

Kowhai (South Island kowhai)

Sophora microphylla

- **Life cycle** perennial
- **Growth Form** divaricating (when young) (to 25 metres)
- **Flower Type** complete, perfect, monoecious, irregular, yellow
- **Seed Type** capsule, gravity dispersal (often drops into rivers)
- **Leaves** compound, leaflets, shape oval, margins entire (smooth), tip obtuse(blunt), surface glabrous (smooth)
- **Stems and Bark** round, rough
- **Roots** taproot



Manuka (tea tree)

Leptospermum scoparium

- **Life cycle** perennial
- **Growth Form** fastigiate (branches erect close to central axis) (to 10 metres)
- **Flower Type** complete, perfect, monoecious, solitary, white
- **Seed Type** capsule, gravity dispersal
- **Leaves** simple, alternate, shape acicular (needle like), margins entire (smooth), tip acute (sharp),
- **Stems and Bark** round, smooth
- **Roots** taproot



Tarata (lemonwood)

Pittosporum eugenioides

- **Life cycle** perennial
- **Growth Form** fastigiate (branches erect close to central axis) (to 12 metres)
- **Flower Type** complete, perfect, monoerocious, regular, compound umbel, yellow, scented
- **Seed Type** capsule, sticky seed, bird dispersed (and now introduced animal)
- **Leaves** simple, alternate, shape elliptic, margins undulate (wavy), tip obtuse (blunt), surface glabrous (smooth), scented when crushed
- **Stems and Bark** round, smooth
- **Roots** taproot



Horopito (pepperwood)

Pseudowintera colorata

- **Life cycle** perennial
- **Growth Form** fastigiated (branches erect close to central axis) (to 2 metres)
- **Flower Type** complete, perfect, monoecious, regular, solitary, cream or yellow
- **Seed Type** berry, black, bird dispersed
- **Leaves** simple, alternate, shape elliptic, margins entire (smooth), tips obtuse (blunt), surface glabrous (smooth), red blotched, white purplish under
- **Stems and Bark** round, smooth
- **Roots** taproot



Tōtara

Podocarpus totara and
Podocarpus cunninghamii

- **Life cycle** perennial
- **Growth Form** erect (to 20 metres)
- **Flower Type** conifer
- **Seed Type** seed borne on fleshy red receptacle, bird dispersed
- **Leaves** simple, alternate, shape narrow-linear, margins entire (smooth), tips acute (sharp), surface glabrous (smooth).
- **Stems and Bark** round, rough
- **Roots** taproot



Kahikatea (white pine)

Dacrycarpus dacrydioides

- **Life cycle** perennial
- **Growth Form** erect (to 43 metres)
- **Flower Type** conifer, dioecious
- **Seed Type** seed borne on fleshy red receptacle, bird dispersed
- **Leaves** shape narrow-linear, margins entire (smooth), tips acute (sharp), surface glabrous (smooth)
- **Stems and Bark** round, rough
- **Roots** taproot, buttress roots



Makomako (wineberry)

Aristotelia serrata

- **Life cycle** perennial
- **Growth Form** fastigate (branches erect close to central axis) (to 10 metres)
- **Flower Type** imperfect, incomplete, panicle, dioecious (separate male and female flowers on different plants), white to pink
- **Seed Type** berry, black, bird dispersed
- **Leaves** opposite, shape deltoid (broadly triangular), margins erose (irregularly toothed), tips acute (sharp), surface wrinkled and uneven, veins obvious, pink underneath
- **Stems and Bark** round, smooth
- **Roots** taproot



Koromiko (willow-leaved hebe)

Hebe salicifolia

- **Life cycle** perennial
- **Growth Form** fastigiated (branches erect close to central axis) (to 5 metres)
- **Flower Type** complete, perfect, monoecious, regular, raceme, white
- **Seed Type** capsule, gravity
- **Leaves** simple, opposite and decusset (look like an X from above) whorled, shape lanceolate, margins minutely serrate, tips acute (sharp), surface glabrous (smooth)
- **Stems and Bark** round, horizontal rings
- **Roots** taproot



Kotukutuku (tree fuchsia)

Fuchsia excorticata

- **Life cycle** perennial
- **Growth Form** erect (to 12 metres)
- **Flower Type** complete, perfect, gynodioecious (bisexual flowers and female flowers), regular, solitary, connate (petals fused to each other), red
- **Seed Type** berry, blue/black, bird dispersed
- **Leaves** simple, alternate, shape lanceolate/oblong, margins entire (smooth), tips acute (sharp), surface wrinkled and uneven, veins obvious, white underneath (can be leafless in winter)
- **Stems and Bark** round, papery
- **Roots** taproot



Kapuka (broadleaf)

Griselinia littoralis

- **Life cycle** perennial
- **Growth Form** fastigiata (branches erect close to central axis, mature trees “spreading”) (to 10 metres)
- **Flower Type** complete, perfect, monoecious, regular, panicle, yellow
- **Seed Type** drupe, black, bird dispersed
- **Leaves** simple, alternate, shape oval, margin entire (smooth), tips obtuse (blunt), surface glabrous (smooth)
- **Stems and Bark** round, smooth
- **Roots** taproot



