

An Interdisciplinary Approach to Documenting Knowledge: Plants and Their Uses in Southern Greenland

SIMONE S. WHITECLOUD¹ and LENORE A. GRENOBLE²

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ABSTRACT. The native language of west Greenland, Kalaallisut, is robust, with over 50 000 speakers among approximately 56 000 inhabitants. However, many people in Nuuk, the capital and largest city, believe traditional knowledge of plant uses has been lost as a result of extensive Danish contact. Our findings indicate that in southern Greenland local knowledge of plant uses is greater than believed. Interviews conducted with people in two southern communities, Nanortalik and Qassiarsuk, showed that people acquire knowledge about plants through a vast number of resources, not only Inuit knowledge from elders, but also published European sources and experimentation, raising questions about the extent to which such knowledge can be labeled traditional or ancestral. We documented more than 50 taxa and 205 plant uses in seven broad categories: medicine, beverages, food, herbs and spices, fuel, ritual, and material culture, the last category consisting primarily of decorative uses. Although medicinal uses account for the largest amount (~27%), the combination of the food, beverage, and herbs and spices/condiment categories make up nearly half of all uses. Some plants, in particular mushrooms and seaweed, were identified as edible but are not consumed. All consultants are fluent speakers of Kalaallisut, and identified the majority of plants. However, only 12 species were identified by everyone consulted, and some plants were identified by their Danish name. Some plant names and uses have remained consistent along the migration route of Inuit ancestors across the Arctic, while others have been lost or changed over time.

Key words: Greenland, Arctic, ethnobotany, linguistics, language, Inuit, local knowledge, plants

RÉSUMÉ. La langue autochtone de l'ouest du Groenland, le kalaallisut, est une langue robuste. Elle est parlée par plus de 50 000 personnes relevant d'une population d'environ 56 000 habitants. Cependant, de nombreuses personnes de Nuuk, la capitale et également la plus grande ville du pays, croient que les connaissances traditionnelles des plantes se sont perdues en raison des contacts trop grands avec les Danois. Nos observations indiquent cependant que dans le sud du Groenland, la connaissance des plantes locales est meilleure que ce que les gens croient. Des entrevues réalisées auprès de gens faisant partie de deux collectivités du Sud, Nanortalik et Qassiarsuk, montrent que les gens acquièrent des connaissances au sujet des plantes au moyen de diverses sources, non seulement les aînés inuits, mais aussi à partir de sources européennes publiées et d'expérimentation, ce qui a pour effet de soulever des questions à savoir dans quelle mesure les connaissances peuvent être considérées comme traditionnelles ou ancestrales. Nous avons répertorié plus de 50 taxons et de 205 utilisations de plantes relevant de sept grandes catégories : médecine, boissons, aliments, herbes et épices, carburants, rituels et culture matérielle. Cette dernière catégorie prend principalement la forme d'usages décoratifs. Bien que les utilisations à caractère médicinal représentent la plus grande partie des utilisations (~27 %), l'ensemble des catégories des aliments, des boissons et des herbes et épices-condiments représente près de la moitié de tous les usages. Certaines plantes, plus particulièrement les champignons et les algues, étaient considérées comme comestibles, sans pour autant être consommées. Toutes les personnes consultées parlent le kalaallisut couramment, et elles ont réussi à identifier la majorité des plantes. Toutefois, seulement 12 espèces ont été identifiées par toutes les personnes consultées, et certaines plantes ont été identifiées au moyen de leur nom danois. Le nom et l'utilisation de certaines plantes sont restés les mêmes le long de la route de migration des ancêtres inuits à l'échelle de l'Arctique, tandis que d'autres se sont perdus ou ont été modifiés au fil du temps.

