

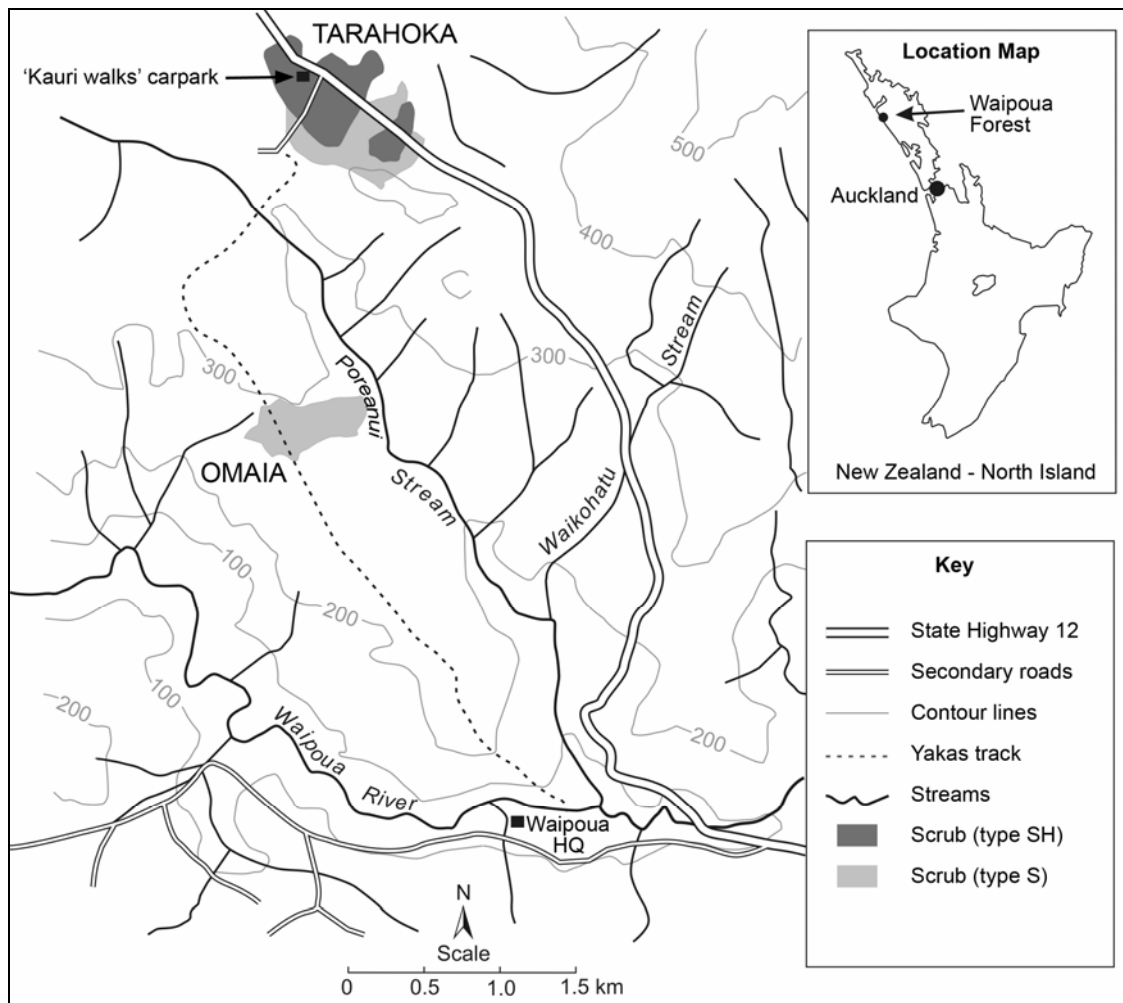
## **Vascular Plant List of Omaia Clearing and Surrounds, Waipoua Forest, Northland, New Zealand**

This plant list was compiled during 2004 as part of a University of Auckland Master of Science thesis (Lux 2005). Omaia clearing is an approximately 30 hectare forest clearing on a low, inland hill (200 – 300m asl) once used by local Maori for kiwi hunting, and last burnt by gumdiggers around 1879 – 1893AD. The clearing is located within the Department of Conservation managed Waipoua Forest Sanctuary on the Yakas track (see Figure 1).

