

A contribution to the lichen flora of Scoresby Land, Central East Greenland

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Abstract – This paper lists 70 taxa of lichens from Scoresby Land in Central East Greenland. 16 taxa are new to this region. *Pyrenopsis furfurea* and *Umbilicaria hirsuta* represent northern range extensions in East Greenland. Notes on the distribution of the collected taxa are given.

Lichen flora / Scoresby Land / Greenland

INTRODUCTION

The lichen flora of Scoresby Land is relatively well known - at least as regards the most conspicuous species. During Norwegian expeditions in 1929 and 1930 B. Lynge and P. F. Scholander collected many lichens at up to four localities in this area (Lynge & Scholander, 1932; Lynge, 1940). In the years 1961, 1962, 1968, 1971 and 1980 the region was visited by the British botanists, P. Topham and G. Halliday. Their lichen collections from numerous localities were determined and published by the author (Hansen, 1982). The British physician, R. Corner, participated in the expedition in 1980 and collected a valuable material of lichens, which he forwarded to the author for determination. It contains 70 taxa of lichens including 16 that appear to be additions to the known lichen flora of Scoresby Land. Totally about 200 species of lichens are so far known from this area, which probably are far richer in lichens than indicated by this number. Like the Scoresby Sund area, Scoresby Land is in need of further lichenological investigations (Hansen, 2008).

MATERIAL AND METHODS

Study area

The central part of Scoresby Land has an alpine character. It is extremely mountainous and intersected by numerous glaciers radiating toward the coast. The maximum altitude of the mountains is about 2500 m a. s. l. Most previous lichenological investigations have been carried out in the coastal lowland areas along Kong Oscars Fjord, in the bays, Mesters Vig and Antarcitics Havn, and in the valleys such as, for example, Skeldal and Nedre Funddal. However, lichens

have also been collected on mountain tops, for example, that of Sortebjerg. Permian- Jurassic deposits consisting of sandstones, arkoses and shales are widely distributed in these easily accessible areas, together with late Proterozoic Eleonore Bay deposits consisting of dolomite and limestone rich in Ca and Mg. Dolerite dykes and sills and basic intrusions of Tertiary age occur scattered in the whole region. (Hansen, 1982). These rock types result in nutrient-enriched environments, which are distinctly reflected by the available lichen collections from the area. Climatically the region is situated in the medium arctic, continental zone (Jensen, 1999). Meteorological observations from Mesters Vig show an annual mean temperature of c. -10°C . The mean temperature of the warmest month, July, is c. $+6^{\circ}\text{C}$, while the mean temperature of the coldest month, February, is c. -24°C . The annual precipitation is c. 275 mm, most of it falling as snow (Hansen, 1982).

Collection and Identification

Collection of lichens was carried out at numerous sample plots in Scoresby Land (Fig. 1). The collected material, a total of 143 lichen specimens, was studied with Zeiss light microscopes and determined/checked by the author. An asterisk (*) in front of the name in the list of lichens indicates that the taxon is an addition to the lichen flora of the region. The specimens are deposited at the Botanical Museum, University of Copenhagen (C). The nomenclature in the list follows Santesson *et al.* (2004).

