**Supplementary Material 2:** Specimens examined.

***Aspilidea subadunans***

**Canada**

***Newfoundland and Labrador***

*Central Newfoundland*:

Burgeo Highway, Route 480, Annieopsquotch Mountains, SW end, 83 km N of Burgeo and 4 km S of Lloyd's River bridge on Burgeo Highway (Route 480), mafic, diabase mountains, 48.2804°N, 57.70516°W, 535 m, on mafic rock, 9.x.2018, *J.W. McCarthy* 4160 *& C. McCarthy* (MSC); *J.W. McCarthy* 3701, 4162, 4180, 4181, 4185, 4187, 4341, 4342, 4343, 4422, 4493, 4597, 4599 *& C. McCarthy* (NBM); *J.W. McCarthy* 4163, 4182, 4183, 4186, 4595 *& C. McCarthy* (CANL); *J.W. McCarthy* 4184 *& C. McCarthy* (NY).

Lions Max Simms Camp, 5 km S of Trans-Canada Highway (Route 1) on Bay d'Espoir Highway (Route 360), rock outcrop in dried up bed of Great Rattling Brook, 48.96817°N, 55.54066°W, 26 m, on siliceous rock, 21.ix.2022, *J.W. McCarthy* 4349, 4350, 4351, 4352, 4354, 4355(SWGC); 4353 (MSC).

*Eastern Newfoundland, Avalon Peninsula:*

Fairhaven Barrens, Route 203, c. 8 km SW of Route 1 (Trans-Canada Highway)-Route 203 intersection, c. 300 m in from right side of road, *Cladonia*-*Racomitrium*-ericaceous-*Juniperus* heath with ombrotrophic *Trichophorum cespitosum* bog-*Abies balsamea*-*Picea mariana*-*Larix laricina*-*Alnus* tuckamoor complex, 47.55801°N, 53.84918°W, 125 m, on siliceous rock, 11.x.2015, *J.W. McCarthy* 2903, 2904 (NBM), 2905 (CANL); *ibid.,* 47.55719°N, 53.84724°W, 137 m, *J.W. McCarthy* 2924 (CANL).

Between Fox Harbour and Ship Harbour, 16.8 km from the intersection of Routes 100 and 102, top of Sugarloaf Hill, 47.3593°N, 53.878449°W, 220 m, exposed rocky hill with *Abies balsamea*-*Picea mariana* tuckamoor, *Alnus*-*Racomitrium*-*Cladonia*-*Juniperus*-ericaceous heath, on siliceous rock, 9.x.2015, *J.W. McCarthy* 2936 (NY), 4158, 4421(NBM).

Trinity Bay, NW of Victoria, Route 74, Heart's Content Barrens, rocky *Racomitrium*-ericaceous-*Cladonia* heathland, 47.80506°N, 53.29367°W, 228 m, on siliceous rock, 19.vii.2017, *J.W. McCarthy* 4596 (NBM).

Conception Bay, Holyrood, Witless Bay Line (Route 13)-Trans-Canada Highway (Route 1), maritime ericaceous-*Cladonia*-*Abies* *balsamea*-*Picea mariana*-*Larix laricina* tuckamoor heathland with abundant, large granite erratic boulders, 47.34145°N, 52.96806°W, 222 m, on siliceous rock in frost boil, 21.vii.2017, *J.W. McCarthy* 3196 (hb. Wheeler).

Conception Bay, Holyrood, Hawke Hills, near Hawke Hills Ecological Reserve, SW of intersection of Witless Bay Line (Route 13) and Trans-Canada Highway (Route 1), alpine heath, 47.29744°N, 53.12634°W, 280 m, on siliceous rock, 27.vii.2017, *J.W. McCarthy* 3194, 3195 *& T. Greene & C. McCarthy* (NBM).

Conception Bay, Holyrood, Hawke Hills, SW of intersection of Witless Bay Line (Route 13) and Trans-Canada Highway (Route 1), Bosun, Avalon Wilderness Reserve, rocky alpine ericaceous-*Cladonia* heath, 47.27623°N, 53.1532°W, 255 m, on siliceous rock, 27.vii.2017, *J.W. McCarthy* 3438 *& T. Greene & C.* McCarthy (NBM); *ibid., Cladonia*-*Sphaerophorus globosus* montane maritime heath with scattered short-statured stands of *Larix laricina,* *Picea mariana*, and *Abies balsamea,* 47.80713°N, 53.28936°W, 231 m, on siliceous rock, 21.viii.2021, *J.W. McCarthy* 4153(CANL).