Mots clés : Groenland, Arctique, ethnobotanique, linguistique, langue, Inuit, connaissance locale, plantes

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¹ Ecology and Evolutionary Biology, Department of Biology, Dartmouth College, Hanover, New Hampshire 03755, USA; simone.whitecloud@dartmouth.edu

² Department of Linguistics, University of Chicago, 1130 East 59th Street, Chicago, Illinois 60637, USA; grenoble@uchicago.edu
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INTRODUCTION

Most recent evidence indicates that the Thule people followed bowhead whales along the receding sea ice margin east from Alaska in the 13th century (Friesen and Arnold, 2008), peopling northern Canada and Greenland. This migration is evidenced by the Inuit group of the Inuit-Yupik-Aleut linguistic family, with Inuit varieties spoken from Alaska (e.g., Iñupiaq) across Canada (e.g., Inuktitut and Inuinnaqtun) to Greenland. Since the Arctic flora includes only about 1500 vascular plant species (Walker, 1995) and most of these have circumpolar ranges, plants encountered along this route were mostly identical; thus it is possible that both language concerning plants and knowledge of their uses were transported along the migration route.

At present, cultural knowledge that originally made this migration possible is still strong along this migration route, but language vitality has declined dramatically in Alaska and parts of Canada. Local language is relegated to certain key domains. In such circumstances, its use is often associated with a traditional (usually subsistence) lifestyle and traditional culture and knowledge. Unlike many other indigenous languages, Kalaallisut (West Greenlandic), the official language of Greenland, enjoys a long-standing written tradition. In addition to reference grammars and dictionaries, resources include a primary written literature in Kalaallisut. The population reads the language and speaks it fluently. However, after 400 years of colonization by Denmark, much traditional knowledge has been lost, and Greenlanders are strongly invested in modernization and attaining self-sufficiency. The transition to a self-rule government in June 2009 has provided greater autonomy for the former Danish colony, and the changing climate is exposing new mineral and gas reserves that could possibly make Greenland financially independent from Denmark. While Danish presence has strongly influenced many facets of Greenlandic culture, the indigenous language remains strong, and Greenlanders still maintain a portion of their diet through traditional subsistence hunting, although subsistence meats are also sold in grocery stores and specialty markets.

In traditional Inuit diets, meat was the primary source of nutrition, with plants constituting only 5% of the diet of Inuit in the Bering Sea area (Weyer, 1932 in Porsild, 1953), often as sources of vitamin C during winter (Porsild, 1953). The small role of plants in the diet, coupled with the long Danish presence and access to produce and supplements, implied that traditional knowledge of plants in Greenland was no longer necessary. Our first queries into plant uses in the summer of 2009 supported this supposition. Most responded that Greenlanders no longer use wild plants: that such practices were traditional, and now Greenlanders are modern. However, through connections with the Greenland Language Secretariat, the Inuit Circumpolar Council, and KNAPK (Association of Hunters and Fishers in Greenland), we were able to identify a handful of people who maintained knowledge of plants.

We take an interdisciplinary approach to documenting Inuit plant knowledge: the biologist provides understanding of botanical identification, plant uses, methods of collection, preparation, and storage, while the linguist provides access to the linguistic identification of the plants, both in Greenland and in a pan-Inuit context, and access to the historical documentation. This collaborative effort allows us to document the revitalization of knowledge, passed down through oral tradition and borrowed from Danish printed sources. Here we discuss our work collecting the knowledge (linguistic, scientific, and local) about plants in southern Greenland and test the likelihood that this knowledge reflects the migration route of Inuit ancestors across the Arctic.