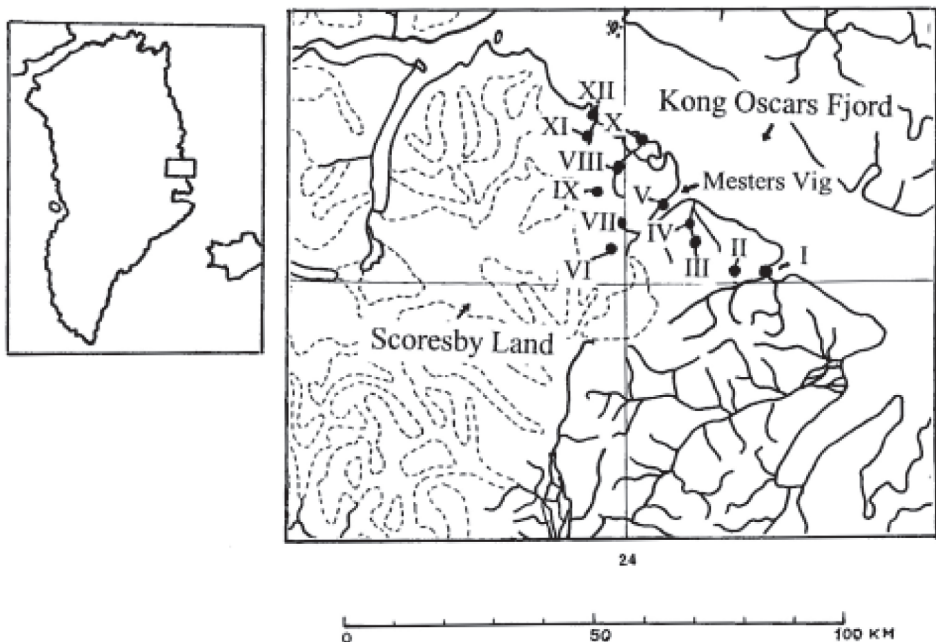


Fig. 1. Location of the investigation area in Central East Greenland. **I:** Antartics Havn. **II:** Majdal. **III:** Jægerdal Pass. **IV:** Jægerdal. **V:** Mesters Vig. **VI:** Sortebjerg. **VII:** Nedre Funddal. **VIII:** Tunnelev. **IX:** Hestekoen. **X:** Nyhavn. **XI:** Skeldal. **XII:** Area between Nyhavn and Skeldal. The small map of Greenland shows the position of the Scoresby Land area.

LIST OF LICHENS

* *Acarospora rhizobola* (Nyl.) Alstrup – III: Jægerdal Pass, c. 72°02'N, 23°35'W, alt. 250 m, on soil on north side of pass, R. Corner 21 August 1980. A somewhat scattered terricolous lichen known so far from Scandinavia, Scotland, Greenland and Siberia (Alstrup, 1986; Andreev *et al.*, 1996; Santesson *et al.*, 2004; Smith *et al.*, 2009).

Acarospora schleicheri (Ach.) Massal. – X: Nyhavn, c. 72°15'N, 23°50'W, on *Diploschistes muscorum* on mineral soil, R. Corner 16 August 1980. A widespread, bi- and circumpolar, xerophytic lichen with preference for slightly alkaline soils (Nimis, 1993; Hansen, 1995).

Alectoria nigricans (Ach.) Nyl. – I: Antartics Havn, 72°00'N, 23°06'W, on soil together with *Flavocetraria cucullata*, R. Corner 19 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on soil in fell-field, R. Corner 16 August 1980. A common, bi- and circumpolar, terricolous lichen.

* *Arctoparmelia separata* (Th. Fr.) Hale – X: Nyhavn, c. 72°15'N, 23°50'W, on siliceous rock together with *Melanelia hepatizon*, R. Corner 16 August 1980. A widespread, circumpolar, terricolous and saxicolous lichen (Thomson, 1984; Hansen, 2002).

* *Arthrorhaphis alpina* (Schaer.) R. Sant. – III: Jægerdal Pass, c. 72°02'N, 23°35'W, alt. 250 m, on soil on north side of pass, R. Corner 21 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on mineral soil in fell-field, R. Corner 16 August 1980. A widespread, bi- and circumpolar, terricolous lichen.

* *Bellemeria subsorediza* (Lynge) R. Sant. – VI: Sortebjerg, 72°04'N, 24°05'W, alt. 1100 m, on basaltic rock, R. Corner 25 August 1980. A widespread, circumpolar, saxicolous lichen (Andreev *et al.*, 1996; Thomson, 1997).

Brodoa oroarctica (Krog) Goward – V: Mesters Vig, c. 72°09'N, 23°07'W, on flat, sheltered rock on south side of entrance to the fjord, R. Corner 22 August 1980; VIII: Tunnelely, c. 72°10'N, 24°07'W, alt. 200 m, on top of rock, R. Corner 28 August 1980; IX: Hestekoen, c. 72°13'N, 24°10'W, alt. 500 m, on boulder, R. Corner 29 August 1980. A widespread, circumpolar, saxicolous lichen.

* *Buellia pulverulenta* (Anzi) Jatta – V: Mesters Vig, c. 72°09'N, 23°07'W, on *Physconia muscigena* on plant remains, R. Corner 22 August 1980. A somewhat disjunct, circumpolar, endoparasitical lichen (Alstrup & Hawksw., 1990; Nimis, 1993; Thomson, 1997).