*Northeast Newfoundland*:

Eastport Peninsula, Salvage, Route 310, Cow Head, rock face above *Picea mariana*-*Kalmia*-*Cladonia* tuckamoor, on siliceous rock, 3.x.2018, *J.W. McCarthy 4423* (CANL); Sandy Cove to Salvage trail, Route 310, exposed bedrock within *Picea mariana*-*Kalmia*-*Cladonia* heath, 48.65586°N, 53.69304°W, 140 m, on siliceous rock, 4.x.2018, *J.W. McCarthy* 3706 (CANL); *ibid.*, 48.6555°N, 53.69559°W, *J.W. McCarthy* 4179 (NY).

Notre Dame Bay, Pike's Arm, Route 346, top of Lookout trail, *Abies balsamea*-*Picea mariana*-*Empetrum* coastal, montane heath with rocky conglomerate rock outcrops, 49.64876°N, 54.58451°W, 67 m, on siliceous rock, 10.viii.2021, *J.W. McCarthy* 4598 (NBM).

*Southeast Newfoundland, Avalon Peninsula*:

St. Mary’s District, 2 miles E of Peter’s River, on a boulder in Atlantic heath, 7.vi.1956, *T. Ahti* 5174, 5184 (H9212738, H9212754).

St. Shott's Barrens, between Peter's River and St. Shott's, Route 10, hyper-oceanic treeless ericaceous-*Cladonia*-*Sphagnum* barrens, *Sphagnum fuscum*-*Trichophorum caespitosum* bog, small rock outcrops, 46.70723°N, 53.51918°W, 112 m, on siliceous rock, 20.viii.2018, *J.W. McCarthy* 3794 (NBM).

Chance Cove Provincial Park, Route 10, hyper-oceanic barrens, 46.79936°N, 53.04181°W, 81 m, on large siliceous boulder in Chance Cove River, 29.ix.2018, *J.W. McCarthy* 4159 (CANL, NBM, NY); *ibid.*, rock fields within hyper-oceanic barrens, on siliceous rock, *J.W. McCarthy* 4188 (NBM).

Just N of Chance Cove Provincial Park, N side of Route 10, just W of Chance Cove River, hyper-oceanic barrens, 46.80201°N, 53.04914°W, 97 m, on siliceous rock, 29.ix.2018, *J.W. McCarthy* 4161 (MSC, NBM, NY).

*Western Newfoundland*:

St. Barbe South District, Gros Morne National Park, Gros Morne Mountain, within 200 m of summit, open *Empetrum-Diapensia* tundra over granite, 49°36’N, 57°47’W, 806 m, on noncalcareous rock, 11.viii.1978, *I.M. Brodo* 22898(CAN–L10020611).

***Nunavut***

Vicinity of Coppermine, 67.808333°N, 115.141667°W, viii.1942, *M.E. Oldenburg* 42-985-34(WIS–L-0103831).

District of Mackenzie, Clinton, Golden Lake, 63.955284°N, 107.70874°W, 2.viii.1954, *M.E. Oldenburg* 54(MIN–1384866, WIS–L-0103829); District of Mackenzie, Bathurst Inlet, heath & *Carex* community, 67.083333°N, 108.283333°W, 30.vii.1979, on shale, *G.W. Scotter* 33156 (WIS–L-0103834).

District of Mackenzie, vicinity of Bathurst Inlet, rock lichen community, 67.7°N, 107.566667°W, 1.viii.1979, on shale, *G.W. Scotter* 33461 (CAN–L10001183, WIS–L-0103836).

District of Mackenzie, vicinity of Bathurst Inlet, in *Dryas* & *Carex-Salix* community, 66.366667°N, 107.616667°W, 2.viii.1979, on shale, *G.W. Scotter* 33586(CAN–L10001182, WIS–L-0103835).

District of Mackenzie, vicinity of Bathurst Inlet, rock lichen community, 67.7°N, 107.566667°W, 1.viii.1979, on shale, *G.W. Scotter* 33443 (WIS–L-0103837).

***Québec***

*Gaspésie:*

MRC de Haute-Gaspésie, Parc national de la Gaspésie, Mt Albert, summit area, 48.92853°N, 66.14713°W, mountain summit area, Arctic/alpine tundra, 2.vii.2013, *R.T McMullin* 8560 (CANL).