According to quantitative plot analysis, the clearing supports four main vegetation types, which are the following:

- ▶ Type 1: Kauri / taraire-towai / kiekie forest (mature forest on outer edges of clearing, mainly on clay soils)
- ▶ Type 2: Kauri-towai / mingimingi / kauri grass forest (tall, young forest stands just outside clearing edge, burnt last between 159 and 225 years ago, associated with some clay and some sandy soils)
- ▶ Type 3: Towai-manuka / kiokio scrub (recently burnt vegetation – 110 to 124 years ago – on underlying volcanic clay soils)
- ▶ Type 4: Kauri-tawheowheo / *Dracophyllum*-manuka / kauri grass scrub (recently burnt vegetation – 110 to 124 years ago – on west coast derived aeolian sand which overlies the volcanic clay)

The plant list indicates which plants occurred in which vegetation types throughout the clearing. For more information, including maps and photos of the vegetation please refer to the thesis (Lux 2005), obtainable on interloan through the University of Auckland General Library.



**Figure 1:** Location of Omaia clearing in Waipoua Forest, an hour's walk along the Yakas track from the 'Kauri walks' carpark. Tarahoka is another Maori/gumdigger burn clearing.

Nomenclature follows Brownsey and Smith-Dodsworth (2000) for ferns and fern allies, and Allan (1961) and Moore and Edgar (1976) for angiosperms and gymnosperms, except for recent names changes reported in Connor and Edgar (1987) and where a more recent taxonomic review has been published, and the name is listed as the preferred name by Landcare Research on the New Zealand Plants Names Database (Allan Herbarium 2000). A specimen of *Todea barbara* is lodged at the herbarium of the Auckland War Memorial Museum (AK 288227).

\* denotes taxa seen outside the vegetation plots, but within the study area, and at other times of the year than the period when the survey was conducted (January 2004 to April 2004).

