

# Mahurangi East Regional Park Extension Fieldtrip – 20 March 2021

Sam Sutherland and Yumiko Baba



**Fig. 1.** Aerial image showing the boundaries of the Mahurangi East Regional Park extension in white outline. Scale bar = 500 m.

Attendees: Jenny Andrew, Yumiko Baba (co-leader), Bev Davidson, Geoff Davidson, Neil Davies, Marley Ford, Leslie Haines, Jane Henrys, Mark Paterson, Vivienne Paterson, Juliet Richmond, Mere Roberts, Joshua Salter, Sam Sutherland (leader), Jack Warden, Alison Wesley, David Wilson, Liam Winterton, Maureen Young.

In 2020, a 91.9 ha land parcel adjacent to the Mahurangi East Regional Park was purchased by Auckland Council, which doubled the size of the existing Mahurangi East Regional Park (Fig. 1). This purchase was made possible through significant philanthropic funding. The property contains remnant coastal forest, a wetland area behind a bund, a beach and saltmarsh grading into mangroves. Near the beach there is an existing bach. There is currently no public vehicle access to the property.

On a sunny blue-sky morning in March 2021, we met at Martins Bay to consolidate vehicles. We convoyed into the Mahurangi East Regional Park Extension via a long gravel farm track which passes



**Fig. 2.** Participants admiring a skeleton fork fern (*Psilotum nudum*) on a pūriri trunk (*Vitex lucens*). All photos taken on 20 Mar, by S. Sutherland, except Fig. 3.



**Fig. 3.** The *Psilotum nudum*, sporting hundreds of sporangia. Photo: Joshua Salter.

through private property. Near the entrance to the park, we stopped to take a look at a couple of large *Streblus* trees. The general verdict was that they were likely small-leaved milk trees (*Streblus heterophylla*), or maybe a hybrid, based on the fact that the leaves were unusually large for an ordinary *S. heterophylla* but not as large as the large-leaved milk tree (*S. banksii*) on offshore islands. The trees were in flower but most of the flowers had been deformed due to witches-broom gall, likely caused by Eriophyid mites. Just as we were rounding up people back into vehicles, a skeleton fork fern (*Psilotum nudum*) was spotted growing on a pūriri trunk (*Vitex lucens*) (Figs. 2, 3). This species has a regional threat status of Sparse.

Most of the vehicles were parked at a gravel pad area near the start of the property and we walked down the steep gravel farm track to explore a wetland complex behind a coastal bund. The wetland complex (Fig. 4) has some large areas of open water with aquatic plants such as common water milfoil (*Myriophyllum propinquum*), *Azolla* ?*pinnata* common duck weed (*Lemna disperma*), exotic swamp lily (*Ottelia ovalifolia*) and other exotic species such as purple-backed duckweed (*Landoltia punctata*) and water lily (*Nymphaea* sp.). A dab chick (Conservation status: Recovering) was seen in one of the ponds and one of the group thought they heard a fernbird (Conservation status: Declining).

Around the fringes of the open water, water purslane (*Ludwigia palustris*), *Isolepis prolifera* and *Persicaria decipiens* were observed, whilst in the drier wetland areas there were rautahi (*Carex geminata*), giant umbrella sedge (*Cyperus ustulatus*) and *Schoenoplectus tabernaemontani* amongst pasture grasses (e.g., *Paspalum* spp.). Patches of *Bolboschoenus medianus* were also present in the immediate areas. Within the wetland there were some small dry islands with karo (*Pittosporum crassifolium*), cabbage tree (*Cordyline australis*), pōhutukawa (*Metrosideros excelsus*), kōwhai (*Sophora chathamica*), mahoe (*Meliccytus ramiflorus*), hangehange (*Geniostoma ligustrifolium*), *Coprosma macrocarpa* and akeake (*Dodonaea viscosa*). It is possible that some of these areas may have been planted along with vegetation on the fringe of the wetland to the south.