Mont de la Table, 9,9 km a l'est-nord-est du Gite du Mont Albert, 3,6 km au nord-nord-est du lac aux Américains, 3,2 km nord-ouest de la rivière Madeleine, 2,6 km au nord-nord-est du mont Xalibu, sommet exposé, champ de blocs, petit bloc rocheux, 1175 m, 2.viii.2014, *J. Gagnon* s.n.(QFA0627975).

Summit area of Mont de la Table, 48.98479°N, 66.00241°W, 1185 m, tundra, summit plateau, 26.ix.2017, *R.T McMullin* 21598 *& H. Doreval* (CANL).

*Nunavik:*

121,6 km au sud-sud-ouest du village de Kuujjuaq, 8,7 km au nord-ouest du lac Daubancourt, 6,2 km au nord-nord-est du lac Terre Rouge, 1,5 km à l'ouest-sud-ouest du lac Aulneau, environ 1 km à l'est du lac Jogues, 57,03917°N, 68.66639°W, 271 m, exposed rock outcrops, 18.vii.2012, *J. Gagnon* SF12-9089 (QFA).

130,3 km sud-sud-ouest du village de Kuujjuaq, 13,2 km au sud du lac Kasipwasikan, 8,9 km au sud-sud-ouest du lac La Lande, 7,6 km à l'ouest-nord-ouest du lac Colombet, environ 1 km à l'ouest-sud-ouest de la rivière Beurling, rivière Caniapiscau, rive ouest, 57,01917°N, 69,10750°W, 176 m, exposed rock outcrops, 19.vii.2012, *J. Gagnon* SF12-9032 (QFA).

149,8 km au sud-sud-ouest du village de Kuujjuaq, 11,1 km à l'ouest-nord-ouest du lac Carré, 9,9 km à l'est-sud-est du lac Chabanel, 5,3 km à l'est du lac de la Moraine, 1,2 km au nord du lac Connelly, 56,89806°N. 69,41167°W, 285 m, exposed rock outcrops, 19.vii.2012, *J. Gagnon* SF12-9062 (QFA).

185,5 km à l'ouest-nord-ouest du village de Kawawachikamach, 11,5 km à l'ouest-sud-ouest du lac Savigny, 9,2 km à l'est-sud-est du ruisseau Mitusich, 8,0 km à l'est-nord-est de la rivière de la Mort, 3,67 km au nord-ouest du lac Cambrien, 56,29583°N, 69,02556°W, 446 m, exposed rock outcrops, 26.vii.2012, *J. Gagnon* SF12-9077, SF12-9080, SF12-9084, SF12-9086(QFA).

89,9 km au nord de la ville de Schefferville, 50 km au nord-nord-ouest du village de Kawawachikamach, 8,1 km à l'ouest-sud-ouest du lac Chassin, 11,3 km au sud du lac Mesnu, 6,7 km au nord-est du lac Pauline, 55,59917°N, 67,02833°W, 611 m, exposed rock outcrops, 30.vii.2012, *J. Gagnon* SF12-9128 (QFA).

60,2 km à l'est-nord-est de la ville de Schefferville, 58,7 km à l'est-sud-est du village de Kawawachikamach, 5,3 km au sud-sud-est du lac McNeil, 4,3 km au sud-ouest de la rivière de Pas, environ 700 m au nord du lac Indian, 55,02472°N, 65,97833°W, 629 m, 7.viii.2012, *J. Gagnon* SF12-9029(QFA).

137,4 km au sud du village de Kuujjuaq, 5,3 km à l'ouest-nord-ouest du lac Marcel, 5,8 km au nord-ouest du lac Kasakamisu, 1,8 km à l'ouest du lac Le Moyne. 56,88722°N, 68,25111°W, 305 m, exposed rock outcrops, 4.viii.2012, *J. Gagnon* SF12-9035 (QFA).

***Yukon***

Mile 39.9-Mile 41.5, Dempster Highway, rock outcrop and cliffs, W of road, 66.475227°N, 136.495881°W, 1070 m, 8.vii.1973, *M. Ostafichuk & J.E. Marsh* 5257(WIS–L-0103843).

**Russia**

***Lapponica Rossica:***

In rupe syenitica loco aprico ventosa in regione subalpine montis Päänuorunen (Republic of Karelia), 3–4.viii.1877, *Vainio* s.n. (TYPE—TUR–V05894; as *Lecanora myrini* var. *subadunans*).

