

CONTRIBUTION TO THE LICHEN FLORA OF SOUTH EAST GREENLAND. I. THE KANGERLUSSUAQ AREA

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Abstract

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The paper lists 72 lichen taxa from the Kangerlussuaq area, South East Greenland. Of these, 45 lichens were recorded for the first time from the area. *Rhizocarpon anseris* and *R. eupetraeum* are new to East Greenland. Nine lichen taxa are new to South East Greenland, viz. *Amandinea coniops*, *Aspicilia candida*, *Calvitimela aglaea*, *Candelariella aurella*, *Ionaspis suaveolens*, *Lecanora hagenii* var. *fallax*, *Placynthium pannariellum*, *Pyrenopsis furfurea* and *Staurothele fissa*.

Keywords: Arctic region, diversity, lichens, species.

INTRODUCTION

In a previous paper dealing with the occurrence and distribution of lichens in South East Greenland, the author listed 89 lichens from the Kangerlussuaq area together with numerous lichens from the Skjoldungen area and the Ammassalik area (HANSEN, 1978a). The main purposes of the botanical expedition in summer 1971 were to carry out ecological and phytosociological investigations and collect lichens. The extensive lichen material has recently been studied by the author again, and this new revision has resulted in many additional lichens, which were neglected during the original study more than 40 years ago. The Danish botanist T.W. Böcher collected some lichens in the Kangerlussuaq area in 1932 (BÖCHER, 1933), and the same year the Norwegian botanist P. F. Scholander carried out extensive lichen collections in this fjord system (LYNGE, 1933; DAHL et al., 1937). The present paper aims to stimulate the future lichen research in the region, which probably belongs to the richest in East Greenland in respect of the lichen flora.

STUDY AREA

Collecting of lichens was carried out at the following five localities in the Kangerlussuaq area (HANSEN, 1978a): 1. Nordre Aputiteeq (67° 48' N, 32° 17' W) – 18 July 1971; 2. Mikis Fjord (68° 10' N, 31° 32' W) – 20–26 July 1971; 3. Skåret (68° 11' N, 31° 52' W) – 29 July 1971; 4. Sødalen (68° 12' N, 31° 23' W) – 20–26 July 1971; 5. Mudderbugt (68° 18' N, 32° 15' W) – 28 July 1971. – Lichens were studied in the lowland and up to c. 500 m a. s. l. in the investigation area. The highest in Greenland mountain Gunnbjørns Fjeld (alt. c. 3700 m a. s. l.) is located just north east of Kangerlussuaq. The rocks are largely composed of Tertiary basalts (loc. 1, 2, 4) and Archaean gneiss (loc. 3, 5) (HANSEN, 1978a). Floristically and climatically, the localities are situated in the low arctic, oceanic region (JENSEN, 1999). The vegetation can be characterized as a mosaic of different types of dwarf shrub heaths dominated by *Vaccinium uliginosum* and *Empetrum hermaphroditum*, fell fields with more scattered vegetation, *Salix herbacea* and *Harrimanella hypnoides* snow

patches, *Salix glauca* copses, herb slopes, fens and marshes (BÖCHER, 1933). The rocks are more or less densely covered with lichens. According to measurements made at the previous weather station on Nordre Aputiteeq, a small island is situated south west of the entrance to Kangerlussuaq, the mean temperature of July and August is 2.4°C, while the mean temperature of the coldest month, March, is -10°C. The annual precipitation is c. 700 mm (NIELSEN et al., 1970).

MATERIALS AND METHODS

The field work was carried out by the author at Nordre Aputiteeq, Mikis Fjord, Skåret, Sødalen and Mudderbugt in late July 1971. Lichens were collected at numerous sites in five localities. A total of 120 lichen specimens were studied using Zeiss light microscopes and identified by the author. The nomenclature in the list is presented after SANTESSON et al. (2004) with some exceptions. The specimens are deposited at the Botanical Museum of the University of Copenhagen (C).

RESULTS AND DISCUSSION

List of species

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 Kangerlussuaq area. Two asterisks (**) indicate that the taxon is new to South East Greenland, and three (***) – it is new to East Greenland. Numbers 1–5 indicate the five localities listed above. “Ap.” and “pe.” means presence of apothecia and perithecia, respectively; “st.” means that the specimen is sterile. Annotations are given regarding substrate of the lichens and their occurrence in South East Greenland. Information about the total distribution of the lichens in Greenland is presented after HANSEN (1995a), THOMSON (1984, 1997) and KRISTINSSON et al., 2010).