BACKGROUND: KALAALLISUT

Kalaallisut differs significantly from other Arctic indigenous languages in its social, political, and economic status. The official variety is a codified language based on West Greenlandic dialects. Standardization, including the creation of new lexical items, is the purview of the Greenland Language Secretariat (Oqaasileriffik), which is part of the Greenland Government. As the official language, Kalaallisut is used in education, government, and all domains of life. It is the majority language in Greenland. Although many Greenlanders are fluent speakers of Danish, the colonizing language, it is a second language for the majority of the population: 78% speak Kalaallisut all or most of the time (Schweitzer et al., 2010). Higher education continues to be in Danish, although since the institution of self-government rule in 2009, developing higher education materials in Kalaallisut has become a priority. In addition, certain other domains are inevitably dominated by Danish. For example, television broadcasts are primarily in Danish, although KNR (the Greenlandic Broadcasting Program, *Kalaallit Nunaata Radioa*, literally ‘Greenland Radio’) broadcasts both television and radio programs in Kalaallisut. Such programming constitutes from 12% to 18% of total programming and reflects a strong commitment of Nalakkersuisut (the Greenland Self-Government) to broadcasting in Kalaallisut. Imported goods come primarily from Denmark in Danish packaging. English is infiltrating Greenland, as it has done elsewhere, and is seen as the key global language. There have also been increased efforts to establish English as a third language for at least a segment of the population. Still, Kalaallisut is the primary and preferred language for the overwhelming majority.

In the context of Greenland, standardization means that although there are dialect variants for some of the common names for plants, there are normative names as well. An analogous situation is found with some common names in American English. For example, dandelion has a number of regional variants (e.g., ‘dandylion’) but ‘dandelion’ is the standard spelling. Commonly known plants in Greenland similarly have standard spellings approved by

the Greenland Language Secretariat in both a field guide to the flora (Foersom et al., 1997) and a dictionary (Berthelsen et al., 2006). Again, Kalaallisut differs from other Arctic indigenous languages in terms of the legal authority of the Greenland Language Secretariat.

Our fieldwork was conducted at two locations in southern Greenland, a different dialect region than that of the West Greenlandic dialects on which the standard is based. At times our consultants provided local (dialect) forms of the plant names. A full analysis of dialect variation in these names is beyond the scope of this paper.

STUDY AREA AND COMMUNITIES

In August 2011, we interviewed residents of two communities in southern Greenland. We spent five days in Qassiarsuk (61°09'00" N, 45°31'00" W), a sheep farming settlement of 47 people accessible only by boat, and four days in Nanortalik (60°08'24" N, 45°13'54" W), a town of approximately 1300 with a helipad (Statistics Greenland, 2013; Fig. 1). All consultants were informed about the purpose of our study and gave verbal consent to be interviewed. We used a local interpreter during interviews and to translate recordings of interviews conducted without an interpreter.

Our information came from 10 adult consultants, one male and nine females, one of whom was an elder and matriarch of her settlement. We identified them by first asking local people if they knew about plants, and if not, if they knew someone who did. With one exception, all nine female consultants were identified as knowledgeable by multiple parties; no one identified the male consultant as knowledgeable. We conducted six detailed, semi-structured interviews, three in Qassiarsuk and three in Nanortalik. In Qassiarsuk, we also interviewed two women informally and observed a third using plants in a funeral wreath. The interviews in Nanortalik included one with a married couple. Interestingly, although only the wife was known in the community for her plant knowledge, her husband appeared to share her knowledge of plants and their uses, and both had personal connections with certain plants from childhood.

METHODS

Detailed interviews consisted of two parts, the first to identify plants and their uses, and the second to document dialectical differences in plant names and perhaps elicit additional uses. First, we showed consultants pictures or samples (fresh or dried) of plants, or both, and asked if they knew the plant and if there was a use for it. All consultants showed us materials dried for personal use, and often they had harvested fresh specimens in preparation for our interview. Second, we recorded participants stating the names of plant they saw while watching a slide show of 54 images (42 vascular plants, one moss, one mushroom, and