**Sweden**

***Lule lappmark:***

Gällivare par., along the Ritsem road c. 3 km SE of Suorva, 67.51406°N, 18.24633°E, 460 m, on siliceous rock in scree slope with large boulders, 27.viii.2010, *A. Nordin* 7092 (UPS L-520804).

**United States**

***Alaska:***

Yukon-Koyukuk, Endicott Mts of Brooks Range, Arrigetch Creek valley, 67.441667°N, 154.083333°W, 853 m, on limestone boulders, 16.vii.1979, *D.J. Cooper* CL-260 (ALA–H1032320, WIS–L-0103847).

Mount Fairplay, vicinity of Tetlin National Wildlife Refuge, epilithic on rocks in *Arctostaphylos alpina*-*Diapensia lapponica* alpine fellfield, 63.698317°N, 142.254133°W, 1097 m, 25.vii.2001, *S.S. Talbot & W.B. Schofield* 416, 418 (ALA–H1032321, WIS–L-0103855, WIS–L-0103853, WIS–L-0103854); epilithic on talus slope in *Cassiope tetragona*-*Pleurozium schreberi* alpine heath, 63.698317°N, 142.254133°W, 1097 m, 25.vii.2001, *S.S. Talbot & W. B. Schofield* 432 (WIS–L-0103851); 63.69137°N, 142.2432°W, 1250 m, on quartzite, 25.vii.2001, *S.S. Talbot and W.B. Schofield* 458(WIS–L-0103209).

Gates of the Arctic National Park, Brooks Range, Chimney Lake, 67.764651°N, 150.500407°W, 740 m, on schist, 18.vii.2012, *T.B. Wheeler* 3942(hb. Wheeler).

Upper Nigu River, 67.972488°N, 155.376505°W, 1115 m, on phyllite, 2.viii.2012, *T.B. Wheeler* 4628 (hb. Wheeler).

***Maine:***

Piscataquis County, Mt. Katahdin, flank North Peak, 31.vii.1923, *A. Norton & J.F. Fanning* s.n. (FH–00419362).

***Aspilidea myrinii***

**Finland**

***Kuusamo:***

Salla (= Kuolajärvi), in cacumine montis Hositunturi, ad saxa rupesque metabasiticas in reg. alp., cp., 1.vii.1937, *M. Laurila* s.n. (UC–617014; O–L207353, *Lichenes Fenniae Exsiccati* no. 412, as *Aspicilia subadunans* (Vain.) Räs.).

***Lapponica enontekiënsis:***

Enontekiö, Kilpisjärvi, W—Saana, 950 m s.m., ad rupem calcaream loco ventoso, 9.viii.1947, *A.J. Huuskonen,* s.n. (MSC–0130362; UC–1406303, *Lichenotheca Fennica* no. 392).

Enontekiö, Saana, ad saxa schistosa in regione alpina, vii.1949, *A.J. Huuskonen* s.n*.* (MSC–0130425; UC–1406177, *Lichenotheca Fennica* no. 755).

Enontekiö, in summo monte Anjeloodi, c. 900 m s.m., ad saxa schistosa in reg. alpina, 27.vii.1955, *A. Henssen & A.J. Huuskonen* s.n*.* (MSC–0130970; UC–1406654, *Lichenotheca Fennica* no. 887).

Enontekiö, in summo monte Marfivaarri, ad lapidem quartziticam, 7.viii.1956, *A.J. Huuskonen* s.n. (MSC–0121125; UC–1406270; *Lichenotheca Fennica* no. 984).

**Norway**

***Buskerud:***

Sigdal, Mt Holmevassnatten, alt. 1200–1220 m, vertical side of boulder in alpine region, 17.iv.1981, *E. Timdal* 2448 (O–L20828).

***Hedmark:***

Ringsaker, the E slope of Mt Kotuva, 61°15’N, 10°52’E, 940 m, on a N-facing rock in the low alpine zone, 24.viii.1996, *R. Haugan* 5303(O–L45059).

Tolga, Holøydalen, E faced talus below Mt Stortjønnknausen, 62°14.37’N, 11°23.49’E, 820 m, vertical side of siliceous boulder, 9.vi.2013, *R. Haugan* 11729 (O–L190159).

