

New Arrangement of Coriaria Species

Oliver	Cheeseman	Cockayne
pottsiana		
angustissima	angustissima(part)	angustissima (S.I.)
plumosa	angustissima(N.I.)	
kingiana		
pteridoides		
sarmentosa		sarmentosa
arborea	ruscifolia	arborea
arborea x pteridoides	thymifolia	
plumosa x sarmentosa		lurida

MORE AMENDMENTS TO THE FLORA.

Simpson and Scott Thomson, in Transactions of the Royal Society of New Zealand, Vol.72, part 1, June 1942, publish "Notes on some New Zealand Plants and Descriptions of New Species (No:2)". Supplementary notes are given regarding 20 species and one species is reduced to a variety. Four hybrids are discussed, an unexpected combination being recorded in Olearia avicenniaefolia x Celmisia du rietzii. New varieties described total 9, and new species 10, the latter distributed as follows: Sophora 1 (Treadwell's kowhai of gardens now becomes S.longicarinata), Hoheria 1, Hebe 2, Veronica 2, Celmisia 2, Senecio 2.

AN APPRECIATION.

(Prompted by the Society's visit to Percy's Reserve on 12th September, 1942.

Now that our native bush is fast disappearing in the environs of settled areas it is gratifying to learn that through the efforts of a few wide-awake citizens, steps are being taken by those in authority to preserve the remnants of our vegetation for all to enjoy. The Petone Borough Council is to be congratulated on the possession of the Percy Reserve which contains fairly representative hillside bush and is, at the same time so close to the town.

The rear part of the reserve needs little improvement, and that mostly by way of removing such exotics as odd pines, gums, and wattles. The forward part, especially about the lake, would benefit a great deal by underplanting the magnificent cabbage trees with some such

shrubs as rangiora, and planting the edge of the lake itself with nigger heads, toetoe, and flax, all as graceful in form as the much-admired Papyrus of Egypt.

V. D. Zotov.

LIFE FORMS OF PLANTS.

In order to learn the names of plants and to study the relationships we must know the shapes of the leaves and the structure of the flowers. But if we investigate the relation between plants and their surroundings, that is, the form of plants in different situations and the changes in their growth through the seasons we must use other characters. The chief of these are the following:-

1. General form.

Between the tall forest tree with its massive upright trunk and widely spreading head of foliage, and the lowly cushion plant of mountain bogs there are numerous forms each apparently nicely suited to the station in which it lives.

2. Seasonal changes.

These refer to the time of flowering and fruiting, to the leaf fall and growth of new leaves in spring, to the dying down to the ground of the whole plant in winter, and to the length of life of the species, that is, whether it lives for one, two, few, or many years.

3. Protective tissue.

The outer surface of a plant, besides performing such functions as controlling the inlet and outlet of air and water, must serve the purpose of protecting the plant against the weather and the attacks of insects, fungi, predacious animals and other dangers. For all these functions the outermost walls of the surface layer of cells are thickened in various ways and are usually furnished with a cuticle impervious to water.

4. Resistance to salinity and acidity.

Certain species have special powers of living under salty or acid conditions. Plants that grow in saline situations are usually succulent in leaf and stem.

5. Adjustment to changed conditions.

An alteration in the environment may be overcome by some plants in various ways. Shade, sun, excessive wind, and salt alter the growth.

6. Pollination.

The methods that plants have for transferring pollen from flower to flower may have definite relations with the