Vegetation in the fringe included cabbage tree, mānuka (*Leptospermum scoparium*), tōtara (*Podocarpus totara*), kānuka (*Kunzea robusta*), kawakawa (*Piper excelsum*), māhoe, *Coprosma macrocarpa* and flax (*Phormium tenax*). The presence of kahikatea (*Dacrycarpus dacrydioides*), kauri (*Agathis australis*) and tānekaha (*Phyllocladus trichomanoides*) of a similar size, was further evidence that this area has been at least partly planted. There was some bamboo (*Bambusa* sp) and boneseed (*Chrysanthemoides monilifera*) on the edge of this area which would be beneficial to control.



**Fig. 4.** Exploring a wetland complex.



**Fig. 5.** Lunch in the shade overlooking the wetland.

The group stopped to have lunch in the shade on a slope overlooking the wetland (Fig. 5). After lunch we visited the beach on the east coast just below the bach on the property (Fig. 6). Shore bindweed (*Calystegia soldanella*) was growing above the high tide line of the beach, and one small New Zealand spinach (*Tetragonia tetragonoides*) was found with knobbly green fruit. A small area of spinifex (*Spinifex sericeus*) was found growing at the northern end of the beach. Pest plants on this coast included pampas (*Cortaderia jubata*) and some agapanthus (*Agapanthus praecox* subsp. *orientalis*) growing above a pōhutukawa at the southern end of the beach.

We headed back across to the west coast of the park where saltmarsh vegetation (e.g. saltmarsh ribbonwood (*Plagianthus divaricatus*) and *Machaerina juncea*) grades into mangroves (*Avicennia marina*). Unfortunately, the weedy *Carex divisa* was present in large swathes on the edge of the saltmarsh habitat.

The coast was followed north to an area of coastal broadleaf forest which had abundant NZ jasmine (*Parsonsia heterophyllus*) growing in the canopy.



**Fig. 6.** Checking out the flora along the beach on the east coast.

Whilst this area was fenced there was an existing track, presumably created by farm animals, which we followed around the coast. Canopy trees included kōwhai, pigeonwood (*Hedycarya arborea*), kānuka and tītoki (*Alectryon excelsus*), and pōhutukawa laden with *Astelia* species at the bottom of the slope. There was also the large-leaved form of tawa (*Beilschmiedia tawa*, also known as *B. tawaroa*) which had shiny dark black fruit. Some very large ngaio trees (*Myoporum laetum*) were admired, and we reflected that it was nice to see non-planted ngaio for a change.

Growing amongst *Gahnia lacera* within the coastal forest, an exciting find for the day was bamboo grass (*Microlaena polynoda*) which has a regional threat status of Scarce. Pest plants in the coastal forest area included woolly nightshade (*Solanum mauritianum*) which was common in canopy gaps, and apple of Sodom (*Solanum linnaeanum*). Conveniently we were able to cut back up the paddocks to our parked vehicles, completing an enjoyable loop exploring the Mahurangi East Regional Park Extension. See the Appendix for the Species List.

**Appendix.** Species List for Mahurangi East Regional Park Extension from ABS field trip on 20 Mar 2021 and two recces on 4 Nov 2020 and 9 Feb 2021. Plant species list compiled by Sam Sutherland and Yumiko Baba; lichen species contributed by Marley Ford.