***Hordaland:***

Ulvik, Umgebung von Finse, Gipfelbereich des Lengjedalsbrotet (östlich von Finse), Steil und Schrägflächen niedriger, lange schneebedeckter Schieferfelsen, 1500 m (hochalpine Stufe), 25.viii–7.iv.1974, *H. Hertel* 15562 (O–L68459).

***Innlandet:***

Øystre Slidre, Valdresflya, between Lakelet Rasletjern and state road 51, 61.3908°N, 8.7847°E, 1410 m, on rock, 9.viii.1985, *T. Tønsberg* 9326 (BG–L-40625).

***Nord-Trøndelag:***

Steinkjer, old copper mines 1.5 km E of Mokk, 63°57.86’N, 12°07.76’E, 480 m, 9.viii.2011, *Bendiksby et al.* 12404 (O–L175683).

***Oppland:***

Dovre, Hjerkinn, mountain ridge E of Veslkringla, 62°09.73’N, 9°32.42’E, 1340 m, siliceous rock face, 21.vii.2013, *R. Haugan* 11694(O–L190124).

***Rogaland:***

Sauda, along the road between Sauda and Røldal, between Breiborg and Svartavatnet, at the stone monument, across the road, 59.73020°N, 6.61261°E, saxicolous on upper part of wall of boulder in boulder field, 23.vi.2013, *T.* *Tønsberg* 42336 (BG–L-98357).

***Vestland:***

Eidfjord, Drølstølsgjelae på Vidden, alt. 900–1000 m, 60.3851°N, 7.3038°E, 12.vii.1907, *J.J. Havaas* s.n. (BG–L-40628).

**Sweden**

***Härjedalen:***

Ljusnedal par., Evagraven canyon, c. 5 km NE of Messlingen. 62°41’23”N, 12°56’00”E (WGS84), 890 m, on schistose rock below the steep rockwalls, 4.ix.2009, *A. Nordin* 6910(UPS L-205077).

Ljusnedal par., Fiskhålsgraven, c. 5 km NE of Messlingen. 62°41’28.1”N, 12°54’27.5”E (WGS84), 860 m, on loose schistose rock fallen down from the steep rock-wall; 4. ix. 2009, *A. Nordin* 6923 (UPS L-205089).

Tännäs parish, Mt. Gruvvålen, S of Glimsjön, alt. 920 m, on rock near the old copper mine, 11.viii.1984, *R. Santesson* 31147 (O–L143698).

***Jämtland:***

Åre par., Mt Skurdalsbergen, S part, c. 3 km N of Storlien,63°20’32’’N, 12°05’26”E (WGS84), 790 m., on loose siliceous rock in scree slope below vertical *Xanthoria*-rich rock wall, 31.viii. 2008, *A. Nordin* 6667 (UPS L-183014).

Åre par., Duved, Mt Mullfjället, the top cairn, 63.422719°N. 12.955658°E, 1030 m, on siliceous rock. 21.viii.2016, *A. Nordin* 7960 (UPS L-792766).

Undersåker par., Mt Ottfjället, Pucklarna, SW slope, 63°10’22.0”N, 12°58’06.7”E (WGS84), 920 m, on steep rock wall facing S, 7.ix.2009, *A. Nordin* 7004 (UPS L-205165).

Undersåker par., Mt Välliste, NNW slope, close to walking trail. 63.27267°N, 13.14510°E, 935 m, on siliceous boulder in rocky area, 14.viii.2013, *A. Nordin* 7544 (UPS L-632574).

***Lule lappmark:***

Jokkmokk par., S slopes of Mt Piutjapakte (Bivtjabákte) N of lake Sitojaure (Sijddojávrre), E of the sami seite, 67.30608°N, 18.25803°E, 720 m, on small siliceous boulder in scree slope, 26.viii.2010, *A. Nordin* 7080 (UPS L-520768).

***Pite lappmark:***

Arjeplog par., SW side of the mountain Tjidtják, c. 2.3 km SW of the lake Gåjvojávrre, W side of the creek running from the lake, 66.57703°N, 16.57985°E, 917 m, on large, siliceous boulder, 26.viii.2017, *M. Westberg, L. Hedenäs & G. Odelvik* PL353 (UPS L-877075).

***Torne lappmark:***

Karesuando par., Mt Baikkasvárri, N side, c. 1 km N of Treriksröset, 69°02’54.5’’N, 20°34’15.7’’E, 675 m, on siliceous rock, 30.vi. 2007, *A. Nordin* 6377 (UPS L-167082).

