular attention was paid to isolating *Fusarium* spp. because these fungi are important in causing root and stem diseases in many cultivated crops. They do not confine their activities in the soil to dead roots and other dead organic material but can invade growing plants as well. *Fusarium* spp. had been found in virgin bush soil as well as in cultivated farm lands. The fungal colonies, as the spreading plants are called, which were exhibited growing in dishes and tubes, showed the bright colours, especially pink and red which are characteristic of this genus. The writer of this note grew a large number of renga lilies (*Arthropodium cirratum*) from seed but lost a lot of young plants from the evil intervention of a similar *Fusarium* sp. which invaded the stems, reducing them to a mush. Characteristic pink streaks were formed on the dead plants.

One of the lecturer's most interesting exhibits was a dish containing colonies of a soil fungus very like the ordinary bread mould. Colonies of two kinds had been separated and planted side by side. The white cotton wool-like growth had spread from each till it touched its neighbour. Lines of black fructifications formed where the two growths met. The two strains of the fungus were in fact 'plus' and 'minus', that is, they showed a very simple form of sexuality. The two fungi were apparently identical but neither could fruit alone but had to exchange some material with the other before developing the black fructification.

The large amount of sampling and isolating of different fungi which Mr. Warcup had accomplished showed that he already was well acquainted with his very interesting subject.

C. B. Cone.

NATURAL HISTORY IN DEVONSHIRE.

On the evening of July 17th, after the business of the Annual General Meeting, we were entertained by Miss Drake, a visitor to Wellington, and a former President of the Exeter Field Club. In lively fashion she outlined for us the composition and activities of the Club and its background.

The county of Devon, in which Exeter lies, has a flora of some 1142 species, of which about 30 are ferns, one of them the famous *Camanda regalis*. The animals include 300 kinds of birds, various deer, otter, badger, stoat, and hedgehog. The wilds of Dartmoor, covering 3-400 square miles and rising to 2050 feet are