Caloplaca ammiospila (Wahlenb.) H. Olivier – X: Nyhavn, c. 72°15'N, 23°50'W, on plant remains, R. Corner 16 August 1980. A common, bi- and circumpolar, terricolous lichen (Nimis, 1993; Hansen, 1995; Nash *et al.*, 2007).

Caloplaca tirolensis (Zahlbr.) – V: Mesters Vig, c. 72°09'N, 23°40'W, on plant remains including lichens, R. Corner 22 August 1980. A widespread, bi- and circumpolar, terricolous lichen (Hansen, Poelt & Söchting, 1987).

* *Candelariella xanthostigma* (Ach.) Lettau – I: Antartics Havn, 72°00'N, 23°06'W, alt. 600 m, on mosses and plant remains, R. Corner 18 August 1980. A widespread, bi- and circumpolar, muscicolous and terricolous lichen (Hansen, 1984; Nimis, 1993; Thomson, 1997).

Cetraria islandica (L.) Ach. – I: Antarctica Havn, 72°00'N, 23°06'W, alt. 500 m, on soil, R. Corner 18 August 1980; III: Jægerdal Pass, 72°02'N, 23°35'W, alt. 250 m, R. Corner 21 August 1980; VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, on soil in *Cassiope tetragona-Vaccinium uliginosum* heath together with *Flavocetraria nivalis*, R. Corner 26 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on soil, R. Corner 28 August 1980. A common, cosmopolitan, terricolous lichen.

Cladonia amaurocraea (Flörke) Schaer. – II: Majdal, 72°00'N, 23°21'W, alt. 100 m, among mosses in *Cassiope* vegetation, R. Corner 20 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, R. Corner 22 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on soil, R. Corner 17 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, among mosses, R. Corner 28 August 1980. A common, circumpolar, terricolous lichen (Hansen, 1995).

* ***Cladonia borealis*** S. Stenroos – V: Mesters Vig, c. 72°08'N, 23°40'W, among mosses on soil, R. Corner 23 August 1980; VIII: Tunnelelv, 72°10'N, 24°07'W, alt. 200 m, among mosses on soil, R. Corner 27 August 1980; IX: Hesteskoen, 72°13'N, 24°10'W, alt. 900 m, on soil together with *Solorina crocea*, R. Corner 29 August 1980. A common, circumpolar, terricolous lichen (Hansen, 1995).

Cladonia chlorophaea (Flörke ex Sommerf.) Spreng. – VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, among mosses in *Cassiope tetragona-Vaccinium uliginosum* heath, R. Corner 26 August 1980. A common, cosmopolitan, terricolous lichen (Thomson, 1984).

Cladonia cyanipes (Sommerf.) Nyl. – XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, among mosses on soil, R. Corner 28 August 1990. A widespread, circumpolar, terricolous lichen (Hansen, 1995).

Cladonia fimbriata (L.) Fr. – XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, among mosses on soil, R. Corner 28 August 1980. A common, bi- and circumpolar, terricolous lichen (Nimis, 1993).

Cladonia macroceras (Delise) Hav. – VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, among mosses in *Cassiope tetragona-Vaccinium uliginosum* heath, R. Corner 26 August 1980. A widespread, circumpolar, terricolous lichen (Nimis, 1993).

Cladonia mitis Sandst. – I: Antarctica Havn, 72°00'N, 23°06'W, on soil in heath, R. Corner 18 August 1980; II: Majdal, 72°00'N, 23°21'W, alt. 100 m, on soil, R. Corner 20 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, on soil, R. Corner 22 August 1980; VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, among mosses in *Cassiope tetragona-Vaccinium uliginosum* heath, R. Corner 26 August 1980; VIII: Tunnelelv, 72°10'N, 24°07'W, alt. 200 m, among mosses on soil, R. Corner 27 August 1980. A common, bi- and circumpolar, terricolous lichen (Hansen, 1995; Smith *et al.*, 2009).

Cladonia pocillum (Ach.) Grognot – I: Antarctica Havn, 72°00'N, 23°06'W, on mineral soil on stable talus slope, R. Corner 19 August 1980; X: Nyhavn, 72°15'N, 23°50'W, on soil in heath together with *Solorina bispora*, R. Corner 16 August 1980. A widespread, bi- and circumpolar, terricolous lichen (Smith *et al.*, 2009).

Cladonia pyxidata (L.) Hoffm. VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, on plant remains in *Cassiope tetragona-Vaccinium uliginosum* heath, R. Corner 26 August 1980. A common, cosmopolitan, terricolous lichen.