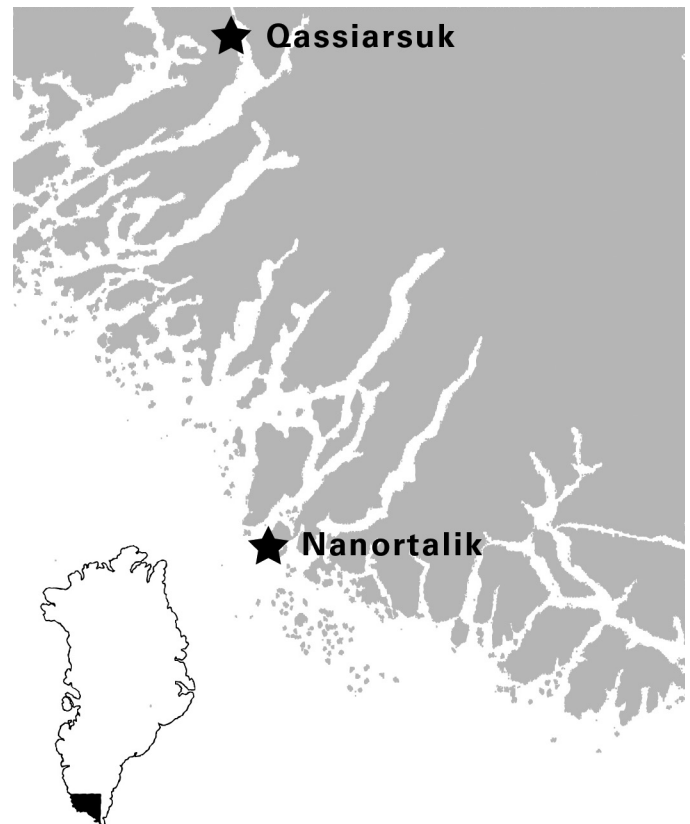


FIG. 1. Map of southern Greenland showing the locations of study areas.

10 seaweeds) on an Apple iPad (Table 1). The seaweeds were those we found while walking along the fjord in Qassiarsuk. We chose the remaining specimens from species that we perceived to be the most common and those with uses well known either in the Arctic or in Europe. We did not collect voucher specimens because of the simplicity of the flora (495 vascular species for the entire country; Rune, 2011) and also to avoid permit violations. Our photographs were taken during the current trip or on previous trips to Greenland.

Informal interviews took place throughout our trip. We documented any instance of plant use, as local people identified plants and their uses to us while driving or hiking, or as we observed people using plants in daily life (e.g., making household decorations from dried plants or preparing a funeral wreath).

Because we were interested in documenting each instance of plant knowledge, we defined “use” as the knowledge of one consultant about one method of preparing and using a plant. In an instance of preparations for different parts of the same species, each preparation was counted as a separate use. Identical uses by different participants were counted separately.

RESULTS

Knowledge varies from merely knowing who is knowledgeable about plants within the community to extensive

TABLE 1. Plant species used in the iPad slide show to record pronunciation and elicit information on uses. Listed in alphabetical order by family.¹