Acarospora smaragdula (Wahlenb.) A.Massal. – on weathered basaltic rock, together with *Lecanora leucococca*; 2; ap. – *A. smaragdula* has previously been reported from a few localities in South East Greenland including Mudderbugt (HANSEN, 1978a, 2002, 2012).

** *Amandinea coniops* (Wahlenb.) M.Choisy ex Scheid. & H.Mayrhofer – on basaltic rock, together

with *Placynthium pannariellum*, *Rhizocarpon cope-landii* and *Umbilicaria deusta*; 4; ap.

* *Arthrorhaphis alpina* (Schaer.) R.Sant. – on soil and mosses; 1, 4, 5; st. – The species is also known from Ammassalik Ø and Dronning Maries Dal in the Skjoldungen area (DAHL et al., 1937; HANSEN & OBERMAYER, 1999; HANSEN, 2002).

* *Aspicilia caesiocinerea* (Nyl. ex Malbr.) Arnold – on basaltic rock, together with *Candelariella vitellina*; 4; ap. – *A. caesiocinerea* is fairly common on rocks influenced by guano on Ammassalik Ø (DANIELS, 1975; HANSEN, 1986, 2002).

** *Aspicilia candida* (Anzi) Hue – on basaltic rock, together with *Candelariella vitellina*, *Rhizocarpon geminatum* and *Xanthoria sorediata*; 4; ap.

Bellemerea alpina (Sommerf.) Clauzade & Cl.Roux – on basaltic rocks; 2, 4; ap. – The species is also known from Skåret and Storfjord Radio in the Kangerlussuaq area (DAHL et al., 1937).

* *Bellemerea subsorediza* (Lynge) R.Sant. – on gneissic rock; 1; st. – The species has previously been reported from a few localities in South East Greenland (HANSEN, 2002, 2012).

* *Biatora vernalis* (L.) Fr. – on plant remains, together with *Bryonora castanea*, *Buellia papillata* and *Psoroma tenue* var. *boreale*; 2, 4. – The species is common in South East Greenland (DAHL et al., 1937; HANSEN, 2002, 2012).

* *Bryonora castanea* (Hepp) Poelt – on mosses and plant remains, together with *Rinodina turfacea*; 2, 4; ap. – The species is common in South East Greenland (DAHL et al., 1937; HANSEN, 2002, 2012).

* *Buellia papillata* (Sommerf.) Tuck. – on plant remains; 4. The species is rare in South East Greenland (HANSEN, 2012).

* *Caloplaca castellana* (Räsänen) Poelt – on basaltic rock, together with *Candelariella vitellina*; 4; ap. – *C. castellana* has previously been reported from Ammassalik Ø (HANSEN et al., 1987; HANSEN, 2002).

Caloplaca nivalis (Körb.) Th.Fr. – on mosses, together with *Lecanora leptacina*; 2; ap. – *C. nivalis* is common in South East Greenland (HANSEN et al., 1987).

Caloplaca tetraspora (Nyl.) H.Olivier – on plant remains, together with *Biatora vernalis*; 2; ap. – *C. tetraspora* is fairly common in South East Greenland (HANSEN et al., 1987).

Caloplaca tirolensis Zahlbr. – on plant remains;

5; ap. – The species is common in South East Greenland (HANSEN et al., 1987).

* *Caloplaca tornoënsis* H.Magn. – on old bone, together with *Candelariella aurella*; 2; ap. – *C. tornoënsis* has previously been reported from Tugtulik (HANSEN et al., 1987).

** *Calvitimela aglaea* (Sommerf.) Hafellner – on basaltic rocks; 2, 4; ap. – The species has previously been reported from Ittoqqortoormiit (HANSEN, 1995b).

* *Calvitimela armeniaca* (DC.) Hafellner – on gneissic and basaltic rocks; 5; ap. – The species has previously been reported from Ammassalik Ø (HANSEN, 2002).

** *Candelariella aurella* (Hoffm.) Zahlbr. – on old bone, together with *Caloplaca tornoënsis* and *Lecanora hagenii* var. *fallax*; 2; st.

Candelariella canadensis H.Magn. – on soil, together with *Lecanora leptacina* and *Lecidoma demissum*; 3; st. – The species has previously been reported from a few localities in South East Greenland including Nordre Aputiteeq, Mikis Fjord and Sødalen (HANSEN, 1978a, 2012).

