1. Introduction

This introduction to plant identification in New Zealand is the first in a series of training resources to be developed by the New Zealand Plant Conservation Network. It was initially prepared after the Network was funded by the New Zealand Government's Biodiversity Condition and Advice Fund in 2005 to develop plant conservation training for iwi. The book was modelled on a range of material including North'Tec's plant courses and the Department of Conservation's training programme.

The New Zealand Plant Conservation Network is involved in a variety of programmes to implement the New Zealand Biodiversity Strategy and Global Strategy for Plant Conservation. Those programmes include education and advocacy, developing plant conservation strategies, prioritising conservation effort and gaining resources, providing technical expertise and disseminating information about native plants.

A key area of work is education to raise awareness of the plight of New Zealand's indigenous plants and fungi, and to inform people about the native plant life of New Zealand (through publications, website, meetings and training courses and workshops). To this end, the Network is developing other training resources, including covenant management—techniques for managing and restoring Nga Whenua Rahui kawenata and conservation covenants; and wetland and stream side management—techniques for restoring and protecting stream side vegetation and wetlands.

What is the New Zealand Plant Conservation Network?

The New Zealand Plant Conservation Network was established in April 2003 and now has over 600 members worldwide. The Network's mission is:

- To educate people about New Zealand's native plant life (including fungi) and promote indigenous plant conservation in New Zealand and throughout Oceania.
- To collaborate to protect and restore New Zealand's indigenous plant life, their natural habitats and associated species.
- To disseminate information about the taxonomy, biology, ecology, and status of indigenous plant species and communities in New Zealand, and
- To promote activities to protect them throughout their natural range.

The Network has a vision that "no indigenous species of plant will become extinct nor be placed at risk of extinction as a result of human action or indifference, and that the rich, diverse and unique plant life of New Zealand will be recognised, cherished and restored."

To achieve that vision the Network works with many people and organisations throughout New Zealand.



The importance of plant conservation in New Zealand

Plant diversity is a key component of nature's life-support systems. The quality of our life, the quality of the water we drink, the quality of the air we breathe and the quality of the soil all depend on maintaining natural plant communities. Most of New Zealand's indigenous plants and fungi, the communities they are part of and the animal communities they support are endemic. That means they do not occur in the wild anywhere else in the world. Our responsibility is to protect these natural resources not only because of the ecosystem services that they deliver or because of the many uses to which they can be put but because of their intrinsic right to exist. New Zealand is world renowned for its flora, fauna and fungi and is regarded internationally as a global biodiversity "hot spot". The continued survival of New Zealand's native plant life is threatened.



Myrsine umbricola, an At Risk – Declining shrub known only from the Tararua Range.

The 2017 NZ Threat Classification System assessment of New Zealand indigenous vascular plants, identified 403 taxa as Nationally Threatened (213 Nationally Critical, 76 Nationally Endangered, 114 Nationally Vulnerable) and a further 850 taxa as At Risk. In addition, a further 107 plants were listed as Data Deficient, meaning there was not enough information to enable their status to be assessed (de Lange et al. 2018: Conservation status of New Zealand indigenous vascular plants, 2017 *New Zealand Threat Classification Series* 22. Department of Conservation, Wellington). Overall, this represents a decline in the conservation staus of the New Zealand flora since the previous assessment in 2012.

Many native plant communities in New Zealand are also threatened, such as wetlands, coastal dunes and lowland forest. Other, non-vascular, plant species and over 50 species of fungi are also known to be at risk of extinction in the wild.

Among the most significant threats are land development (such as subdivision, wetland drainage and forest clearance), invasion of exotic plant, animal and fungal species and global environmental changes (such as a changing climate). Plant conservation, in response to those threats, will halt and reverse the current decline of native plant life in New Zealand.

More information about the Network

More information about New Zealand's native plant life (including all native plants mentioned in this module) and the New Zealand Plant Conservation Network maybe obtained by visiting the Network website at www.nzpcn.org.nz. This website includes information about how to become a Network member to gain full access to the website and to receive the monthly Network newsletter.

The contact address for the Network is as follows:

New Zealand Plant Conservation Network P.O. Box 147 MANGONUI 0442 NEW ZEALAND Email: info@nzpcn.org.nz

Involvement of NorthTec

This book was written for the New Zealand Plant Conservation Network by Iain Reid of NorthTec, and the late John Sawyer and Jeremy Rolfe of the Network. NorthTec has been involved in plant training programmes for many years, running a range of courses including innovative Horticulture and Sustainable Rural Development Level 2 programmes that are delivered at many marae and small rural areas throughout Northland. It also has a strong Level 4 programme which is rapidly upgrading to more advanced levels and a wide range of disciplines.

For more information about the courses run by NorthTec go to: northtec.ac.nz.