**Russia**

***Ks. Kuolajärvi (Salla):***

Sallatunturi, ad rupes ventosas, 6.vii.1934, *V.* *Räsänen* s.n.(H, LE, UPS; as syntype of *Aspicilia cinerea* var. *sallensis* Räsänen, H9503235).

Sallatunturi, ad saxa ventosa, *V.* *Räsänen* s.n.(H, LE, UPS; as syntype of *Aspicilia cinerea* var. *sallensis* Räsänen, H9503236); ad saxa in reg. alp., 6.vii.1934, *V.* *Räsänen* s.n. (H, LE, UPS; as syntype of *Aspicilia cinerea* var. *sallensis* Räsänen, H9503237).

***Herbaria collections incorrectly identified as Aspilidea myrinii***

**Canada**

***Alberta*:**

Jasper National Park, Athabasca Falls on Athabasca River, c. 20 mi S of Jasper, dry lodgepole pine forest with granitic rock outcrops, 52.5°N, 118.5°W, 3500 m, on granitic outcrops, 29.vi.1991, *S.C. Tucker* 30825 (SBBG002873L; revised as *Aspicilia cinerea*, s. lat.).

***British Columbia*:**

Kootenay Land Distr., Dear Park, 49°N, 117.633°W, 7.vi.1890, *J. Macoun* 38(CAN–L10012537; revised as *Aspicilia cinerea*, s. lat.).

Stikine Region, Three Guardsmen Pass, Mile 60, Haines Hwy, tundra, 59.66667°N, 136.5°W, 1065 m, on granitic rock, 20.vii.1967, *J.W. Thomson* 21871, 21904 *& T. Ahti* (WIS–L-0103828, WIS–L-0103827; revised as *Aspicilia* *cinerea*, s. lat.).

Northern Rocky Mountains, Liard River basin, Wokkpash Lake, along W shore of lake at N end to the outlet into Wokkpash River, steep clay-gravel banks with scattered *Salix* scrub, on stone in dry spruce-pine woods near river, 58.45°N, 124.883°W, 23.vii.1977, *I.M. Brodo & E. Haber* 21583 (CAN–L10006057; revised as *Aspicilia* spp.).

***Northwest Territories:***

Cape Parry Area near Pin Main Dewline Dewline station, polar semi-desert and seepage areas, 70.016667°N, 126.95°W, 15.vii.1978, *G.W. Scotter* 26527 (WIS–L-0103830; revised as *Aspicilia cinerea*, s. lat.).

***Nunavut*:**

Baffin Island, Cape Dorset, 28–29.viii.1934, *N. Polunin* 2381a-28(FH–00419363; revised as *Lecidea swartzioidea*).

Northwest Territories (Nunavut), District of Keewatin, Baker Lake, on rock trains just E of town, 64.32°N, 96°W, 19.vii.1959, *J.W. Thomson & J. A. Larsen* 23928, 23968 (WIS–L-0103840, WIS–L-0103841; revised as *Aspicilia cinerea*, s. lat.).

Northwest Territories (Nunavut), District of MacKenzie, vicinity of Bathurst Inlet, Rock Lake, lichen-*Dryas* heath & *Carex*-*Eriophorum*, 67.233333°N, 107.25°W, on shale, 31.vii.1979, *G.W. Scotter* 33337, 33354 (WIS–L-0103832, WIS–L-0103838; revised as *Aspicilia cinerea*, s. lat.).

Northwest Territories (Nunavut), District of MacKenzie, vicinity of Bathurst Inlet, *Dryas* & *Alnus*-*Salix* communities, 66.366667°N, 107.133333°W, on shale, 1.viii.1979, *G.W. Scotter* 33418, 33423 (WIS–L-0103839, WIS–L-0103833; revised as *Aspicilia cinerea,* s. lat.).

***Québec*:**

Fort Chimo (Kuujuak), area to N of settlement and on hill to NW of airstrip, 58.1°N, 68.4167°W, on granite rock, 18.viii.1959, *J.W. Thomson* 13828 (CAN–L10001180, WIS–L-0103842; revised as *Aspicilia cinerea*, s. lat.).