| Code                         | Scientific name                     | Common name                        | Found in veg. type: |   |   |    | Recent synonym             |
|------------------------------|-------------------------------------|------------------------------------|---------------------|---|---|----|----------------------------|
| <b>FERNS AND FERN ALLIES</b> |                                     |                                    |                     |   |   |    |                            |
| ANA lan                      | <i>Anarthropteris lanceolata</i>    |                                    | 1                   |   |   |    |                            |
| ASP bul                      | <i>Asplenium bulbiferum</i>         | Pikopiko, hen and chicken fern     | 1                   |   |   |    |                            |
| ASP fla                      | <i>Asplenium flaccidum</i>          | Makawe                             | 1                   | 2 |   | 4  |                            |
| ASP obl                      | <i>Asplenium oblongifolium</i>      | Huruhuruwhenua, shining spleenwort | 1                   | 2 |   |    |                            |
| ASP pol                      | <i>Asplenium polyodon</i>           | Petako, sickle spleenwort          | 1                   | 2 |   |    |                            |
| BLE dis                      | <i>Blechnum discolor</i>            |                                    | 1                   |   |   | 4  |                            |
| BLE fil                      | <i>Blechnum filiforme</i>           |                                    | 1                   |   |   |    |                            |
| BLE fra                      | <i>Blechnum fraseri</i>             |                                    | 1                   | 2 | 3 |    |                            |
| BLE nov                      | <i>Blechnum novae-zelandiae</i>     | Kiokio                             | 1                   | 2 | 3 | 4  | <i>B. capense</i>          |
| CTE het                      | <i>Ctenopteris heterophylla</i>     |                                    | 1                   | 2 | 3 | 4  |                            |
| CYA dea                      | <i>Cyathea dealbata</i>             | Ponga, silver fern                 | 1                   | 2 | 3 |    |                            |
| CYA med                      | <i>Cyathea medullaris</i>           | Mamaku, black tree fern            | 1                   |   |   |    |                            |
| CYA smi                      | <i>Cyathea smithii</i>              | Katote                             | 1                   |   |   |    |                            |
| DIC lan                      | <i>Dicksonia lanata</i>             | Tuokura                            | 1                   | 2 | 3 | 4  |                            |
| DIC squ                      | <i>Dicksonia squarrosa</i>          | Wheki                              | 1                   | 2 |   | 4  |                            |
| GLE dic                      | <i>Gleichenia dicarpa</i>           | Tangle fern, waewaekaka            |                     |   | 3 | 4  |                            |
| GRA sp.                      | <i>Grammitis</i> sp.                |                                    | 1                   | 2 |   | 4  |                            |
| HUP var                      | <i>Huperzia varia</i>               | Iwituna, hanging clubmoss          |                     | 2 |   | 4  | <i>Lycopodium varium</i>   |
| HYM arm                      | <i>Hymenophyllum armstrongii</i>    |                                    |                     |   |   | 1  |                            |
| HYM dem                      | <i>Hymenophyllum demissum</i>       |                                    | 1                   | 2 | 3 |    |                            |
| HYM dil                      | <i>Hymenophyllum dilatatum</i>      |                                    | 1                   | 2 | 3 | 4  |                            |
| HYM fla                      | <i>Hymenophyllum flabellifolium</i> |                                    | 1                   | 2 |   | 4  |                            |
| HYM mul                      | <i>Hymenophyllum multifidum</i>     |                                    | 1                   | 2 | 3 | 4  |                            |
| HYM rar                      | <i>Hymenophyllum rarum</i>          |                                    | 1                   |   |   | 4  |                            |
| HYM rev                      | <i>Hymenophyllum revolutum</i>      |                                    | 1                   | 2 | 3 | 4  |                            |
| HYM san                      | <i>Hymenophyllum sanguinolentum</i> |                                    | 1                   | 2 | 3 | 4  |                            |
| LAS his                      | <i>Lastreopsis hispida</i>          |                                    | 1                   |   |   |    |                            |
| LIN lin                      | <i>Lindsaea linearis</i> *          |                                    |                     |   |   | 4* |                            |
| LIN tri                      | <i>Lindsaea trichomanoides</i>      |                                    | 1                   |   | 3 |    |                            |
| LYC cer                      | <i>Lycopodiella cernua</i>          |                                    |                     | 2 | 3 | 4  | <i>Lycopodium cernuum</i>  |
| LYC lat                      | <i>Lycopodiella lateralis</i>       |                                    |                     | 2 |   | 4  | <i>Lycopodium laterale</i> |
| LYC deu                      | <i>Lycopodium deuterodensum</i>     | Puakarimu, Waewae-koukou           | 2                   | 3 | 4 |    |                            |

