**PHOTOBIONT DIVERSITY IN THE MARINE LICHEN *Lichina pygmaea*: MORE COMPLEX THAN WE THOUGHT?**

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In recent years, the ‘one fungi, one algae and/or one cyanobacteria’ nature of the lichen symbiosis has come under scrutiny. Studies on terrestrial lichens have indicated the presence of other cryptic photobionts that increase ecological fitness in response to varying environmental conditions. Such complexity in photobiont diversity may be common, but is yet to be investigated in marine lichens. Marine lichens live in distinct ecosystems compared to their terrestrial counterparts because of regular submersion in seawater and are much less studied. We performed bacteria 16S and eukaryote 18S rRNA gene metabarcoding surveys to assess total photobiont diversity within the marine lichen *Lichina pygmaea* (Lightf.) C. Agardh, which is widespread throughout the intertidal zone of Atlantic coastlines. We found that in addition to the established cyanobacterial photobiont *Rivularia*, *L. pygmaea* is also host to an apparent range of other marine and freshwater cyanobacteria, as well as marine eukaryote algae in the family Ulvophyceae (Chlorophyta). We propose that symbiosis with multiple freshwater and marine cyanobacteria and eukaryote photobionts may contribute to the ability of *L. pygmaea* to survive the harsh fluctuating environmental conditions of the intertidal zone. Funding: NC and MC (NERC NE/N006151/1, ERC 772584).