**Sweden**

Torne Trask area, Torne Lappmark Province, path to Katterjakk Stn. to Katterjakk Lake, 1.5 km SW of Katterjakk Sta., lower alpine belt, 68.42°N, 18.13°E, elev. 600 m, growing on rock in stream, riparian habitat, with *Saxifrage* spp., and mosses, 26.viii.1992, *L. Geiser* TNFS L2951 (ALA–H1252296; revised as *Rhizocarpon* spp.).

**United States**

***Alaska:***

Thomson Pass, Mile 25.2, Richardson Highway, *Racomitrium lanuginosum*-*Lupinus nootkatensis* alpine tundra on upper mountain slope, 61.128611°N, 145.729722°W, 838 m, on bird perch rock, 27.vii.1967, *J.W. Thomson* 23401 *& T. Ahti* (WIS–L-0103850; revised as *Aspicilia cinerea*, s. lat.).

Sheep Mountain, Mile 113, Glenn Highway, up slope/top of ridge, 61.833333°N, 147.5°W, 1524 m, on rocks, 29.vii.1967, *J.W. Thomson* 21002, 21066 *& T. Ahti* (WIS–L-0103846, WIS–L-0103845; revised as *Aspicilia cinerea*, s. lat.).

Denali Naional Park, Polychrome Pass on bluff high above main park road, 63.515°N, 149.934444°W, saxicolous, 15.viii.1989, *G.Y. McHenry* 81589.51 (WTU–L-6468; revised as *Aspicilia* spp.).

Aleutians East, Izembek National Wildlife Refuge, Frosty Mountain, 55.123333°N, 162.838333°W, 500 m, epilithic, 1.viii.1993, *S.S. Talbot* 224 *& S. Talbot & W. Schofield* (WIS–L-0103848; revised as *Lecidea lactea*).

Adak Island, Aleutian Islands, W side of Sweeper Cove, epilithic on boulder in streamlet channel, 51.854333°N, 176.634033°W, 50 m, 22.viii.1994, *S.S. Talbot* 1186 *& S. Talbot* (WIS–L-0103844; annotated by J.W. Thomson (1994) as “sterile, possibly *Aspicilia myrinii* but cannot be certain”; identification not attempted).

Glory of Russia Cape area, St. Matthew Island, on rock in fellfield ridge, 60.557633°N, 172.946017°W, 100 m, 19.vii.1997, *S.S. Talbot* SM97-114, SM97-115A *& S. Talbot* (WIS–L-0103852, WIS–L-0103849; revised as *Aspicilia* spp.).

North Slope County, Noatak National Preserve, Noatak River, S side of Noatak River directly opposite the mouth of the Nimiukuk on a prominent hill with a rock cairn on top, on dwarf shrub *Betula glandulosa*, ericaceous tundra, 68.1202°N, 159.91338°W, 261 m, 29.viii.2002, *T. Wiese* NM-1-04d *& B. Carter* (ALA–H1267429; revised as *Aspicilia* spp.).

***Colorado:***

Larimer Co., Rocky Mountains National Park, alpine tundra of Trail Ridge NW and W of Toll Memorial, E of Iceberg Pass, alpine tundra, 40.416667°N, 105.733333°W, 3500–3720 m, 4–5.viii.1984, *J.W. Thomson* 22464(WIS–L-0103856; revised as *Aspicilia cinerea*, s.lat.).

***Michigan:***

Keweenaw County, Keweenaw Point, side of Mt. Bohemia, 47.391577°N, 88.013163°W, on talus blocks, 31.vii.1947, *J.W. Thomson* 2951 (WIS–L-0103857; revised as *Aspicilia cinerea*, s. lat.).

***Minnesota:***

NE Minnesota, Cook, Gunflint, 47.75583°N, 90.324887°W, on rocks,1.vii.1897, *B. Fink* 309a (WIS–L-0103858; revised as *Aspicilia* sp.).

***Montana:***

Flathead County, McDonald Creek gorge, just upstream from Avalanche Creek, on moss over argillite boulders below high-water mark, 48.683333°N, 113.8°W, 1073 m, 26.vii.1986, *R. Rosentreter* 4021(WIS–L-0103859; revised as *Aspicilia cinerea*, s. lat.).

***South Dakota:***

Black Hills, road to Mount Rushmore, 43.880057°N, 103.459242°W, 15.viii.1940, *J.W. Thomson* 2157 (WIS–L-0103860; revised as *Aspicilia cinerea*, s. lat.).