| Code                                   | Scientific name                    | Common name                      | Found in<br>veg. type: |   |    | Recent synonym                 |
|--|------------------------------------|----------------------------------|------------------------|---|----|--------------------------------|
| <b>FERNS AND FERN ALLIES continued</b> |                                    |                                  |                        |   |    |                                |
| LYC vol                                | <i>Lycopodium volubile</i>         | Waewaekoukou                     | 2                      | 3 | 4  |                                |
| LYG art                                | <i>Lygodium articulatum</i>        | Mangemange                       | 1                      | 2 | 4  |                                |
| MIC pus                                | <i>Microsorium pustulatum</i>      | Kowaowao, hound's<br>tongue fern | 1                      | 2 | 4  | <i>Phymatosorus pustulatus</i> |
| PAE sca                                | <i>Paesia scaberula</i>            |                                  |                        | 1 |    |                                |
| PNE pen                                | <i>Pneumatopteris pennigera</i>    | Gully fern                       | 1                      |   |    |                                |
| PTE esc                                | <i>Pteridium esculentum</i>        | Bracken fern,<br>Rahurahu        | 2                      | 3 | 4  |                                |
| RUM adi                                | <i>Rumohra adiantiformis</i>       | Iron fern, leather fern          | 1                      | 2 |    |                                |
| SCH dic                                | <i>Schizaea dichotoma</i>          | Fan fern                         | 2                      |   | 4  |                                |
| SCH fis                                | <i>Schizaea fistulosa*</i>         | Comb fern                        |                        |   | 4* |                                |
| TME elo                                | <i>Tmesipteris elongata</i>        |                                  | 1                      | 2 | 4  |                                |
| TME lan                                | <i>Tmesipteris lanceolata</i>      |                                  | 1                      |   |    |                                |
| TME sig                                | <i>Tmesipteris sigmatifolia</i>    |                                  | 1                      |   |    |                                |
| TME tan                                | <i>Tmesipteris tannensis</i>       |                                  | 1                      |   |    |                                |
| TOD bar                                | <i>Todea barbara*</i>              |                                  |                        |   | 4* |                                |
| TRI elo                                | <i>Trichomanes elongata</i>        |                                  | 1                      |   |    |                                |
| TRI ren                                | <i>Trichomanes reniforme</i>       | Kidney fern                      | 1                      | 2 | 3  | 4                              |
| <b>GYMNOSPERMS</b>                     |                                    |                                  |                        |   |    |                                |
| AGA aus                                | <i>Agathis australis</i>           | Kauri                            | 1                      | 2 | 3  | 4                              |
| DAC cup                                | <i>Dacrydium cupressinum</i>       | Rimu                             | 1                      | 2 | 3  | 4                              |
| DAC dac                                | <i>Dacrydium dacrydioides</i>      | Kahikatea                        | 1                      | 2 | 3  | 4                              |
| HAL kir                                | <i>Halocarpus kirkii</i>           | Monoao                           | 2                      |   | 4  |                                |
| LIB plu                                | <i>Libocedrus plumosa</i>          | Kawaka                           | 2                      |   | 4  |                                |
| MAN col                                | <i>Manoao colensoi</i>             | Manoao, silver pine              | 2                      |   | 4  | <i>Lagarostrobos colensoi</i>  |
| PHY tri                                | <i>Phyllocladus trichomanoides</i> | Tanekaha, celery<br>pine         |                        | 3 | 4  |                                |
| POD hal                                | <i>Podocarpus hallii</i>           | Hall's totara                    | 1                      | 2 | 3  | 4                              |
| PRU fer                                | <i>Prumnopitys ferruginea</i>      | Miro                             | 1                      | 2 | 4  |                                |
| <b>ANGIOSPERMS - DICOTYLEDONS</b>      |                                    |                                  |                        |   |    |                                |
| ACK ros                                | <i>Ackama rosifolia</i>            | Makamaka                         | 1*                     |   |    |                                |
| ALS lin                                | <i>Alseuosmia linaarifolia</i>     |                                  |                        |   | 4  |                                |
| ALS mac                                | <i>Alseuosmia macrophylla</i>      | Hoihoi, karapapa                 | 1                      | 2 | 3  | 4                              |
| ALS que                                | <i>Alseuosmia quercifolia*</i>     |                                  |                        |   | 4* |                                |
| ARI ser                                | <i>Aristotelia serrata*</i>        | Makomako, wineberry              | 1*                     |   |    |                                |