\* = exotic species      # = additions from ABS visit, 20 Mar 2021

| Scientific names                                                        | Common names       | Notes                                         |
|-------------------------------------------------------------------------|--------------------|-----------------------------------------------|
| <b>Ferns</b>                                                            |                    |                                               |
| <i>Adiantum hispidulum</i>                                              | rosy maidenhair    |                                               |
| <i>Adiantum cunninghamii</i>                                            | common maidenhair  |                                               |
| <i>Asplenium flaccidum</i>                                              | hanging spleenwort | #                                             |
| <i>Asplenium oblongifolium</i>                                          | shining spleenwort | #                                             |
| <i>Azolla ?pinnata</i> *                                                | ferny azolla       | #                                             |
| <i>Cyathea dealbata</i>                                                 | silver fern        |                                               |
| <i>Dendroconche scandens</i><br>Syn. <i>Microsorium scandens</i>        | fragrant fern      |                                               |
| <i>Deparia petersenii</i><br>subsp. <i>congrua</i>                      |                    |                                               |
| <i>Doodia australis</i>                                                 | rasp fern          |                                               |
| <i>Lastreopsis glabella</i>                                             | smooth shield fern |                                               |
| <i>Hymenophyllum sanguinolentum</i>                                     | filmy fern         | #                                             |
| <i>Nephrolepis cordifolia</i> *                                         | tuber ladder fern  | Growing on one of the<br>bunds in the wetland |
| <i>Parapolystichum microsorium</i><br>Syn. <i>Lastreopsis microsora</i> |                    | #                                             |
| <i>Pneumatopteris pennigera</i>                                         | gully fern         |                                               |
| <i>Psilotum nudum</i>                                                   | skeleton fork fern |                                               |
| <i>Pteridium esculentum</i>                                             | bracken            |                                               |
| <i>Pteris tremula</i>                                                   |                    |                                               |
| <i>Pyrrosia elaeagnifolia</i>                                           | leather-leaf fern  |                                               |
| <i>Zealandia pustulata</i><br>Syn. <i>Microsorium pustulatum</i>        |                    |                                               |

|                                                         |                     |                                                     |   |
|---------------------------------------------------------|---------------------|-----------------------------------------------------|---|
| <b>Gymnosperms</b>                                      |                     |                                                     |   |
| <i>Agathis australis</i>                                | kauri               | Appears to be planted                               |   |
| <i>Araucaria heterophylla</i> *                         | Norfolk Island pine |                                                     |   |
| <i>Cupressus macrocarpa</i> *                           | macrocarpa          |                                                     |   |
| <i>Dacrycarpus dacrydioides</i>                         | kahikatea           | On edge of wetland area.<br>Planted?                |   |
| <i>Dacrydium cupressinum</i>                            | rimu                | On edge of wetland area.<br>Planted?                | # |
| <i>Pinus</i> sp. *                                      | pine                |                                                     |   |
| <i>Podocarpus totara</i>                                | totara              |                                                     |   |
| <i>Phyllocladus trichomanoides</i>                      | tanekaha            | On edge of wetland area.<br>Planted?                | # |
| <i>Quercus robur</i> *                                  | European oak        |                                                     | # |
| <i>Taxodium distichum</i> *                             | swamp cypress       |                                                     | # |
| <b>Dicots</b>                                           |                     |                                                     |   |
| <i>Agapanthus praecox</i><br>subsp. <i>orientalis</i> * | agapanthus          | Above pohutukawa<br>at southern end of<br>the beach | # |
| <i>Alectryon excelsus</i><br>subsp. <i>excelsus</i>     | titoki              |                                                     |   |
| <i>Alnus glutinosa</i> *                                | common alder        | On bund in wetland<br>Planted?                      |   |
| <i>Amaryllis belladonna</i> *                           | belladonna lily     | On slope below house                                | # |
| <i>Atriplex prostrata</i> *                             |                     |                                                     | # |
| <i>Avicennia marina</i>                                 | mangrove            |                                                     |   |
| <i>Beilschmiedia tarairi</i>                            | taraire             |                                                     |   |
| <i>Beilschmiedia tawa</i>                               | tawa                | Wide leaved tawa<br>(tawaroa)                       |   |
| <i>Cakile maritima</i> *                                |                     | On beach                                            | # |
| <i>Calystegia sepium</i><br>subsp. <i>roseata</i>       | pink bindweed       | In wetland                                          | # |