Family	Species
Agaricaceae	<i>Lycoperdon perlatum</i> Persoon ²
Apiaceae	<i>Angelica archangelica</i> L. <i>Ligusticum scoticum</i> L.
Asteraceae	<i>Achillea millefolium</i> L. <i>Arnica angustifolia</i> M. Vahl in Horenmann <i>Tripleurospermum maritimum</i> (L.) W.D.J. Koch <i>Taraxacum</i> sp.
Betulaceae	<i>Betula nana</i> L.
Campanulaceae	<i>Campanula rotundifolia</i> L.
Caryophyllaceae	<i>Cerastium alpinum</i> L. <i>Silene acaulis</i> (L.) Jacquin <i>Stellaria longipes</i> Goldie coll.
Cornaceae	<i>Cornus suecica</i> L.
Crassulaceae	<i>Rhodiola rosea</i> L.
Cupressaceae	<i>Juniperus communis</i> L.
Cyperaceae	<i>Eriophorum</i> sp.
Ericaceae	<i>Empetrum nigrum</i> Lange ex Hagerup <i>Pyrola grandiflora</i> Radius <i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd <i>Rhododendron lapponicum</i> (L.) Wahlenberg <i>Vaccinium uliginosum</i> L. <i>Vaccinium vitis-idaea</i> L.
Fabaceae	<i>Lathyrus japonicus</i> Willdenow
Gentianaceae	<i>Lomatogonium rotatum</i> (L.) Fries
Lamiaceae	<i>Thymus praecox</i> Opiz
Lentibulariaceae	<i>Pinguicula vulgaris</i> L.
Menyanthaceae	<i>Menyanthes trifoliata</i> L.
Onagraceae	<i>Chamerion angustifolium</i> (L.) Holub <i>Chamerion latifolium</i> (L.) Holub
Orobanchaceae	<i>Euphrasia frigida</i> Pugsley
Palmariaceae	<i>Palmaria palmata</i> (L.) Weber & Mohr ³
Papaveraceae	<i>Papaver radicum</i> auct. coll.
Phaeophyceae	<i>Alaria</i> sp. <i>Ascophyllum nodosum</i> (L.) Le Jolis ³ <i>Laminaria</i> sp.
Plantaginaceae	<i>Plantago maritima</i> L. <i>Hippuris vulgaris</i> L. coll.
Poaceae	<i>Leymus mollis</i> (Trinius) Pilger <i>Phleum alpinum</i> L.
Polygonaceae	<i>Bistorta vivipara</i> (L.) Delarbre <i>Rumex acetosa</i> L. <i>Rumex acetosella</i> L. coll.
Ranunculaceae	<i>Ranunculus</i> sp.
Rosaceae	<i>Dryas integrifolia</i> M. Vahl <i>Sibbaldia tridentata</i> (Solander) Paule & Soják <i>Sorbus groenlandica</i> (Schneider) Å. & D. Löve
Salicaceae	<i>Salix glauca</i> L. coll. <i>Salix herbacea</i> L.
Scrophulariaceae	<i>Pedicularis flammea</i> L. <i>Rhinanthus minor</i> L.
Sphagnaceae	<i>Sphagnum</i> sp.

¹ Plant Latin names and authors taken from Rune, 2011 unless otherwise noted. Abbreviations for authors of plant names: L. = Linnaeus; sp. = species; coll = collective species; ex = first validly published by the second author; auct. = by various authors (auctores).

² Species Fungorum. <http://www.speciesfungorum.org/Names/GSDSpecies.asp?RecordID=220647>.

³ Guiry and Guiry, 2014.

knowledge about the collection, preparation, storage, and use of plants. No one admitted to knowing about plants; those whom others had identified as knowledgeable did not claim to be experts. Three consultants did admit to a great love for plants, or excitement about plants, or both.

Consultants reported or recognized more than 50 taxa, of which 38 vascular plants, bryophytes, fungi, lichens, and seaweeds were identified to species, and the rest to genus, if possible (Table 2). We documented 205 uses of plants and grouped them in nine categories: beverage, material culture, food, medicine, fuel, herb and spice or condiment, ritual, inedible or contraindicated, and unknown (Table 2). Beverages include mostly teas and three instances of fermented drink. In the material culture category are funeral wreaths and decorative bouquets of dried and fresh materials, including Christmas trees made from *Juniperus communis*. Medicines include preparations for both topical and internal use. Fuel includes material for fire and candle-wicks. Herbs and spices are those plants used during cooking, while condiments are added to food after it is cooked. Ritual describes uses connected with spiritual practices, in this case to cleanse the home of bad energy or ghosts.

The majority of uses were for medicine (~27%), beverages (~22%), food (~20%), and material culture (~13%). Food and beverage were the only two categories of which every consultant in the semi-structured interviews had knowledge. Medicinal knowledge was held by only three consultants; however, other consultants used species with medicinal properties in teas and did not mention those properties. All material culture uses (27) were decorative: dried flowers hung in the homes of several consultants; the exception was one commercial perfume produced from *Thymus praecox* that was on display in the Nanortalik museum. We are unsure whether this product remains on the market. Food plants were often raw berries or jellies made from fruits or flowers. Often plants were mentioned as being edible, but were not necessarily consumed by the consultant. This was particularly true for mushrooms and seaweeds.