| Code  | Scientific name                 | Common name                 | Found in<br>veg. type: | Recent synonym                |
|---|---------------------------------|-----------------------------|------------------------|-------------------------------|
| <b>ANGIOSPERMS – DICOTYLEDONS continued</b> |                                 |                             |                        |                               |
| BEI tar                                     | <i>Beilschmiedia tarairi</i>    | Taraire                     | 1 2 3                  |                               |
| BEI taw                                     | <i>Beilschmiedia tawa</i>       | Tawa                        | 1 2 4                  |                               |
| BRA rep                                     | <i>Brachyglottis repanda</i>    | Rangiora                    | 1                      |                               |
| CLE pan                                     | <i>Clematis paniculata</i>      | Puawananga                  | 1                      |                               |
| COP arb                                     | <i>Coprosma arborea</i>         | Mamangi                     | 1 2                    |                               |
| COP gra                                     | <i>Coprosma grandifolia</i>     | Kanono                      | 1 2 4                  |                               |
| COP luc                                     | <i>Coprosma lucida</i>          | Shining karamu              | 1 2 3 4                |                               |
| COR lae                                     | <i>Corynocarpus laevigatus</i>  | Karaka                      | 1                      |                               |
| DRA lat                                     | <i>Dracophyllum latifolium</i>  | Nei-nei                     | 1 2                    |                               |
| DRA les                                     | <i>Dracophyllum lessonianum</i> |                             | 3 4                    |                               |
| DRO aur                                     | <i>Drosera auriculata*</i>      | Sundew                      |                        | 4*                            |
| DRO bin                                     | <i>Drosera binata</i>           | Sundew                      |                        | 4                             |
| DYS spe                                     | <i>Dysoxylum spectabile</i>     | Kohekohe                    | 1                      |                               |
| ELA den                                     | <i>Elaeocarpus dentatus</i>     | Hinau                       | 1 2 3 4                |                               |
| EPA pau                                     | <i>Epacris pauciflora</i>       |                             |                        | 4                             |
| EPI sp.                                     | <i>Epilobium</i> sp.            |                             |                        | 4                             |
| GAU ant                                     | <i>Gaultheria antipoda</i>      |                             |                        | 4                             |
| GEN rup                                     | <i>Geniostoma rupestre</i>      | Hangehange                  | 1 2 3 4                |                               |
| GON inc                                     | <i>Gonocarpus incanus</i>       | Piripiri                    | 3                      | <i>Haloragis incana</i>       |
| GRI luc                                     | <i>Griselinia lucida</i>        | Puka                        | 1 2 4                  |                               |
| HED arb                                     | <i>Hedycarea arborea</i>        | Porokaiwhiri,<br>pigeonwood | 1 2 3 4                |                               |
| IXE bre                                     | <i>Ixerba brexioides</i>        | Tawari                      | 1 2 3 4                |                               |
| KNI exc                                     | <i>Knightia excelsa</i>         | Rewarewa                    | 1 2 3 4                |                               |
| KUN eri                                     | <i>Kunzea ericoides</i>         | Kanuka                      | 1 2 3 4                | <i>Leptospermum ericoides</i> |
| LAU nov                                     | <i>Laurelia novaezelandiae</i>  | Pukatea                     | 1                      |                               |
| LEP sco                                     | <i>Leptospermum scoparium</i>   | Manuka                      | 1 2 3 4                |                               |
| LEU fas                                     | <i>Leucopogon fasciculatus</i>  | Mingimingi                  | 1 2 3 4                |                               |
| LIT cal                                     | <i>Litsea calicularis</i>       | Mangeao                     | 1                      |                               |
| LOP bul                                     | <i>Lophomyrtus bullata</i>      | Ramarama                    | 1 4                    |                               |
| MEL sim                                     | <i>Melicope simplex*</i>        |                             | 1*                     |                               |
| MEL ram                                     | <i>Melicytus ramiflorus</i>     | Mahoe                       | 1 2 3 4                |                               |
| MET alb                                     | <i>Metrosideros albiflora</i>   | White rata                  | 1 2                    |                               |
| MET car                                     | <i>Metrosideros carminea</i>    | Carmine rata                | 1                      |                               |
| MET dif                                     | <i>Metrosideros diffusa</i>     |                             | 1 4                    |                               |
| MET ful                                     | <i>Metrosideros fulgens</i>     | Winter rata                 | 1 2                    |                               |
| MET per                                     | <i>Metrosideros perforata</i>   | White rata                  | 1 2 4                  |                               |

