



Annual distribution of *Porphyra virididentata* lineage

The red alga *Porphyra virididentata* grows in the mid-intertidal zone on rocky shores on exposed to moderately exposed coasts near Wellington, Cape Campbell, Kaikoura, Moeraki, Timaru, Dunedin, and Kuri Bush.

1. Literature sources

The literature was searched for distributional information for *P. virididentata*, described in Nelson et al. (2001).

- a. A search was carried out of the following databases: Te Puna using the keywords "*Porphyra virididentata* + Zealand+geograph? +distribut?" (16/09/2005); Aquatic Sciences and Fisheries Abstracts "*porphyra virididentata* and zealand and (geograph* or distribut*)" (16/09/2005); Web of Science "TS=(*Porphyra virididentata* and zealand and (geograph* or distribut*))" (15/09/2005); Scopus "TITLE-ABS-KEY("*Porphyra virididentata*" and zealand and (geograph* or distribut*))" (16/09/2005); Google Scholar "zealand geographic or distributed or distribution "*Porphyra virididentata*" (19/09/2005). From all these sources 1 paper was located (ASFA = 1, Scopus = 1), Nelson et al. (2001) in which the species was described.
- b. Using subject indices, *Seafood New Zealand* was checked for articles dealing with *Porphyra* distribution and research in September 2005.
- c. A search of NIWACAT in September 2005 produced no records.

2. Ministry of Fisheries electronic databases

No data are recorded using the name *Porphyra virididentata*.

3. Museum holdings

Holdings of *P. virididentata* at WELT, the herbarium of the Museum of New Zealand Te Papa Tongarewa and in algal research collections at NIWA were examined in September 2005. Other herbarium holdings were not investigated because it was considered that they would not add any additional records: all specimens of *P. virididentata* have been identified and then distributed to other herbaria from Te Papa. Data were used to help estimate presence/absence.

4. Summary

Porphyra virididentata grows in the mid-intertidal zone on rocky shores on exposed to moderately exposed coasts. It has been found in Wellington (Island, Houghton and Lyall Bays), Cape Campbell, Kaikoura, Moeraki,

Timaru, Dunedin, and Kuri Bush. It has not been found on the Chatham Islands or on Stewart Island.

It was not possible to distinguish the 90% and 100% distributions, which have been extended to link headlands where this species has been recorded and/or where equivalent habitats occur.

The above information on the distribution of *P. virididentata* derived primarily from herbarium collections, was reviewed by Dr Murray Parsons, former Keeper Landcare Herbarium, and then integrated by hand onto a large-scale map of New Zealand. The rounded lines were then digitised and imported into a GIS software package as layers. The areas of each distribution class were calculated and the layers were linked to attribute and metadata files. The map, because of its scale, cannot be taken to accurately define the local distribution of this species.

5. References

The following publication is the key reference describing both this species and the current understanding of its distribution.

Nelson, W.A., Broom, J.E. & Farr, T.J. (2001). Four new species of *Porphyra* (Bangiales, Rhodophyta) from the New Zealand region. *Cryptogamie Algologie* 22: 263–284.