

Widely distributed red alga from New Zealand receives a scientific name at last

March 28 2013



This image shows Pyropia plicata on intertidal rocks. Credit: Dr. Wendy Nelson

The most commonly occurring red alga in the algal order **Bangiales** in



New Zealand has at last received a formal scientific name. *Pyropia plicata*, is an intertidal red alga, found in abundance in the North, South and <u>Chatham Islands</u>. It has been confused for many years with a species first collected from the New Zealand subantarctic islands in 1840. Recent research had clarified the identity and distribution of the southern species, Porphyra columbina, and also transferred it to the genus Pyropia. The description of *Py. plicata* was published in the open access journal *PhytoKeys*.

The newly described *Py. plicata* has a distinctive growth form with pleated blades. It has beautiful purple to grey <u>coloration</u>, bleaching to khaki-green on upper edges. It is found attached to high intertidal rocks by a central <u>rhizoidal</u> holdfast, which are hair-like extensions of the blade cells. Although the blades are only one cell layer thick they are remarkably resistant to the rigours of life on the intertidal shore and can withstand drying in the sun, and rehydrating when the tide returns.





This is an image of *Pyropia plicata*, herbarium (scale bar = 5 cm). Credit: Dr. Wendy Nelson

This is one of the species that is known in New Zealand as karengo, and is highly prized by Maori as a taonga or treasure. Pyropia species are also eaten worldwide and known to be high in protein and trace elements. In Japan species of Pyropia are known as nori and are familiar to many people worldwide as the seaweed sheet that is wrapped around sushi.





This is an image of bleached *Pyropia plicata* on intertidal rocks in summer. Credit: Dr. Wendy Nelson

"When we began work on the Bangiales of New Zealand over 20 years ago, we thought there were only a few species in this order in the southern Pacific." comments Dr. Wendy Nelson from the National Institute of Water and Atmospheric Research, New Zealand. "We have come to realise the diversity in this region is very high, and there are still many species that are undescribed. Documenting species and clarifying their relationships are important steps in understanding diversity and protecting our environment."

More information: Nelson, W.A. (2013) Pyropia plicata sp. nov. (Bangiales, Rhodophyta): naming a common intertidal alga from New Zealand. *PhytoKeys* 21: 17-28., doi: 10.3897/phytokeys.21.4614



Sutherland, J.; Lindstrom, S.; Nelson, W.; Brodie, J.; Lynch, M.; Hwang, M.S.; Choi, H.G.; Miyata, M.; Kikuchi, N.; Oliveira, M. Farr, T.; Neefus, C; Mols-Mortensen, A.; Milstein, D.; Müller, K. (2011).. A new look at an ancient order: generic revision of the Bangiales. *Journal of Phycology* 47:1131-1151.

Provided by Pensoft Publishers

Citation: Widely distributed red alga from New Zealand receives a scientific name at last (2013, March 28) retrieved 18 June 2024 from https://phys.org/news/2013-03-widely-red-alga-zealand-scientific.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.