Horoeka (lancewood)

Pseudopanax crassifolius

- **Life cycle** perennial
- **Growth Form** heteroblastic (changes form when adult)
- **Flower Type** complete, perfect, monoecious, regular, umbel, cream
- **Seed Type** berry, black, bird dispersed
- **Leaves** simple, alternate, shape linear, margins toothed or lobed, acute (sharp), surface glabrous (smooth), prominent midrib
- **Stems and Bark** round, grooved
- **Roots** taproot



Pokaka

Eleocarpus hookerianus

- **Life cycle** perennial
- **Growth Form** heteroblastic (changes form when adult)
- **Flower Type** complete, perfect, monoecious, regular, raceme, white
- **Seed Type** drupe, black, bird dispersed
- **Leaves** simple, alternate, shape lanceolate, narrow-lobed (juvenile), margins bluntly serrate or lobed (adult), tips obtuse (blunt), surface glabrous (smooth).
- **Stems and Bark** round, rough (trunk sounds hollow when knocked)
- **Roots** taproot



Juvenile leaves



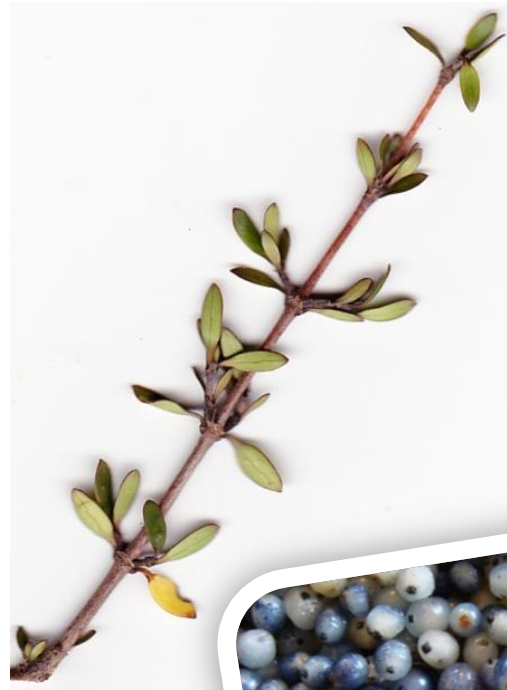
Adult leaf



Mingimingi

Coprosma propinqua

- **Life cycle** perennial
- **Growth Form** divaricating (tangly) (to 6 metres)
- **Flower Type** incomplete, imperfect, dioecious (separate male and female flowers on different plants), irregular, solitary, cream
- **Seed Type** berry, blue, bird dispersed
- **Leaves** simple, opposite, linear to broad oblong, margin entire (smooth), obtuse (blunt), surface glabrous (smooth)
- **Stems and Bark** round, smooth
- **Roots** taproot



Shining karamu

Coprosma lucida

- **Life cycle** perennial
- **Growth Form** fastigiate (branches erect close to central axis) (to 6 metres)
- **Flower Type** incomplete, imperfect, dioecious (separate male and female flowers on different plants), in clusters, cream
- **Seed Type** berry (orange), bird dispersed
- **Leaves** simple, opposite, shape obovate and broad elliptic, margins entire (smooth), tips obtuse (blunt), surface domatia (pits in surface), midrib prominent
- **Stems and Bark** round, smooth
- **Roots** taproot



Mahoe-wao (narrow-leaved mahoe)

Melicytus lanceolatus

- **Life cycle** perennial
- **Growth Form** fastigate (branches erect close to central axis) (to 5 metres)
- **Flower Type** complete, perfect, monoecious, regular, solitary, flowers directly on stems, yellow to purple, scented
- **Seed Type** berry, dark purple
- **Leaves** simple, alternate, shape lanceolate, margins finely but bluntly serrate, tips acuminate (tapering to a fine point), surface glabrous (smooth)
- **Stems and Bark** round, smooth
- **Roots** taproot



Puawhananga (native clematis)

Clematis paniculata

- **Life cycle** perennial
- **Growth Form** climbing
- **Flower Type** incomplete, imperfect, dioecious (separate male and female flowers on different plants), regular, solitary, white
- **Seed Type** achene (dry seed), wind dispersed
- **Leaves** compound (adult trifoliate), narrow linear to narrow lanceolate, margins lobed, tips obtuse (blunt), surface glabrous (smooth)
- **Stems and Bark** round, smooth
- **Roots** fibrous



Pate (seven finger)

Shefflera digitata

- **Life cycle** perennial
- **Growth Form** erect (to 8 metres)
- **Flower Type** complete, perfect, monoecious, regular, panicle, pale green
- **Seed Type** berry (lots of seeds) or drupe (one seed)?, bird dispersed
- **Leaves** compound, alternate, shape palmate, margins sharply serrate, tips bluntly acuminate (tapering to a fine point), surface glabrous (smooth)
- **Stems and Bark** round, finely ridged
- **Roots** taproot



