

Phytosociological characterization of the High Arctic Region of Canada

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Vegetation of the High Arctic Canada is physiognomically characterized by an extensive barren tundra composed of dwarf shrubs, herbaceous plants, bryophytes and lichens, of extremely low vegetative cover. Such landscapes are often called "polar desert". The first attempt of phytosociological classification of vegetation of the High Arctic Canada was made by Barrett (1972) in Devon Island, who recognized 9 associations which were hierarchically grouped into 7 alliances and 7 orders. After then, some more studies were made including Sheard & Geale (1983), Bergeron & Svoboda (1989), Kojima (1991, 1999), and Batten & Svoboda (1994). Based on those preceding studies, this paper provides an integrated summary of the phytosociological classification and hierarchy of the High Arctic vegetation of Canada, presenting four alliance (1.Papaverion lapponici, 2.Dryado-Salicion arcticae, 3.Cassiopion tetragonae, 4.Caricion stantis). These alliances were grouped to higher units, i.e. Saxifragetalia oppositifoliae and Caricetalia stantis, and the highest unit, i.e., Salicetea arcticae.

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