Forty-three percent of species had only one known use, 35% had two to five uses, and the remaining 22% had from six to 21 uses, with *Angelica archangelica* having the greatest number of uses.

Sources of Knowledge

Knowledge was acquired in various ways. Most consultants reported having gained their knowledge as children from elders and also from books. One participant, who was not recognized within the community as knowledgeable, reported that she invented new uses for plants, often using them in teas. Consultant 5, whose knowledge came from interviews she conducted at a nursing home, knew the greatest number of uses (32%), and the most medicinal uses for plants (35 of 42 reported). The married couple had knowledge handed down from relatives on the husband's and the wife's side, as well as from books in Kalaallit and

TABLE 2. Documented uses of plants, seaweeds, and fungi for South Greenland, listed alphabetically by family.^{1,2} Dashes (–) indicate that the consultant did not provide details for a given cell.

Family and species	Consultant Part used	Preparation	Use	Category
Agaricaceae:				
<i>Lycoperdon perlatum</i> Persoon ³	3 fb	dried whole, broken open and placed on a wound or scar	medicine	M
Apiaceae:				
<i>Angelica archangelica</i> L.	2 le	dried whole	tea	B
<i>Angelica archangelica</i> L.	2 se	dried whole	tea	B
<i>Angelica archangelica</i> L.	2 le	dried, mixed with salt	herb	S
<i>Angelica archangelica</i> L.	3 le	chopped fresh young leaves used in salmon salad, with fish, potatoes, muskox	food	FO
<i>Angelica archangelica</i> L.	3 se	fresh or dry, baked whole in cookies	food	FO
<i>Angelica archangelica</i> L.	3 st	soft stalk eaten raw in spring, peeled in fall	food	FO
<i>Angelica archangelica</i> L.	3 ro	peel and eat raw	food	FO
<i>Angelica archangelica</i> L.	3 st	mixed fresh with seal fat in a seal stomach, eaten with dried fish	food	FO
<i>Angelica archangelica</i> L.	3 le	dried and ground, coarsely or by hand, for cooking	food	FO
<i>Angelica archangelica</i> L.	5 –	–	–	–
<i>Angelica archangelica</i> L.	5 ro or le	add handful to 20 liters of water for a bath; take only 1/day, not for over 3 minutes	stimulant, to make you happy	M
<i>Angelica archangelica</i> L.	6 le	fresh in floral arrangements	decorative	MC
<i>Angelica archangelica</i> L.	6 st	small stalks minced, simmered with water, sugar and a peeled, grated red apple	marmalade, garnish; served with minke whale steaks	FO
<i>Angelica archangelica</i> L.	6 st	chopped small fresh stalk added to fresh Napa cabbage, with raisins, grated apple and juice of 1 lemon	salad	FO
<i>Angelica archangelica</i> L.	6 le	dried, ground	condiment for creamy fish soup, meat	S
<i>Angelica archangelica</i> L.	6 se	dried, ground	condiment	S
<i>Angelica archangelica</i> L.	7 st	sugared and pickled	food	FO
<i>Angelica archangelica</i> L.	7 le	plucked from stems, dried, ground	spice	S
<i>Angelica archangelica</i> L.	7 se	plucked from flower head, dried, ground	spice	S
<i>Angelica archangelica</i> L.	7 se	plucked from flower head, dried, used whole	tea	B
<i>Angelica archangelica</i> L.	8 le, st	dried	–	–
Asteraceae:				
<i>Achillea millefolium</i> L.	5 le	fresh leaves cooked lightly, used as compress	acne and wrinkles	M
<i>Achillea millefolium</i> L.	5 le, fl	1 handful of leaves and flowers to 1 liter of water	hand and foot bath	M
<i>Achillea millefolium</i> L.	5 –	–	skin, mosquitoes	M
<i>Achillea millefolium</i> L.	6 fl	fresh in floral arrangements	decorative	MC
<i>Achillea millefolium</i> L.	5 –	1 tbsp to 1 quarter liter of boiling water	for tumors or growths	M
<i>Achillea millefolium</i> L.	5 –	1 tsp to 1 cup boiling water daily for gargling	throat ailment	M
<i>Achillea millefolium</i> L.	5 le or ro	15 leaves per liter of water, or 5 pieces of cut roots per liter of water, 1 cup daily	stimulant, to make you happy	M
<i>Achillea millefolium</i> L.	5 fl	poultice	abscesses, boils, sores	M
<i>Matricaria recutita</i> L. ^{4,5}	5 fl	place fresh flowers in sun for five weeks	aching joints	M
<i>Matricaria recutita</i> L. ^{4,5}	3 –	eaten in East Greenland like <i>seernaq</i> (<i>R. acetosa</i>) or <i>kuanneq</i> (<i>A. archangelica</i>)	cleanses the body	FO, M
<i>Taraxacum</i> sp.	5 wh	–	lemonade	B
<i>Taraxacum</i> sp.	5 wh	–	tea	B
<i>Taraxacum</i> sp.	5 fl	50–70 heads, 2–3 dL honey, 1 liter water cooked 15 minutes. To prevent bitterness, use stalk as well as flower. Strain. Can be made into wine formerly used to make a coffee-like drink	juice, wine	B
<i>Taraxacum</i> sp.	5 ro	–	coffee-like beverage	B
<i>Taraxacum</i> sp.	5 wh	–	food	FO
<i>Taraxacum</i> sp.	5 le or fl	chopped	wounds, eczema, skin	M
<i>Taraxacum</i> sp.	5 le or fl	1 large handful per liter of water	hand or foot bath	M
<i>Taraxacum</i> sp.	5 wh	–	medicine	M
<i>Taraxacum</i> sp.	5 –	–	salad	FO
<i>Taraxacum</i> sp.	6 fl	–	wine	B
<i>Taraxacum</i> sp.	6 fl	fresh in floral arrangements	decorative	MC