| Code  | Scientific name                          | Common name                         | Found in<br>veg. type: | Recent synonym               |
|---|--|-------------------------------------|------------------------|------------------------------|
| <b>ANGIOSPERMS – DICOTYLEDONS continued</b> |  |                                     |                        |                              |
| MET rob                                     | <i>Metrosideros robusta</i>              | Northern rata                       | 1 2 4                  |                              |
| MID sal                                     | <i>Mida salicifolia</i>                  | Shiney-leaf maire                   | 1 3 4                  |                              |
| MYR aus                                     | <i>Myrsine australis</i>                 | Mapou                               | 1 2 3 4                |                              |
| MYR sal                                     | <i>Myrsine salicina</i>                  |                                     | 1 2 3 4                |                              |
| NER dic                                     | <i>Nertera dichondrifolia</i>            |                                     | 1 2 3 4                |                              |
| NES cun                                     | <i>Nestegis cunninghamii</i>             | Black maire                         | 1 2 3                  |                              |
| NES lan                                     | <i>Nestegis lanceolata</i>               | White maire                         | 1 2 3 4                |                              |
| NES mon                                     | <i>Nestegis montana</i>                  | Oro-oro, narrow-leaved<br>maire     | 1 3                    |                              |
| OLE ran                                     | <i>Olearia rani</i>                      | Heketara                            | 1 2 3                  |                              |
| PAR het                                     | <i>Parsonsia heterophylla</i>            | Akakaikiore, New<br>Zealand jasmine | 1                      |                              |
| PHE nud                                     | <i>Phebalium nudum</i>                   | Mairehau                            | 2 3 4                  |                              |
| PIT cor                                     | <i>Pittosporum cornifolium</i>           |                                     |                        | 4                            |
| PIT ten                                     | <i>Pittosporum tenuifolium</i>           | Kohuhu                              |                        | 4                            |
| PSE ano                                     | <i>Pseudopanax anomalus</i>              |                                     | 1                      |                              |
| PSE arb                                     | <i>Pseudopanax arboreus</i>              | Five-finger,<br>whauwhaupaku        | 1 2 3 4                |                              |
| PSE cra                                     | <i>Pseudopanax crassifolius</i>          | Horoeka, lancewood                  | 1 2 3 4                |                              |
| PSE axi                                     | <i>Pseudowintera axillaris</i>           |                                     | 1                      |                              |
| QUI ser                                     | <i>Quintinia serrata</i>                 | Tawheowheo                          | 1 2 3 4                |                              |
| RAU edg                                     | <i>Raukaua edgerleyi</i>                 | Raukawa                             | 1                      | <i>Pseudopanax edgerleyi</i> |
| RUB aus                                     | <i>Rubus australis</i>                   | Bush-lawyer                         | 1 2 3                  |                              |
| SCH dig                                     | <i>Schefflera digitata</i>               | Pate                                | 1                      |                              |
| SEN kir                                     | <i>Senecio kirkii</i>                    | Kirk's tree daisy,<br>kohuhurangi   | 1 2 3 4                |                              |
| SYZ mai                                     | <i>Syzygium maire</i>                    | Swamp maire                         | 1                      |                              |
| TOR tor                                     | <i>Toronia toru</i>                      | Toru                                | 2 3 4                  | <i>Persoonia toru</i>        |
| WAH sp.                                     | <i>Wahlenbergia</i> sp.                  |                                     | 2                      |                              |
| WEI sil                                     | <i>Weinmannia silvicola</i>              | Towai                               | 1 2 3 4                |                              |
| <b>ANGIOSPERMS - MONOCOTYLEDONS</b>         |  |                                     |                        |                              |
| ACI sin                                     | <i>Acianthus sinclairii</i>              |                                     | 1                      |                              |
| AST sol                                     | <i>Astelia solandri</i>                  | Perching lily                       | 1 2 3 4                |                              |
| AST tri                                     | <i>Astelia trinervia</i>                 | Kauri grass                         | 1 2 3 4                |                              |
| BAU ter                                     | <i>Baumea teretifolia</i>                |                                     | 1 4                    |                              |
| BUL pyg                                     | <i>Bulbophyllum pygmaeum</i>             | Piripiri                            | 1 2 3 4                |                              |
| CAL chl                                     | <i>Caladenia</i> aff. <i>chlorostyla</i> |                                     | 3 4                    | <i>C. catenata</i>           |

