

Beech Mistletoes in Abel Tasman National Park.

Guide for plant detection and identification.

Three main species are present within Abel Tasman N. P. with the primary hosts being:

1. *Peraxilla colensoi* (Scarlet mistletoe): Silver beech
2. *Peraxilla tetrapetala* (Red mistletoe): Mountain and black beech, and *occasionally* red beech
3. *Alepis flavida* (Yellow mistletoe): Mountain and black beech.

Mistletoe plants can be detected by:

1. Obvious plant/stem development from host stem at low height.
2. Different density and texture of foliage from the host tree foliage at mid-upper levels.
3. Obvious flowering of the plant, or evidence of flowers (petals) on the ground below the plant. Flowers present (most conspicuous) between late December- late February.

Plant details.

If a mistletoe plant is located, the following information should be recorded (for records and to facilitate relocation and possible monitoring).

Required:

1. **Location:** Either GPS-derived coordinates or description (e.g. *"c. 30 m from stoat trap AH065 to AH066. 2 m on left [southwest] of trap line).*
2. **Mistletoe species** (e.g. *Peraxilla tetrapetala* or Red mistletoe)

Additional:

3. **Host species:** (e.g. silver beech)
4. **Plant height** (approximate to nearest metre) on host: (e.g. 4m). To assist relocation.
5. **Plant size** (approximate in 3 dimensions: 2 x horizontal and 1 x vertical): (e.g. 0.5 x 0.75 x 1.0 m). To assist relocation

Peraxilla colensoi (Scarlet mistletoe)



Key identification features

- Primary host: Silver beech.
- Shrub up to 3-5 m.
- Parasitizes further out on branches of its host than *Peraxilla tetrapetala*.
- Leaves to 8cm long, smooth, thick and have a leathery texture. Veins hardly evident and only the midrib is conspicuous.
- Flower heads have groups of 3-10 flowers and are up to 60 mm long.
- Without flowers present, young epiphytic broadleaf (*Griselinia littoralis*) can be mis-identified as *P.colensoi*. Subtle differences in branching habit to distinguish (experience required).

Peraxilla tetrapetala (Red mistletoe)



Key identification features

- Primary host: Mountain/black beech. Occasionally red beech.
- Shrub up to 3 m.
- Parasitizes on inner branches of its host and clumps/stems commonly present on host stem.
- Leaves to 2.5cm long, diamond shaped.
- Veins hardly evident and only the midrib is conspicuous.
- Leaves often with blister galls.
- Flower heads are solitary or 2-4 together and are up to 40 mm long.

Alepis flavida (Yellow mistletoe)



Key identification features

- Primary host: Mountain/black beech
- Shrub up to 2 m.
- Parasitizes further out on smaller branches of its host than *Peraxilla spp.*
- Leaves oval, leathery 2-6 cm long. Dull green and have a leathery texture.
- Veins are longitudinally parallel and visible on the lower surface of the leaf (hold up to light).
- Sparsely leafy compared to *Peraxilla spp.*
- Flower heads are small, orange-yellow.