Cladonia stricta (Nyl.) Nyl. – I: Antarctica Havn, 72°00'N, 23°06'W, on soil, R. Corner 18 & 19 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, on soil on stable talus slope, R. Corner 22 August 1980; XI: Skeldal, 72°10'N, 24°08'W, among mosses on soil, R. Corner 28 August 1980. A common, circumpolar, terricolous lichen (Hansen, 1995).

* ***Cladonia trassii*** Ahti – II: Majdal, 72°00'N, 23°21'W, alt. 100 m, among mosses on soil, R. Corner 20 August 1980. A widespread, circumpolar, terricolous lichen (Brodo *et al.*, 2001; Hansen, 2008).

Diploschistes muscorum (Scop.) R. Sant. – X: Nyhavn, c. 72°15'N, 23°50'W, on mineral soil in heath, R. Corner 16 August 1980. A common, cosmopolitan, terricolous lichen.

Flavocetraria cucullata (Bellardi) Kärnefelt & Thell – I: Antarctica Havn, c. 72°00'N, 23°06'W, on soil, R. Corner 18 & 19 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on soil in heath, R. Corner 16 August 1980. A widespread, terricolous lichen.

Flavocetraria nivalis (L.) Kärnefelt & Thell – VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, on soil, R. Corner 26 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on soil in heath, R. Corner 16 August 1980. A common, bi- and circumpolar, terricolous lichen.

Fulgensia bracteata (Hoffm.) Räsänen – IV: Jægerdal, c. 72°07'N, 23°35'W, alt. 50 m, on solifluction soil, R. Corner 22 August 1980. A widespread, circumpolar, terricolous lichen.

Fuscopannaria praetermissa (Nyl.) P. M. Jørg. – I: Antarctica Havn, 72°00'N, 23°06'W, alt. 600 m, on mosses and plant remains, R. Corner 18 August 1980. A widespread, bi- and circumpolar, terricolous lichen.

* ***Gyalecta foveolaris*** (Ach.) Schaer. – IV: Jægerdal, 72°07'N, 23°35'W, alt. 50 m, on mosses and soil rich in humus, R. Corner 22 August 1980. A widespread, circumpolar, terricolous lichen (Hansen, Poelt & Vezda, 1987).

* ***Lecanora atromarginata*** (H. Magn.) Hertel & Rambold – VI: Sortebjerg, 72°04'N, 24°05'W, alt. 1100 m, on basaltic rock, R. Corner 25 August 1980. A widespread, bi- and circumpolar, saxicolous lichen (Smith *et al.*, 2009).

Lecanora geophila (Th. Fr.) Poelt – XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on soil, R. Corner 28 August 1980. A somewhat scattered, circumpolar, terricolous lichen (Hansen, 1995).

* ***Lecanora hagenii*** (Ach.) Ach. v. fallax Hepp – I: Antarctica Havn, 72°00'N, 23°06'W, alt. 600 m, on mosses and plant remains, R. Corner 18 August 1980. A widespread, circumpolar, terricolous lichen.

Lopadium coralloideum (Nyl.) Lyngø – X: Nyhavn, 72°15'N, 23°50'W, on soil in heath, R. Corner 16 August 1980. A somewhat scattered, circumpolar, muscicolous and terricolous lichen (Thomson, 1997).

Melanelia hepatizon (Ach.) Thell – I: Antarctica Havn, 72°00'N, 23°06'W, on rock, R. Corner 19 August 1980; X: Nyhavn, 72°15'N, 23°50'W, on siliceous rock, R. Corner 16 August 1980. A widespread, circumpolar, saxicolous lichen.

* ***Melanelia stygia*** (L.) Essl. – III: Jægerdal Pass, 72°02'N, 23°35'W, alt. 250 m, on siliceous rock on north side of pass, R. Corner 21 August 1980; VI: Sortebjerg,

72°04'N, 24°05'W, alt. 1100 m, on rock, R. Corner 25 August 1980; VIII: Tunnelelv, 72°10'N, 24°07'W, alt. 150 m, on rock, R. Corner 30 August 1980. A widespread, circumpolar, saxicolous lichen.