| Code  | Scientific name                                    | Common name                | Found in veg. type: |    |    |   | Recent synonym                  |
|---|--|----------------------------|---------------------|----|----|---|---------------------------------|
| <b>ANGIOSPERMS – MONOCOTYLEDONS continued</b> |  |                            |                     |    |    |   |                                 |
| CHI cor                                       | <i>Chiloglottis cornuta</i>                        |                            | 2                   | 4  |    |   |                                 |
| COL haa                                       | <i>CollospERMum hastatum</i>                       | Widowmaker                 | 1                   | 2  |    |   |                                 |
| COR aus                                       | <i>Cordyline australis</i>                         | Ti, cabbage tree           |                     | 3  |    |   |                                 |
| COR ban                                       | <i>Cordyline banksii</i>                           |                            | 1                   | 3  |    |   |                                 |
| COR obl                                       | <i>Corybas oblongus</i>                            | Spider orchid              | 1                   | 2  | 3  | 4 |                                 |
| CYR obl                                       | <i>Cyrtostylis oblongus*</i>                       |                            |                     | 2* |    |   |                                 |
| DIA nig                                       | <i>Dianella nigra</i>                              | Turutu                     | 1                   | 2  | 3  | 4 |                                 |
| EAR aut                                       | <i>Earina autumnalis</i>                           | Raupeka                    | 1                   | 2  | 3  | 4 |                                 |
| EAR muc                                       | <i>Earina mucronata</i>                            | Peka-a-waka                | 1                   | 2  | 3  | 4 |                                 |
| FRE bau                                       | <i>Freycinetia baueriana</i> subsp. <i>banksii</i> | Kiekie                     | 1                   | 2  |    |   |                                 |
| GAH pau                                       | <i>Gahnia pauciflora</i>                           |                            | 1                   |    |    |   |                                 |
| GAH xan                                       | <i>Gahnia xanthocarpa</i>                          | Toekiwi, giant cutty grass | 1                   | 2  | 3  | 4 |                                 |
| LIB pul                                       | <i>Libertia pulchella*</i>                         |                            | 1*                  |    |    |   |                                 |
| MIC ave                                       | <i>Microlaena avenacea</i>                         | Bush rice grass            | 1                   | 2  | 3  |   |                                 |
| PHO ten                                       | <i>Phormium tenax*</i>                             | Harakeke, N.Z. flax        | 1*                  |    |    |   |                                 |
| PTE aga                                       | <i>Pterostylis agathicola</i>                      |                            | 1                   | 2  | 4  |   | <i>Pterostylis banksii</i>      |
| PTE tru                                       | <i>Pterostylis trullifolia</i>                     |                            |                     | 2  | 4  |   |                                 |
| RHO sap                                       | <i>Rhopalostylis sapida</i>                        | Nikau                      | 1                   | 2  | 3  |   |                                 |
| RIP sca                                       | <i>Ripogonum scandens</i>                          | Kareao, supplejack         | 1                   | 2  | 3  | 4 |                                 |
| RYT bia                                       | <i>Rytidosperma biannulare*</i>                    |                            |                     |    | 4* |   | <i>Notodanthonia biannulare</i> |
| SCH ten                                       | <i>Schoenus tendo</i>                              | Wiwi                       |                     |    | 4  |   |                                 |
| THE pul                                       | <i>Thelymitra pulchella*</i>                       |                            |                     |    | 4* |   |                                 |
| UNC sp.                                       | <i>Uncinia</i> sp.                                 |                            | 1                   |    |    |   |                                 |
| UNC unc                                       | <i>Uncinia uncinata</i>                            | Hook grass                 | 1                   | 2  | 3  | 4 |                                 |
| WIN cun                                       | <i>Winika cunninghamii</i>                         | Winika                     | 1                   | 2  | 3  | 4 | <i>Dendrobium cunninghamii</i>  |

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