Mountain toatoa (celery pine)

Phyllocladus alpinus

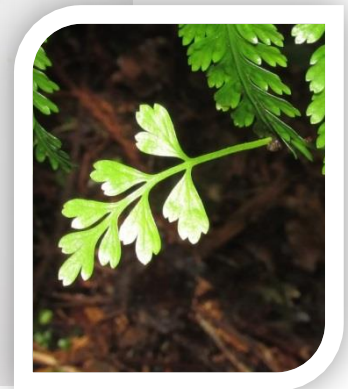
- **Life cycle** perennial
- **Growth Form** fastigiated (branches erect close to central axis) (to 9 metres)
- **Flower Type** cones
- **Seed Type** cones
- **Leaves** phylloclades (flattened stems), opposite, shape variable (rhomboid, spatulate, obovate, or elliptic!) lobed, margins lobed, tips obtuse (blunt), surface glabrous (smooth), white beneath
- **Stems and Bark** round, smooth
- **Roots** taproot



Manamana (hen and chicken fern)

Asplenium bulbiferum

- **Life cycle** perennial
- **Growth Form** rosette
- **Flower Type** no flowers
- **Seed Type** spores in sori elongated along veins, dispersal method bulbils on upper leaf surface
- **Lamina (leaves)** frond, stipe, lamina, rachis, branching, veins, pinnae), opposite 2-3 pinnae (branches), shape elliptic, leaf surface dark green glabrous (smooth)
- **Stems and Bark** stipe
- **Roots** rhizomes (creeping stem)



Kaikomako (ducks foot)

Penantia corymbosa

- **Life cycle** perennial
- **Growth Form** Divaricating and heteroblastic (to 10 metres)
- **Flower Type** imperfect, incomplete, monoecious (but separate male and female flowers, panicle, white, scented, wind or insect pollinated)
- **Seed Type** drupe, black, bird dispersed
- **Leaves** simple, alternate, shape oval margins coarsely toothed or lobed, tips obtuse (blunt), surface coriaceous (tough leathery), veins obvious
- **Stems and Bark** round, ridged or fissured.
- **Roots** taproot



Adult leaf



Juvenile leaves





Similar
Looking
Leaves



pirita (common mistletoe)

Illeostylus micranthus

- **Life cycle** perennial
- **Growth Form** epiphytic, hemiparasitic (deriving part nourishment from host but also capable of photosynthesis)
- **Flower Type** imperfect, incomplete, dioecious (separate male and female flowers on different plants), in panicles, greenish to yellow-green
- **Seed Type** drupe, yellow or orange, bird dispersed (green seed shown)
- **Leaves** simple, opposite, broadly elliptic (variable – can also be ovate, elliptic, rhomboid)), margins entire (smooth), tips obtuse (blunt), coriaceous (tough and leathery)
- **Stems and Bark** round, smooth
- **Roots** haustoria (attaching to host)



Red Tussock (now known as
copper tussock)

Chionochloa rubra

- **Life cycle** perennial
- **Growth Form** tuft
- **Flower Type** panicle (flowers perfect)
- **Seed Type** caryopsis (dry seed fused to wall, doesn't open when mature)
- **Leaves** shape linear, margins inrolled, tip acicular, ligule hairy, leaf blades persist on sheath (grasses have their own vocabulary)
- **Roots** fibrous (adventitious roots)



Ti kouka (cabbage tree)

Cordyline australis

- **Life cycle** perennial
- **Growth Form** erect, (to 20 metres)
- **Flower Type** complete, perfect, monoecious, regular, panicle, white, scented
- **Seed Type** berry, white, bird dispersed
- **Leaves** simple, spiral, shape lanceolate (broader at base), margin entire (smooth), leaf tip acute (sharp), surface glabrous (smooth) with parallel venation (monocot)
- **Stems and Bark** round, rough
- **Roots** taproot, and fibrous with aerial roots on stems



peka-a-waka (bamboo orchid)

Earina mucrinata

- **Life cycle** Perennial
- **Growth Form** epiphyte
- **Flower Type** Inflorescence - racemose panicle, perfect, colour yellow-green
- **Seed Type** capsules grey, wind dispersed
- **Leaves** simple, alternate, imbricate (overlapping), shape flexuose linear lanceolate, margin entire (smooth), leaftip acute (sharp), surface glabrous (smooth).
- **Roots** rhizomes (creeping stem), uses host plant for support.



Kohuhu (black mapou)

Pittosporum tenuifolium

- **Life cycle** perennial
- **Growth Form** fastigate (branches erect close to central axis) (to 8 metres)
- **Flower Type** complete, perfect monoecious, regular, solitary, purple, scented
- **Seed Type** capsule, sticky seed, bird dispersed
- **Leaves** simple, alternate, shape various - oblong, ovate, obovate, elliptic, margins entire (smooth), tips obtuse (blunt), surface glabrous (smooth)
- **Stems and Bark** round, smooth
- **Roots** taproot