Myxobilimbia lobulata (Sommerf.) Hafellner – V: Mesters Vig, c. 72°09'N, 23°40'W, on soil in depression on stable talus slope together with *Pertusaria oculata*, R. Corner 22 August 1980. A widespread, circumpolar, terricolous and muscicolous lichen.

Ochrolechia frigida (Sw.) Lynge – X: Nyhavn, 72°15'N, 23°50'W, on mosses in heath, R. Corner 16 August 1980. A common, bi- and circumpolar, terricolous and muscicolous lichen.

Parmelia saxatilis (L.) Ach. – V: Mesters Vig, c. 72°09'N, 23°40'W, on rock, R. Corner 22 August 1980. A common, bi- and circumpolar, corticolous and saxicolous lichen (Smith *et al.*, 2009).

Parmelia sulcata Taylor – V: Mesters Vig, c. 72°09'N, 23°40'W, on manured boulder, R. Corner 22 August 1980. A very common, cosmopolitan, corticolous and saxicolous lichen (Smith *et al.*, 2009).

Peltigera leucophlebia (Nyl.) Gyeln. – XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on mosses among rocks, R. Corner 28 August 1980. A somewhat scattered, circumpolar, terricolous and muscicolous lichen.

Peltigera malacea (Ach.) Funck – II: Majdal, 72°00'N, 23°21'W, alt. 100 m, on mosses and soil rich in humus, R. Corner 20 August 1980. A widespread, circumpolar, terricolous lichen (Hansen, 1995).

Pertusaria oculata (Dicks.) Th. Fr. – I: Antarctica Havn, 72°00'N, 23°06'W, alt. 200 m, on mineral soil on stable talus slope, R. Corner 19 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, on soil on talus slope, R. Corner 22 August 1980; VI: Sortebjerg, 72°04'N, 24°05'W, alt. 200 m, on soil on talus slope, R. Corner 25 August 1980; VIII: Tunnelelv, 72°10'N, 24°07'W, alt. 150 m, on soil on stable talus slope, R. Corner 31 August 1980; IX: Hestekoen, 72°13'N, 24°10'W, alt. 1050 m, on mosses and soil on talus slope, R. Corner 29 August 1980. An arctic-alpine, circumpolar lichen with a distinct preference for snow-patches (Hansen, 1995; Smith *et al.*, 2009).

Phaeophyscia sciastra (Ach.) Moberg – VI: Sortebjerg, 72°04'N, 24°05'W, alt. 500 m, on mosses and soil over rock, R. Corner 26 August 1980. A widespread, circumpolar lichen growing on soil, mosses and nutrient-enriched rocks (Smith *et al.*, 2009).

Physcia caesia (Hoffm.) Fűrnr. – V: Mesters Vig, c. 72°09'N, 23°40'W, on nutrient-enriched rock, R. Corner 22 August 1980. A common, cosmopolitan, saxicolous lichen (Smith *et al.*, 2009).

Physcia dubia (Hoffm.) Lettau – X: Nyhavn, c. 72°15'N, 23°50'W, on nutrient-enriched, siliceous boulder together with *Xanthoria elegans*, R. Corner 16 August 1980. A common, cosmopolitan, saxicolous lichen (Smith *et al.*, 2009).

Physconia muscigena (Ach.) Poelt – I: Antarctica Havn, 72°00'N, 23°06'W, alt. 600 m, on mosses and plant remains, R. Corner 18 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, on plant remains, R. Corner 22 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on mosses, R. Corner 28 August 1980. A widespread, circumpolar, terricolous and saxicolous lichen.

* *Placynthium pannariellum* (Nyl.) H. Magn. – X: Nyhavn, c. 72°15'N, 23°50'W, on siliceous rock, R. Corner 16 August 1980. A rare, saxicolous lichen known so far from Greenland, Svalbard and Europe (Thomson, 1984; Smith *et al.*, 2009).

Pleopsidium chlorophanum (Wahlenb.) Zopf – X: Nyhavn, c. 72°15'N, 23°50'W, on rock, R. Corner 16 August 1980. A somewhat scattered, bi- and circumpolar, saxicolous lichen (Smith *et al.*, 2009).

Pseudophebe minuscula (Nyl. ex Arnold) Brodo & D. Hawksw. – XIII: Tunnelelv, 72°10'N, 24°07'W, alt. 150 m, on rock, R. Corner 30 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, alt. 150 m, on rock, R. Corner 29 August 1980. A common, bi- and circumpolar, saxicolous lichen.