* *Candelariella dispersa* (Räsänen) Hakul. – on *Placynthium asperellum* and *Vestergrenopsis isidiata* on weathered basaltic rocks; 2, 4; st. – *C. dispersa* has previously been reported from Tasiilaq (HANSEN, 2002).

Cladonia fimbriata (L.) Fr. – on plant remains; 2, 4; st. – The species occurs scattered in South East Greenland (HANSEN, 1978a, 2012).

* *Cladonia macroceras* (Delise) Hav. – on plant remains and soil; 2, 4; ap. – *C. macroceras* is rare in South East Greenland (HANSEN, 2012).

Cladonia pocillum (Ach.) Grognot – on plant remains, together with *Cladonia fimbriata*; 4; st. – *C. pocillum* has previously been reported from Storfjord Radio (DAHL et al., 1937). The species has a scattered occurrence in South East Greenland (HANSEN, 1978a).

* *Cladonia trassii* Ahti – on soil, together with *Solorina crocea*; 2, 4; ap. – *C. trassii* is very common in South East Greenland (HANSEN, 2012).

* *Dibaeis baeomyces* (L.f.) Rambold & Hertel – on clayey soil; 5; st. – There are a few previous reports of *D. baeomyces* from South East Greenland (DANIELS et al., 1985; HANSEN, 2012).

* *Ephebe hispidula* (Ach.) Horw. – on moist rock;

4; st. – The species has previously been reported from Tasiilaq (HANSEN, 2002).

Euopsis pulvinata (Schaer.) Vain. – on weathered, somewhat moist basaltic rock; 2; ap. – The species has previously been reported from Ammassalik Ø and Storfjord Radio in the Kangerlussuaq area (DAHL et al., 1937; HANSEN, 2002).

** *Ionaspis suaveolens* (Fr.) Th.Fr. ex Stein. – on basaltic rock, together with *Tremolecia atrata*; 5; ap.

* *Lecanora argopholis* (Ach.) Ach. – on basaltic rock; 2; ap. – The species has previously been reported from Tasiilaq (HANSEN, 2002).

* *Lecanora chloroleprosa* (Vain.) H.Magn. – on gneissic and basaltic rocks; 2; st. – The species has previously been reported from Ammassalik Ø (HANSEN, 2002, 2012).

** *Lecanora hagenii* (Ach.) Ach. var. *fallax* Hepp – on old bone; 2; ap.

* *Lecanora intricata* (Ach.) Ach. – on weathered basaltic rock; 2; ap. – The species is known from a few localities in South East Greenland (DAHL et al., 1937; DANIELS, 1975; HANSEN, 2002).

* *Lecanora leptacina* Sommerf. – on mosses in damp sites, together with *Buellia papillata*, *Caloplaca nivalis*, *Ochrolechia alaskana* and *Pertusaria geminipara*; 2, 3, 4; ap. – The species has previously been reported from Tasiilaq (HANSEN, 2002).

Lecanora leucococca Sommerf. – on basaltic rocks, together with *Calvitimela aglaea*, *Lecidea atrobrunnea* and *Rhizocarpon geminatum*; 2; ap. – The taxon has previously been reported from the Kangerlussuaq area as *Lecanora polytropica* var. *leucococca* (DAHL et al., 1937).

* *Lecanora marginata* (Schaer.) Hertel & Rambold – on basaltic rocks, together with *Orphniospora moriopsis*, *Rhizocarpon jemtlandicum* and *Tremolecia atrata*; 2, 5; ap. – The species is rare in South East Greenland (THOMSON, 1997).

* *Lecidea lapicida* (Ach.) Ach. var. *pantherina* Ach. – on basaltic rocks, together with *Rhizocarpon geminatum* and *Xanthoria elegans*; 2, 4, 5; ap. – The species is fairly common in South East Greenland (HANSEN, 1978a, 2002).

* *Lopadium pezizoideum* (Ach.) Körb. – on plant remains and soil, together with *Lecidoma demissum*; 2; ap. – the species is rare in South East Greenland (HANSEN, 2002).

* *Miriquidica atrofulva* (Sommerf.) A.J. Schwab & Rambold – on somewhat moist basaltic rock, together with *Miriquidica nigroleprosa*, *Rhizocarpon bolanderi* and *Tremolecia atrata*; 2; st. – *M. atrofulva* occurs scattered in South East Greenland (HANSEN, 2002, 2012).

* *Miriquidica garovaglii* (Schaer.) Hertel & Rambold – on basaltic rock; 2; ap. – The species has previously been reported from Tasiilaq (HANSEN, 2002).