|                                                                  |                         |                                |   |
|------------------------------------------------------------------|-------------------------|--------------------------------|---|
| <i>Calystegia soldanella</i>                                     | shore bindweed          | On beach                       | # |
| <i>Carmichaelia australis</i>                                    | broom                   |                                |   |
| <i>Centella uniflora</i>                                         |                         |                                |   |
| <i>Cirsium vulgare</i> *                                         | Scotch thistle          |                                |   |
| <i>Chrysanthemoides monilifera</i><br>subsp. <i>monilifera</i> * | boneseed                |                                |   |
| <i>Coprosma areolata</i>                                         | thin-leaved coprosma    |                                |   |
| <i>Coprosma macrocarpa</i><br>subsp. <i>minor</i>                | karamu                  |                                |   |
| <i>Coprosma rhamnoides</i>                                       | twiggy coprosma         |                                |   |
| <i>Corynocarpus laevigatus</i>                                   | karaka                  |                                |   |
| <i>Cotoneaster</i> sp. *                                         | cotoneaster             |                                | # |
| <i>Cotula coronopifolia</i>                                      | bachelors button        |                                |   |
| <i>Crataegus monogyna</i> *                                      | hawthorn                |                                |   |
| <i>Dichondra repens</i>                                          |                         |                                | # |
| <i>Dodonaea viscosa</i>                                          | akeake                  | On bund in wetland<br>Planted? |   |
| <i>Dysoxylum spectabile</i>                                      | kohekohe                |                                |   |
| <i>Erechtites valerianifolia</i> *                               | Brazilian fireweed      |                                | # |
| <i>Galium divaricatum</i> *                                      |                         |                                |   |
| <i>Geniostoma ligustrifolium</i><br>var. <i>ligustrifolium</i>   | hangehange              |                                |   |
| <i>Geranium homeanum</i>                                         |                         |                                |   |
| <i>Hedycarya arborea</i>                                         | pigeonwood              |                                |   |
| <i>Hoheria populnea</i>                                          | lacebark                |                                | # |
| <i>Hypericum humifusum</i> *                                     | trailing St John's wort |                                | # |
| <i>Hypochaeris radicata</i> *                                    | catsear                 |                                |   |
| <i>Knightia excelsa</i>                                          | rewarewa                |                                |   |
| <i>Kunzea robusta</i>                                            | kanuka                  |                                |   |
| <i>Lapsana communis</i> *                                        | nipplewort              |                                |   |
| <i>Leptospermum scoparium</i>                                    | manuka                  |                                |   |
| <i>Lilaeopsis novae-zelandiae</i>                                |                         |                                | # |
| <i>Linum bienne</i> *                                            | pale flax               |                                |   |