* *Psoroma tenue* Henssen – II: Majdal, 72°00'N, 23°21'W, alt. 100 m, on mosses and soil rich in humus, R. Corner 20 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on mosses, R. Corner 16 August 1980. A somewhat scattered, circumpolar, muscicolous and terricolous lichen (P. M. Jørgensen, 2004).

* *Pyrenopsis furfurea* (Nyl.) Leight. – X: Nyhavn, c. 72°15'N, 23°50'W, on mineral soil in heath, R. Corner 16 August 1980. A somewhat scattered, circumpolar, terricolous and saxicolous lichen (Dahl, 1950; Smith *et al.*, 2009).

Rhizocarpon superficiale (Schaer.) Vain. – X: Nyhavn, c. 72°15'N, 23°50'W, on siliceous rock, R. Corner 17 August 1980. A common, bi- and circumpolar, saxicolous lichen (Smith *et al.*, 2009).

Rhizoplaca melanophthalma (DC.) Leuckert & Poelt – XI: Sortebjerg, 72°04'N, 24°05'W, alt. 1100 m, on nutrient-enriched rock, R. Corner 25 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on the top of bird perching boulder, R. Corner 16 August 1980. A common, bi- and circumpolar, saxicolous lichen (Nimis, 1993).

Rinodina turfacea (Wahlenb.) Körb. – V: Mesters Vig, c. 72°09'N, 23°40'W, on plant remains including lichens, R. Corner 22 August 1980. A widespread, circumpolar, terricolous lichen.

Solorina bispora Nyl. – I: Antarctica Havn, 72°00'N, 23°06'W, on soil, R. Corner 18 August 1980; VI: Sortebjerger, 72°04'N, 24°05'W, alt. 450 m, on soil, R. Corner 25 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on soil, R. Corner 16 August 1980. A widespread, circumpolar, terricolous lichen.

Solorina crocea (L.) Ach. – I: Antarctica Havn, 72°00'N, 23°06'W, on soil, R. Corner 17 August 1980; III: Jægerdal Pass, 72°02'N, 23°35'W, alt. 250 m, on soil, R. Corner 21 August 1980; IX: Hestekoer, 72°13'N, 24°10'W, alt. 900 m, on soil, R. Corner 29 August 1980. A common, circumpolar snow-patch lichen.

Solorina saccata (L.) Ach. – X: Nyhavn, c. 72°15'N, 23°50'W, on turf, R. Corner 17 August 1980. A widespread, circumpolar, terricolous lichen.

Stereocaulon glareosum (L. I. Savicz) H. Magn. – X: Nyhavn, c. 72°15'N, 23°50'W, on soil in heath, R. Corner 16 August 1980. A widespread, bi- and circumpolar, terricolous lichen (Smith *et al.*, 2009).

Umbilicaria arctica (Ach.) Nyl. – I: Antarctica Havn, 72°00'N, 23°06'W, on nutrient-enriched rocks, R. Corner 19 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, on nutrient-enriched rock, R. Corner 22 August 1980; VIII: Tunnelelv, 72°10'N, 24°07'W, alt. 150 m, on rock; R. Corner 30 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on rock manured by birds. R. Corner 17 August 1980;

XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on nutrient-enriched boulder, R. Corner 28 August 1980. A common, circumpolar, saxicolous lichen (Hansen, 1995).

Umbilicaria decussata (Vill.) Zahlbr. – I: Antarctica Havn, 72°00'N, 23°06'W, on nutrient-enriched rock, R. Corner 19 August 1980; VI: Sortebjerg, 72°05'N, 24°05'W, alt. 1100 m, on rock, R. Corner 25 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on rock manured by birds, R. Corner 16 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on boulder manured by birds, R. Corner 28 August 1980. A common, bi- and circumpolar, saxicolous lichen.

Umbilicaria deusta (L.) Baumg. – VII: Nedre Funddal, 72°05'N, 24°00'W, alt. 200 m, on moist, vertical rock in *Cassiope tetragona*-*Vaccinium uliginosum* heath, R. Corner 26 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on rock, R. Corner 28 August 1980. A common, circumpolar, saxicolous lichen.

* *Umbilicaria hirsuta* (Sw. ex Westr.) Hoffm. – V: Mesters Vig, c. 72°09'N, 23°40'W, on rock, R. Corner 22 August 1980. A somewhat scattered, bi- and circumpolar, saxicolous lichen (Hansen, 1995; Smith *et al.*, 2009).

