## A Check List of New Zealand Charophyta

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## Abstract

A list of 18 charophytes recorded in New Zealand is given, together with their distributions in New Zealand as at present known

Hooker, in the Handbook of the New Zealand Flora (1867) recorded five charophytes from New Zealand, and later Nordstedt (1880), in describing and recording those collected in 1874–75 by Berggren, brought the number up to twelve. Since then there have been a number of collections and a few other species have been recorded. The records, however, are not easily accessible to most New Zealand botanists. This paper, therefore, provides a list of all charophyte species and varieties for which there are known published records for New Zealand.

Wood's list (1952) has for the most part been used in deciding the approved modern name. Under each accepted name is given the first record of a collection for New Zealand. This is under the heading "Original Collection" when it is the first record for the taxon. If there is further information there is also given the present known distribution for New Zealand as shown by published records and collections examined by the writer—It should be noted that where New Zealand or North Island is given in the first record it is sometimes clear, or highly probable, that only one or two collections were known, and in no case can such a name in a first record be safely taken as necessarily indicating a widespread distribution.

## CHECK LIST

1 Nitella conformis, Nordstedt

Original record: Nordstedt (1880: 18); Lake Pearson, Canterbury

2 N. hookeri, Braun var hookeri

Original record: Braun (1849: 199); New Zealand and Kerguelen Island.

NZ Distribution: Widespread.

N. hookeri, Braun, var. attenuata, Nordstedt

Original record. Nordstedt (1889: 14), Ohaewai, in Bay of Islands

N. hookeri, Braun, var. microcephala, Nordstedt

Original record: Nordstedt (1880 19); Otaua River, between Bay of Islands and Hokianga.

3 N. hyalina, (DC) Agardh var. novae-zelandiae, Braun Original record: Braun in Hochstetter (1863: 112); Lake Pupuke, Takapuna. NZ Distribution. Widespread.

4 N. leonhardii, Wood

Original record: N. interrupta, Braun ex Leonhardi (1863 · 146) as sp. ined. Presumably the specimens recorded by Leonhardi came from the Waikato River as they were collected by the Novara Expedition (Nordstedt 1880: 20), and the only specimens of this species collected by that expedition seem to be those of Jelinek, 1859, from the "Waikate River" (Braun and Nordstedt 1882: 93).

NZ Distribution. North of latitude 39°, North Island In the Westport district, South Island

5. N. leptosoma, Nordstedt

Original record: Nordstedt (1880: 17), Omatangi, Taupo.

6 N. mucosa (Nordstedt) J Groves

Original record: N. pseudoflabellata, Braun f. mucosa, Nordstedt; Nordstedt (1880: 16); Waitangi, Bay of Islands; Tauranga.

N.Z. Distribution: North of latitude 38°, North Island.

7. N. stuartii, Braun

First N.Z. record: Nordstedt (1888: 181); Te Whau (Thames Goldfields)

N.Z. Distribution: Thames District and near Kaitaia.

8 N. tricellularis, (Nordstedt) Nordstedt in T. F. Allen

Original Record: N. translucens (Pers.) Ag subsp. tricellularis, Nordstedt, Nordstedt (1880: 15); Lake Pearson, Canterbury

N.Z. Distribution: Lakes in the region of the middle Waimakariri River

9 Lamprothamnion macropogon, (Braun) Ophel

First N.Z. record: Chara macropogon, Braun; J. Groves and G O Allen (1935)

54); New Zealand

NZ. Distribution: Wellington to Timaru, in coastal lagoons

10 Chara australis, R Br var. australis

First N.Z. record: C australis, R. Br., Braun in Hooker (1860: 159), New Zealand. This record precedes the recognition of the varieties of C australis and should it prove to have been based on another variety described later (though there seems no reason to suppose it was), the first record for New Zealand of C australis, var. australis will be.

C. australis, R. Br var nobilis, Braun, Braun and Nordstedt (1882 105); New Zealand.

N.Z. Distribution: Widespread in the North Island

C. australis, R. Br. var vieillardii, Braun

First N.Z. record: Nordstedt (1889 32); New Zealand

N.Z. Distribution: Possibly widespread

11 C. braunii, Gmelin

Only N.Z. record J Groves (1924 327). New Zealand

12. C. contraria, Braun ex Kutzıng var behriana, Braun

First NZ. record C contraria Hooker (1867 550), North Island

13 C. fibrosa, Ag ex Bruzelius subsp. gymnopitys, (Braun) Zaneveld var acanthopitys (Braun) Zaneveld

First N.Z record C benthami, Braun. Nordstedt (1880. 20), Lake Tarawera, Auckland Province.

NZ. Distribution Lake Tarawera and northwards to Mangonii County Lake Ianthe, Lake Sarah, and Bruce Bay in the South Island.

14. C. globularis, Thuillier var. capillacea (Thuillier) Zaneveld

First NZ record C. fragilis, Desv , Nordstedt (1880 20), Lake Taraweia

N.Z. Distribution: Widespread.

15. C. vulgaris, Vaillant ex Linnaeus

First N.Z. record C foetida, Braun; Hooker (1867: 550), North Island Apparently this record is based on one poor specimen scarcely determinable with certainty, Braun and Nordstedt (1882 · 162)

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<sup>\*</sup> Not seen, reference taken from quotations in Zaneveld and from Nordstedt, 1880.