Miriquidica leucophaea (Flörke ex Rabenh.) Hertel & Rambold – on gneissic rock; 4; ap. – The species has previously been reported from a few localities in South East Greenland including Mikis Fjord (LYNGE, 1933; DAHL et al., 1937; HANSEN, 1978a, 2002, 2012).

* *Myxobilimbia lobulata* (Sommerf.) Hafellner – on clayey soil, together with *Lecidoma demissum*; 1–4. – *M. lobulata* has previously been reported from a few localities in the Ammassalik area (HANSEN, 2002, 2012).

* *Ochrolechia alaskana* (Verseghy) Kukwa – on mosses and plant remains, together with *Lecidoma demissum* and *Pertusaria oculata*; 2, 5; ap. – The species is common all over Greenland, where it has previously been reported as *O. frigida*.

Orphniospora moriopsis (A.Massal.) D.Hawksw. – on basaltic rock; 5; ap. – The species has previously been reported from numerous localities in South East Greenland including Storfjord Radio (DAHL et al., 1937; HANSEN, 1978a).

* *Pertusaria geminipara* (Th.Fr.) C.Knight ex Brodo – on plant remains; 2; st. – The species is widely distributed in South East Greenland (HANSEN, 1978a, 2002).

** *Placynthium pannariellum* (Nyl.) H.Magn. – on temporarily moist rocks; 4; st.

* *Porpidia flavocaerulescens* (Hornem.) Hertel & A.J.Schwab – on basaltic rocks, together with *Lecidea atrobrunnea* and *L. lapicida* var. *pantherina*; 1, 4; ap. – *P. flavocaerulescens* is known from a few localities in South East Greenland (HANSEN, 2002, 2012).

* *Porpidia melinodes* (Körb.) Gowan & Ahti – on basaltic rock, together with *P. flavocaerulescens* and *Rhizocarpon anseris*; 1; st. – *P. melinodes* is known from a few localities in South East Greenland (HANSEN, 2002, 2012).

Pseudophebe minuscula (Nyl. ex Arnold) Brodo

& D.Hawksw. – on basaltic rock; 2; st. – The species has previously been reported from many localities in South East Greenland including Skåret, Storfjord Radio, Brandalsfjeld and Spækpynten in the Kangerlussuaq area (DAHL et al., 1937; HANSEN, 1978a).

* *Psoroma tenue* Henssen var. *boreale* Henssen – on mosses and plant remains, together with *Cladonia macrophyllodes*; 2, 4, 5; ap. – *P. tenue* var. *boreale* has previously been reported from a few localities in the Ammassalik area (HANSEN, 2012).

** *Pyrenopsis furfurea* (Nyl.) Leight. – on soil, together with *Cladonia pyxidata*; 2; st. – *P. furfurea* has previously been reported from a few localities in South East Greenland (HANSEN, 2002, 2012).

*** *Rhizocarpon anseris* Lyngé – on basaltic rock; 1; ap.

* *Rhizocarpon bolanderi* (Tuck.) Herre – on gneissic and basaltic rocks, together with *Rhizocarpon geminatum*, *Rhizoplaca melanophthalma* and *Sporastatia testudinea*; 2, 5; ap. – *R. bolanderi* has previously been reported from Tasiilaq (HANSEN, 2002).

* *Rhizocarpon copelandii* (Körb.) Th.Fr. – on gneissic and basaltic rocks, together with *Lecanora chloroleprosa* and *Placynthium pannariellum*; 2, 4, 5; ap. – *R. copelandii* has previously been reported from Ammassalik Ø (HANSEN, 2002).

*** *Rhizocarpon eupetraeum* (Nyl.) Arnold – on siliceous rock, together with *Rhizocarpon geographicum*; 2; ap.

* *Rhizocarpon geminatum* Körb. – on gneissic and basaltic rocks, together with *Sporastatia testudinea*, *Umbilicaria arctica* and *U. virginis*; 2, 5; ap. – Most previous reports of *Rhizocarpon disporum* from South East Greenland (LYNGE, 1933; DAHL et al., 1937; DANIELS, 1975; HANSEN, 1978a, b) refer to *R. geminatum*, which appears to be fairly common in the Kangerlussuaq area.

* *Rhizocarpon grande* (Flörke) Arnold – on gneissic rock, together with *Lecidea atrobrunnea* and *Rhizocarpon geographicum*; 2; ap. – The species has previously been reported from a few localities in South East Greenland (HANSEN, 2002, 2012).