Umbilicaria hyperborea (Ach.) Hoffm. – III: Jægerdal Pass, 72°02'N, 23°35'W, alt. 250 m, on rock, R. Corner 21 August 1980; V: Mesters Vig, c. 72°09'N, 23°40'W, on rocks, R. Corner 22 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on rock, 17 August 1980. A common, bi- and circumpolar, saxicolous lichen (Smith *et al.*, 2009).

Umbilicaria krascheninnikovii (L. I. Savicz) Zahlbr. – VI: Sortebjerg, 72°05'N, 24°05'W, alt. 1100 m, on rock, R. Corner 25 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on rock, R. Corner 16 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on boulder, R. Corner 28 August 1980. A somewhat scattered, circumpolar, saxicolous lichen occurring even in the northernmost land area of the world (Hansen, 1995, 2009).

Umbilicaria lyngei Schol. – X: Nyhavn, c. 72°15'N, 23°50'W, on rock, R. Corner 16 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on rock, R. Corner 28 August 1980. A more or less common, circumpolar, saxicolous lichen (Hansen, 1995).

Umbilicaria proboscidea (L.) Schrad. – VI: Sortebjerg, 72°05'N, 24°05'W, alt. 1100 m, on rock, R. Corner 25 August 1980; IX: Hesteskoen, 72°13'N, 24°10'W, alt. 500 m, on boulder, R. Corner 29 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on rock, R. Corner 17 August 1980; XII: Area between Nyhavn and Skeldal, 72°16'N, 24°05'W, on boulder, R. Corner 28 August 1980. A common, bi- and circumpolar, saxicolous lichen (Smith *et al.*, 1980).

Umbilicaria torrefacta (Lightf.) Schrad. – X: Nyhavn, c. 72°15'N, 23°50'W, on rocks, R. Corner 16 August 1980. A common, circumpolar, saxicolous lichen.

Umbilicaria virginis Schaer. – I: Antarctica Havn, 72°00'N, 23°06'W, on rock, R. Corner 19 August 1980; III: Jægerdal Pass, 72°02'N, 23°35'W, alt. 250 m, on rock, R. Corner 21 August 1980; VIII: Tunnelelv, 72°10'N, 24°07'W, alt. 150 m, on rock, R. Corner 30 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on rock, R. Corner 16 August 1980. A common, circumpolar, saxicolous lichen.

Usnea spacelata R. Br. – I: Antarctica Havn, 72°00'N, 23°06'W, alt. 800 m, on rock, R. Corner 19 August 1980; IX: Hesteskoen, 72°13'N, 24°10'W, alt. 1050 m, on rock, R. Corner 29 August 1980. A somewhat scattered, bi- and circumpolar, saxicolous lichen.

Xanthoria elegans (Link) Th. Fr. – VI: Sortebjerg, 72°04'N, 24°05'W, alt. 1100 m, on nutrient-enriched rock, R. Corner 25 August 1980; X: Nyhavn, c. 72°15'N, 23°50'W, on siliceous rock, R. Corner 16 August 1980. A widespread, bi- and circumpolar, saxicolous lichen with preference for nitrophilous and calciphilous substrates.

CONCLUSION

Only a small part of Scoresby Land has previously been investigated lichenologically. Therefore even comparatively small lichen collections from this area are of particular interest. Corner's lichen material represents an important contribution to the known lichen flora of Scoresby Land. It is fairly rich in lichens with a preference for neutral to slightly alkaline soil such as *Acarospora schleicheri*, *Cladonia pocillum*, *Diploschistes muscorum*, *Fulgensia bracteata*, *Solorina bispora* and *S. saccata*. In this respect Scoresby Land is somewhat similar to other areas in this part of Greenland, for example the Scoresby Sund area and Hudson Land. The element of nitrophilous lichens is also fairly conspicuous in this area. It is represented by species such as *Phaeophyscia sciastra*, *Umbilicaria arctica*, *U. decussata* and *U. krascheninnikovii*. Among the finds of particular interest is that of *Arctoparmelia separata* and *Umbilicaria hirsuta*, both of which are very rare in East Greenland. The last mentioned species is similar to *U. vellea* and possibly has been confounded with this species. *Arctoparmelia separata* appears to be disjunct in Greenland.

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