

GENETIC VARIABILITY AND GEOGRAPHICAL DISTRIBUTION OF *CLADONIA BOREALIS* AROUND THE POLAR REGION

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The fruticose lichen *Cladonia borealis* is found in Europe, Asia, North and South America as well as the Antarctic and the Arctic area (cosmopolitan species). In order to investigate genetic variation and geographical distribution of *C. borealis* from Svalbard (Arctic), King George Islands (Antarctic) and Punta Arenas (Chile), 59 specimens of the species were randomly selected and the sequences of rDNA (ITS–LSU) and RNA polymerase II (RPB2) were determined. Results indicated that they are divided into 2 phylogenetic groups in King George Islands, 3 groups in Svalbard and one group in Punta Arenas. Each subgroup was composed only of specimens from each geographical area. The results suggested that this species have evolved with geographical barrier.