|                                                      |                         |                                                                 |   |
|------------------------------------------------------|-------------------------|-----------------------------------------------------------------|---|
| <i>Lobelia anceps</i>                                | shore lobelia           |                                                                 |   |
| <i>Lotus suaveolens</i> *                            | hairy birdsfoot trefoil |                                                                 | # |
| <i>Lotus pedunculatus</i> *                          | lotus                   |                                                                 | # |
| <i>Ludwigia palustris</i> *                          | water purslane          |                                                                 | # |
| <i>Lysimachia arvensis</i><br>var. <i>arvensis</i> * | scarlet pimpernel       |                                                                 |   |
| <i>Medicago arabica</i> *                            | spotted bur medick      |                                                                 | # |
| <i>Melicytus ramiflorus</i>                          | mahoe                   |                                                                 |   |
| <i>Metrosideros excelsa</i>                          | pohutukawa              |                                                                 |   |
| <i>Myoporum laetum</i>                               | ngaio                   |                                                                 |   |
| <i>Myriophyllum propinquum</i>                       | common water milfoil    |                                                                 | # |
| <i>Myrsine australis</i>                             | red mapou, red matipo   |                                                                 |   |
| <i>Nymphaea</i> sp. *                                | water lily              | Although flowers red, it fits<br>descriptions of <i>N. alba</i> |   |
| <i>Olea europaea</i>                                 | olive                   | Few plants down slope of<br>the house                           | # |
| <i>Oxalis exilis</i>                                 | yellow oxalis           |                                                                 | # |
| <i>Parsonsia heterophylla</i>                        | NZ jasmine              |                                                                 | # |
| <i>Persicaria decipiens</i>                          |                         |                                                                 | # |
| <i>Pittosporum crassifolium</i>                      | karo                    |                                                                 |   |
| <i>Planchonella costata</i>                          | tawapou                 | 1 adult tree seen on<br>coastal cliff                           |   |
| <i>Plantago lanceolata</i> *                         | narrow-leaved plantain  |                                                                 | # |
| <i>Physalis peruviana</i> *                          | cape gooseberry         |                                                                 |   |
| <i>Phytolacca octandra</i> *                         | inkweed                 |                                                                 |   |
| <i>Piper excelsum</i><br>subsp. <i>excelsum</i>      | kawakawa                |                                                                 |   |
| <i>Plagianthus divaricatus</i>                       | salt marsh ribbonwood   |                                                                 |   |
| <i>Plantago lanceolata</i> *                         | narrow-leaved plantain  |                                                                 |   |
| <i>Populus</i> sp. *                                 |                         |                                                                 |   |
| <i>Prunella vulgaris</i> *                           | self-heal               |                                                                 |   |
| <i>Ranunculus repens</i> *                           | buttercup               |                                                                 |   |
| <i>Rosa rubiginosa</i> *                             | briar                   |                                                                 | # |

|                                           |                                |                                                                       |
|-------------------------------------------|--------------------------------|-----------------------------------------------------------------------|
| <i>Rumex conglomeratus</i> *              | clustered dock                 |                                                                       |
| <i>Sagina procumbens</i> *                | procumbent pearlwort           | #                                                                     |
| <i>Salicornia quinqueflora</i>            | glasswort                      | #                                                                     |
| <i>Samolus repens</i> var. <i>repens</i>  | sea primrose                   |                                                                       |
| <i>Senecio bipinnatisectus</i>            | Australian fireweed            | #                                                                     |
| <i>Sison amomum</i> *                     | stone parsley                  | #                                                                     |
| <i>Solanum americanum</i> / <i>opacum</i> |                                |                                                                       |
| <i>Solanum linnaeanum</i> *               | apple of sodom                 | #                                                                     |
| <i>Solanum mauritianum</i> *              | woolly nightshade              |                                                                       |
| <i>Sonchus asper</i> *                    | prickly sow thistle            | #                                                                     |
| <i>Sophora chathamica</i>                 | kowhai                         |                                                                       |
| <i>Streblus heterophyllus</i>             | small-leaved milk tree, turepo | Possible hybrid between <i>S. banksii</i> & <i>S. heterophyllus</i> ? |
| <i>Symphyotrichum subulatum</i> *         | sea aster                      | #                                                                     |
| <i>Tetragonia tetragonoides</i>           | NZ spinach                     | #                                                                     |
| <i>Torilis arvensis</i> *                 | spreading hedge-parsley        |                                                                       |
| <i>Trifolium fragiferum</i> *             | strawberry clover              |                                                                       |
| <i>Trifolium repens</i> *                 | white clover                   |                                                                       |
| <i>Ulex europaeus</i> *                   | gorse                          |                                                                       |
| <i>Verbascum creticum</i> *               | Cretan mullein                 | On coastal cliff area                                                 |
| <i>Vicia disperma</i> *                   | small French tare              |                                                                       |
| <i>Vinca major</i> *                      | periwinkle                     | On coastal cliff area                                                 |
| <i>Vitex lucens</i>                       | puriri                         |                                                                       |
| <i>Wahlenbergia violacea</i>              | violet harebell                | #                                                                     |
| <b>Monocots</b>                           |                                |                                                                       |
| <i>Agave americana</i> *                  | century plant                  | On coastal cliff                                                      |
| <i>Agrostis capillaris</i> *              | browntop                       |                                                                       |
| <i>Anthoxanthum odoratum</i> *            | sweet vernal                   |                                                                       |
| <i>Apodasmia similis</i>                  | oioi                           |                                                                       |
| <i>Astelia banksia</i>                    | shore kowharawhara             |                                                                       |

