

but still relatively simple ferns, are the umbrella ferns (Gleicheniaceae) the Splitting Ferns (Schizaeaceae) and the Royal Ferns (Osmundaceae) which include our beautiful Princes of Wales Feather (Leptopteris superba). In the next group, which contains the tree ferns and the filmy ferns, the structure of the sorus is more complicated and the sporangia are protected by a covering, the indusium. The sporangia do not (except in rare cases) ripen simultaneously as in the previous group, but one after the other, thus prolonging the sporing season.

The next group, the huge family Polypodiaceae has a great variety of soral forms. The sori are of many different shapes and sizes and with or without protective coverings (indusia). The sporangia ripen in succession, but in no set order.

New Zealand has ferns adapted to all types of conditions. Some require deep shade and a moisture-laden atmosphere (ex. many filmy ferns) while others can endure sunshine and exposure, the rock-loving ferns, (Notholaena adistans, Pellaea rotundifolia, etc) Others again prefer open country, for instance the bracken (Pteridium esculentum) and the Scented Fern (Paesia scaberula). Some again seek the high country (ex. Polystichum cystostegia and Hypolepis millefolium), while there are two quaint little water ferns specialised for an aquatic life, the red Azolla (Azolla rubra) and the New Zealand Pillwort (Pillularia novae-zelandae)

Fresh and dried specimens were on exhibition at the lecture, but unfortunately time did not permit much discussion of them. At the close of the lecture a hearty vote of thanks was accorded the speaker.

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Owing to the threatening nature of the weather in the early part of the day, a somewhat small gathering met Professor Wall at the Mt. Eden Kiosk to explore the botanical possibilities of the mountain. We noted the spurred Valerian (Kentranthus ruber) with its masses of red flowers. This weed has pretty well taken possession of the bottom of the crater. A small daisy-like shrub with yellow flowers (Osteospermum moniliferum) and (strangely for a member of the daisy family) succulent fruits was seen. Among the larger weeds were various members of the cabbage family, the

wild turnip (Brassica campestris), the Oriental mustard (Sisymbrium orientale - the leaves of this species are excellent in salad) the hedge mustard (Sisymbrium officinale), the snap dragon family gave us the two mulleins (Verbascum thapsus and V. virgatum), the former with its woolly leaves and tall yellow spikes up to five feet high, and various small species of Veronica. Another plant with large yellow flowers was the Evening Primrose (Oenothera biennis) a member of the Fuchsia family. The pea family gave us a rich harvest. We noted the Everlasting Pea (Lathyrus latifolius) three vetches (Vicia sativa, V. angustifolia and V. tetrasperma) and the Scotch Broom (Cytisus scoparius) in full flower. The mountain also carries many different types of clover. Attractive among smaller weeds was Herb Robert (Geranium robertianum) with its dainty flowers, autumn coloured foliage and delicate scent, two other Geraniums, G. molle and G. dissectum, also grow on the mountain. The Mallow family yielded the common Mallow (Malva silvestris) with its large purplish flowers and the Dwarf marrow (M. rotundifolia) also the little creeping Bristly Mallow (Modiola caroliniana). In addition to Osteospermum, the mountain carries many members of the dairy family. The cat's ear (Hypochoeris radicata - now an important food for Otago sheep), the sow-thistle (Sonchus oleraceus)

Not yet in flower were the large coarse leaved ox-tongue (Helminthia echinodes) and the Scotch thistle (Cirsium lanceolatum) and various other members of this rather overwhelming family. There were many grasses in flower. These included the prairie-grass (Bromus cartharticus) and its relatives goose-grass (B. mollis) and the barren-brome (B. sterilis), the beautiful tall Fescue (Festuca arundinaceae), the native rice-grass (Microlaena stipoides), our native pilose Danthonia (Danthonia pilosa) perhaps the most valuable of the Danthonias, the Blue-grass (Agropyron scabrum), and others. This list is of course by no means complete, but sufficient to show how rich in species the mountain is. We were fortunate in having the assistance of Professor Wall (who was kept working hard!) and we hope that on some future occasion he will again show us the interest to be found in "waste places."

The meeting concluded with a hearty vote of thanks to the leader.

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