* *Rhizocarpon inarense* (Vain.) Vain. – on gneissic and basaltic rocks; 1, 5; ap. – The species has been reported from a few localities in South East Greenland, where it probably has been neglected (HANSEN, 2002, 2012).

Rhizocarpon jemtlandicum (Malme) Malme – on

gneissic rock; 3; ap. – The species is known from a few localities in South East Greenland including Amdrupnæsset in the Kangerlussuaq area (DAHL et al., 1937; HANSEN, 2002, 2012).

* *Rinodina archaea* (Ach.) Arnold – on plant remains; 2, 5; ap. – The species has previously been reported from a few localities in South East Greenland (VAINIO, 1905; HANSEN, 2012).

* *Rinodina mniaraea* (Ach.) Körb. – on mosses; 5; ap. – The species is known from a few localities in South East Greenland (LYNGE, 1933; DAHL et al., 1937; HANSEN, 2012).

* *Sphaerophorus fragilis* (L.) Pers. – among mosses on soil; 3; st. – Contrary to the statement of LYNGE (1933) *S. fragilis* is common in South East Greenland (HANSEN, 1978a).

* *Sporastatia polyspora* (Nyl.) Grummann – on gneissic rock, together with *Bellemerea subsorediza*; 1; ap. – *S. polyspora* has previously been reported from Storøen (DAHL et al., 1937).

** *Staurothele fissa* (Taylor) Zwackh – on basaltic rocks, together with *Placynthium pannariellum*; 2, 4; pe.

* *Staurothele fuscocuprea* (Nyl.) Zschacke – on basaltic rock, together with *S. fissa*; 2; pe. – *S. fuscocuprea* has previously been reported from a few localities in South East Greenland (DAHL et al., 1937).

* *Stereocaulon arenarium* (L.I.Savicz) I.M.Lamb – on soil; 5; st. – The species is known from a few localities in South East Greenland (HANSEN, 1978a, 2002).

* *Stereocaulon botryosum* Ach. – on weathered gneissic rock; 4; st. – The species has previously been reported from a few localities in South East Greenland (HANSEN, 2002, 2012).

* *Stereocaulon glareosum* (L.I.Savicz) H. Magn. – 2, 4; on gravelly soil, together with *Cladonia mitis*; ap. – *S. glareosum* is fairly common in South East Greenland (HANSEN, 2002, 2012).

* *Trapeliopsis granulosa* (Hoffm.) Lumbsch – on soil; 4; ap. – The species is known from a few localities in South East Greenland (DAHL et al., 1937; HANSEN, 2002, 2012).

* *Umbilicaria nylanderiana* (Zahlbr.) H. Magn. – on rocks; 2, 4, 5; ap. – The species is known from a few localities in South East Greenland (HANSEN, 2012).

Umbilicaria virginis Schaer. – on basaltic rock; 2; ap. – The species has previously been reported from

a few localities in South East Greenland including Mudderbugt (HANSEN, 1978a, 2002, 2012).

* *Verrucaria ceuthocarpa* Wahlenb. – on gneissic seashore rock; 5; pe. – The species has previously been reported from a few localities on Ammassalik Ø (HANSEN 2002, 2012).

Xanthoria sorediata (Vain.) Poelt – on manured basaltic rock, together with *Candelariella vitellina* and *Rhizocarpon geminatum*; 4; st. – *X. sorediata* is known from many localities in South East Greenland including Storffjord Radio, Brandalsfjeld, Amdrupnæsset and Mudderbugt in the Kangerlussuaq area (DAHL et al., 1937; HANSEN, 1978a).

CONCLUSIONS

Generally the lichen flora of East Greenland is fairly well studied. However, some coastal areas and fjords such as Tugtilik and Scoresby Sund have recently been incompletely studied as regards lichens. The present paper deals with interesting additions to the lichen flora of Tugtilik and other lichens, which are considered more or less rare in this area. Many species, for example *Aspicilia caesiocinerea*, *Lecanora argopholis* and *Rhizocarpon bolanderi*, are restricted to rocks influenced by guano and other nutritious matters. Other lichens, for example *Biatora vernalis*, *Buellia papillata* and *Pertusaria geminipara*, grow on soil, plant remains and mosses in dwarf shrub heaths. Species such as *Miriquidica atrofulva*, *Porpidia flavocaerulescens* and *P. melinodes* mainly grow on more or less moist rocks rich in iron. Both the terricolous and the saxicolous lichen vegetation in the Tugtilik area agree fairly well with that of Ammassalik Ø and Tasiilaq in particular as regards their distinct preference for moist, oceanic climatical conditions.