|                                 |                            |                        |
|---------------------------------|----------------------------|------------------------|
| <i>Astelia hastata</i>          | tank lily                  |                        |
| <i>Avena barbata</i> *          | slender oat                |                        |
| <i>Axonopus fissifolius</i> *   | narrow-leaved carpet grass |                        |
| <i>Bambusa</i> sp. *            | bamboo                     | On edge of wetland     |
| <i>Bolboschoenus medianus</i>   | purua grass                | In wetland area        |
| <i>Bromus diandrus</i> *        | ripgut broom               | #                      |
| <i>Carex divisa</i> *           |                            | On edge of saltmarsh # |
| <i>Carex divulsa</i> *          | grey sedge                 |                        |
| <i>Carex flagellifera</i>       | trip me up                 |                        |
| <i>Carex geminata</i>           |                            | #                      |
| <i>Carex longibrachiata</i> *   | Australian sedge           | #                      |
| <i>Carex solandri</i>           | forest sedge               | #                      |
| <i>Carex virgata</i>            | swamp sedge                |                        |
| <i>Cordyline australis</i>      | cabbage tree, ti           |                        |
| <i>Cortaderia jubata</i> *      | purple pampas              | On coast by beach      |
| <i>Cynodon dactylon</i> *       | Bermuda grass              |                        |
| <i>Cyperus brevifolius</i> *    |                            | #                      |
| <i>Cyperus eragrostis</i> *     | umbrella sedge             | #                      |
| <i>Cyperus ustulatus</i>        | giant umbrella sedge       |                        |
| <i>Dactylis glomerata</i> *     | cocksfoot                  | #                      |
| <i>Dichelachne crinita</i>      | long-hair plume grass      | #                      |
| <i>Earina</i> sp.               |                            | #                      |
| <i>Eleocharis acuta</i>         | sharp spike sedge          | #                      |
| <i>Ficinia nodosa</i>           | knobby clubrush            |                        |
| <i>Gahnia lacera</i>            | cutty grass                |                        |
| <i>Gastridium ventricosum</i> * | nit grass                  |                        |
| <i>Iris ?foetidissima</i> *     |                            |                        |
| <i>Isolepis prolifera</i>       |                            |                        |
| <i>Juncus anthelatus</i> *      |                            | #                      |
| <i>Juncus australis</i>         | leafless rush              | #                      |
| <i>Juncus edgariae</i>          | wiwi                       | #                      |

|                                                         |                         |                                          |
|---------------------------------------------------------|-------------------------|------------------------------------------|
| <i>Juncus effusus</i> *                                 | soft rush               |                                          |
| <i>Juncus kraussii</i>                                  | sea rush                |                                          |
| <i>Juncus sarophorus</i>                                | broom rush              | #                                        |
| <i>Juncus subsecundus</i> *                             |                         |                                          |
| <i>Juncus tenuis</i> subsp. ? <i>tenuis</i> *           |                         |                                          |
| <i>Juncus tenuis</i> subsp. <i>dichotomus</i> *         |                         | #                                        |
| <i>Juncus usitatus</i>                                  |                         | #                                        |
| <i>Landoltia punctata</i> *                             | purple-backed duckweed  |                                          |
| <i>Lemna disperma</i>                                   | common duckweed         | Previously known as <i>Lemna minor</i> # |
| <i>Lolium arundinaceum</i> subsp. <i>arundinaceum</i> * | tall fescue             |                                          |
| <i>Lolium perenne</i> *                                 | perennial rye grass     |                                          |
| <i>Machaerina juncea</i>                                | tussock swamp twig rush | #                                        |
| <i>Machaerina rubiginosa</i>                            |                         | #                                        |
| <i>Microlaena polynoda</i>                              | bamboo grass            | #                                        |
| <i>Microlaena stipoides</i>                             | meadow rice             |                                          |
| <i>Oplismenus hirtellus</i>                             |                         |                                          |