***Washington:***

Kittitas County, small rocky ridge in meadow above FR 2107, c. 21 miles N of Ellensburg, 47.30067°N, 120.54667°W, 1738 m, saxicolous, 25.viii.1995, *M. Arnot* L418(WTU–L-6938; revised as *Bellemerea alpina*).

***Sagediopsis aspiciliae***

**Canada**

***Newfoundland and Labrador:***

*Central Newfoundland:*

Burgeo Highway, Route 480, Annieopsquotch Mountains, SW end, 83 km N of Burgeo and 4 km S of Lloyd's River bridge on Burgeo Highway (Route 480), mafic, diabase mountains, 48.2804°N, 57.70516°W, 535 m, on mafic rock, 9.x.2018, *J.W. McCarthy* 4162, 4180, 4181, 4341, 4343, 4493, 4597 *& C. McCarthy* (NBM); *J.W. McCarthy* 4163, 4182, 4183, 4595 *& C. McCarthy* (CANL).

*Eastern Newfoundland, Avalon Peninsula:*

Fairhaven Barrens, Route 203, c. 8 km SW of Route 1 (Trans-Canada Highway)-Route 203 intersection, c. 300 m in from right side of road, *Cladonia*-*Racomitrium*-ericaceous-*Juniperus* heath with ombrotrophic *Trichophorum cespitosum* bog-*Abies balsamea*-*Picea mariana*-*Larix laricina*-*Alnus* tuckamoor complex, 47.55801°N, 53.84918°W, 125 m, on siliceous rock, 11.x.2015, *J.W. McCarthy* 2903, 2904(NBM); *ibid.,* 47.55719°N, 53.84724°W, 137 m, *J.W. McCarthy* 2924 (CANL).

Between Fox Harbour and Ship Harbour, 16.8 km from the intersection of Routes 100 and 102, top of Sugarloaf Hill, 47.3593°N, 53.878449°W, 220 m, exposed rocky hill with *Abies balsamea*-*Picea mariana* tuckamoor, *Alnus*-*Racomitrium*-*Cladonia*-*Juniperus*-ericaceous heath, on siliceous rock, 9.x.2015, *J.W. McCarthy* 2936 (NY), 4158 (NBM).

*Northeast Newfoundland, Eastport Peninsula:*

Salvage, Route 310, Cow Head, rock face above *Picea mariana*-*Kalmia*-*Cladonia* tuckamoor, on siliceous rock, 3.x.2018, *J.W. McCarthy* 4423 (CANL).

Sandy Cove to Salvage trail, bedrock outcrops among stunted *Picea mariana*-*Larix laricina*-*Cladonia*-*Kalmia* heath, Route 310, 48.6555°N, 53.69559°W, 140 m, on siliceous rock, 4.x.2018, *J.W. McCarthy* 4179 (NY).

**Québec**

*Gaspésie:*

MRC de Haute-Gaspésie, Parc national de la Gaspésie, Mt Albert, summit area, 48.92853°N, 66.14713°W, mountain summit area, Arctic/alpine tundra, 2.vii.2013, *R.T McMullin* 8560 (CANL).

*Nunavik:*

121,6 km au sud-sud-ouest du village de Kuujjuaq, 8,7 km au nord-ouest du lac Daubancourt, 6,2 km au nord-nord-est du lac Terre Rouge, 1,5 km à l'ouest-sud-ouest du lac Aulneau, environ 1 km à l'est du lac Jogues, 57,03917°N, 68.66639°W, 271 m, exposed rock outcrops, 18.vii.2012, *J. Gagnon* SF12-9089 (QFA).

185,5 km à l'ouest-nord-ouest du village de Kawawachikamach, 11,5 km à l'ouest-sud-ouest du lac Savigny, 9,2 km à l'est-sud-est du ruisseau Mitusich, 8,0 km à l'est-nord-est de la rivière de la Mort, 3,67 km au nord-ouest du lac Cambrien, 56,29583°N, 69,02556°W, 446 m, exposed rock outcrops, 26.vii.2012, *J. Gagnon* SF12-9077, SF12-9080, SF12-9084, SF12-9086(QFA).

60,2 km à l'est-nord-est de la ville de Schefferville, 58,7 km à l'est-sud-est du village de Kawawachikamach, 5,3 km au sud-sud-est du lac McNeil, 4,3 km au sud-ouest de la rivière de Pas, environ 700 m au nord du lac Indian, 55,02472°N, 65,97833° W, 629 m, 7.viii.2012, *J. Gagnon* SF12-9029(QFA).