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REFERENCES

- BÖCHER T.W., 1933: Studies on the Vegetation of the East Coast of Greenland. – Meddelelser om Grønland, 104: 1–134.

- DAHL E., LYNGBE B., SCHOLANDER P.F., 1937: Lichens from Southeast Greenland. – *Skrifter om Svalbard og Ishavet*, 70: 1–76.
- DANIELS F.J.A., 1975: Vegetation of the Angmagssalik District Southeast Greenland. III. Epilithic macrolichen communities. – *Meddelelser om Grønland*, 198: 1–32.
- DANIELS F.J.A., HANSEN E.S., SIPMAN H.J.M., 1985: New records of terricolous microlichens from Southeast Greenland. – *Acta Botanica Neerlandica*, 34: 49–58.
- HANSEN E.S., 1978a: Notes on occurrence and distribution of lichens in South East Greenland. – *Meddelelser om Grønland*, 204(4): 1–71.
- HANSEN E.S., 1978b: A comparison between the lichen flora of coastal and inland areas in the Julianehåb District, South Greenland. – *Meddelelser om Grønland*, 204(3): 1–31.
- HANSEN E.S., 1986: New or interesting Greenland lichens III. – *Mycotaxon*, 26: 173–186.
- HANSEN E.S., 1995a: Greenland Lichens. – Copenhagen.
- HANSEN E.S., 1995b: The lichen flora near Ittoqqortoormiit/Scoresbysund in Central East Greenland. – *Herzogia*, 11: 197–206.
- HANSEN E.S., 2002: Lichens from Ammassalik Ø, Southeast Greenland. – *Folia Cryptogamica Estonica*, 39: 3–12.
- HANSEN E.S., 2012: Lichens from five localities in south-east Greenland and their exposure to climate change. – *Bibliotheca Lichenologica*, 108: 123–134.
- HANSEN E.S., OBERMAYER W., 1999: Notes on *Arthrorhaphis* and its lichenicolous fungi in Greenland. – *Bryologist*, 102: 104–107.
- HANSEN E.S., POELT J., SØCHTING U., 1987: Die Flechtengattung *Caloplaca* in Grønland. – *Meddelelser om Grønland*. – *Bioscience*, 25: 1–52.
- JENSEN D.B., 1999: Grønlands biodiversitet – et landestudie. *Teknisk Rapport*, 27. – Nuuk.
- KRISTINSSON H., ZHURBENKO M., HANSEN E.S., 2010: Panarctic checklist of lichens and lichenicolous fungi. *Technical Report*, 20. – Akureyri.
- LYNGBE B., 1933: The Lichens. – *Meddelelser om Grønland*, 104: 1–15.
- NIELSEN N., SKAUTRUP P., VIBE C., 1970: J.P. Trap Danmark. Grønland. – Copenhagen.
- SANTESSON R., MOBERG R., NORDIN A., TØNSBERG T., VITIKAINEN O., 2004: Lichen-forming and lichenicolous fungi of Fennoscandia. – Uppsala.
- THOMSON J.W., 1984: American Arctic lichens. I. The macrolichens. – New York.
- THOMSON J.W., 1997: American Arctic lichens. II. The microlichens. – Wisconsin.
- VAINIO E.A., 1905: Lichenes expeditionis G. AMDRUP (1898–1902). – *Meddelelser om Grønland*, 30: 123–141.

NAUJOS ŽINIOS APIE PIETRYTINĖS GRENLANDIJOS FLORĄ. I. KANGERLUSSUAQ APYLINKĖS

Eric Steen HANSEN

Santrauka

Straipsnyje pateikiamas 72 kerpių taksonų sąrašas iš Kangerlussuaq apylinkių pietrytinėje Grenlandijoje. Keturiasdešimt penkios rūšys aptiktos pirmą kartą šioje vietovėje. *Rhizocarpon anseris* ir *R. eupetraeum* aptiktos pirmą kartą rytinėje Grenlandijoje. Devyni taksonai

užregistruoti pirmą kartą pietrytinėje Grenlandijoje: *Amandinea coniops*, *Aspicilia candida*, *Calvitimela aglaea*, *Candelariella aurella*, *Ionaspis suaveolens*, *Lecanora hagenii* var. *fallax*, *Placynthium pannariellum*, *Pyrenopsis furfurea* ir *Staurothele fissa*.