|                                       |                     |   |
|---------------------------------------|---------------------|---|
| <i>Ottelia ovalifolia</i> *           | swamp lily          |   |
| <i>Paspalum dilatatum</i> *           |                     |   |
| <i>Paspalum distichum</i> *           | freshwater paspalum |   |
| <i>Phormium tenax</i>                 | harakeke            |   |
| <i>Rhopalostylis sapida</i>           | nikau               |   |
| <i>Ripogonum scandens</i>             | supplejack, kareao  |   |
| <i>Rytidosperma racemosum</i> *       | danthonia           |   |
| <i>Schoenoplectus tabernaemontani</i> | kuawa               |   |
| <i>Spinifex sericeus</i>              | spinifex            | # |
| <i>Sporobolus africanus</i> *         | rat's tail          |   |
| <i>Stenotaphrum secundatum</i> *      | buffalo grass       |   |
| <i>Vulpia bromoides</i> *             | vulpia hair grass   | # |
| <i>Zantedeschia aethiopica</i> *      | arum lily           |   |
| <i>Wolffia australiana</i>            | water meal          | # |

#### Mosses

|                              |                   |   |
|------------------------------|-------------------|---|
| <i>Leucobryum javense</i>    |                   | # |
| <i>Ptychomnion aciculare</i> | pipe cleaner moss | # |

#### Lichens

|                                  |   |                                  |   |                                    |   |                                     |   |
|----------------------------------|---|----------------------------------|---|------------------------------------|---|-------------------------------------|---|
| <i>Bacidia</i> sp.               | # | <i>Lecanora</i> sp.              | # | <i>Pertusaria thiospoda</i>        | # | <i>Pyrenula</i> sp.                 | # |
| <i>Biatoropsis usnearum</i>      | # | <i>Lepraria finkii</i>           | # | <i>Pertusaria</i> sp.              | # | <i>Pyxine subcinerea</i>            | # |
| <i>Chrysothrix xanthina</i>      | # | <i>Notoparmelia erumpens</i>     | # | <i>Phlyctis</i> sp.                | # | <i>Ramalina celastri</i>            | # |
| <i>Cladonia darwinii</i>         | # | <i>Pannaria allorhiza</i>        | # | <i>Phyllospora</i> sp.             | # | <i>Ramalina peruviana</i>           | # |
| <i>Coccocarpia palmicola</i>     | # | <i>Pannaria elixii</i>           | # | <i>Podostictina pickeringii</i>    | # | <i>Sticta squamata</i>              | # |
| <i>Collema leave</i>             | # | <i>Parmeliella</i> sp.           | # | <i>Porina exocha</i>               | # | <i>Teloschistes chrysophthalmus</i> | # |
| <i>Crocodia aurata</i>           | # | <i>Parmotrema austrocetratum</i> | # | <i>Pseudocyphellaria carpoloma</i> | # | <i>Usnea nidifica</i>               | # |
| <i>Dirinaria applanata</i>       | # | <i>Parmotrema crinitum</i>       | # | <i>Pseudocyphellaria crocata</i>   | # | <i>Usnea rubicunda</i>              | # |
| <i>Dufourea ligulata</i>         | # | <i>Parmotrema perlatum</i>       | # | <i>Pseudocyphellaria montagnei</i> | # | <i>Xanthoria parietina</i>          | # |
| <i>Flavoparmelia haywardiana</i> | # | <i>Parmotrema reticulatum</i>    | # | <i>Pseudocyphellaria wilkinsii</i> | # |                                     |   |