TABLE 2. Documented uses of plants, seaweeds, and fungi for South Greenland, listed alphabetically by family.^{1,2} Dashes (-) indicate that the consultant did not provide details for a given cell – *continued*.

Family and species	Consultant Part used	Preparation	Use	Category
Betulaceae:				
<i>Betula glandulosa</i> Michaux	2	dried whole	tea	B
<i>Betula glandulosa</i> Michaux	8	dried	–	–
<i>Betula nana</i> L.	5	–	hand or foot bath	M
<i>Betula pubescens</i> Ehrhart coll.	2	dried whole	tea	B
<i>Betula pubescens</i> Ehrhart coll.	3	dried, for heating homes historically, no longer used	functional	FU
<i>Betula pubescens</i> Ehrhart coll.	7	plucked from stems, dried	tea	B
<i>Betula pubescens</i> Ehrhart coll.	8	dried	–	–
<i>Betula pubescens</i> Ehrhart coll.	9	fresh in floral arrangements	decorative	MC
<i>Betula pubescens</i> Ehrhart coll.	5	fresh in floral arrangements	for burns	M
<i>Betula</i> sp.	2	pulverize	salad	FO
<i>Betula</i> sp.	2	–	spice for anything	S
<i>Betula</i> sp.	2	dried, crumbled	tea	B
<i>Betula</i> sp.	4	dried	–	–
<i>Betula</i> sp.	5	–	fermented beverage (schnapps)	B
<i>Betula</i> sp.	6	–	tea	B
<i>Betula</i> sp.	7	whole, collected from and stored in ptarmigan (<i>Lagopus mutus</i>) crops ground, collected from ptarmigan (<i>Lagopus mutus</i>) crops	spice for lamb and caribou	S
Brassicaceae:				
<i>Capsella bursa-pastoris</i> (L.) Medik.	5	freshly crushed, place on wound to promote healing	wounds, inflammation, eczema	M
<i>Cochlearia groenlandica</i> L.	3	fresh, eaten raw	high in vitamin C; for scurvy or a cough	M
Campanulaceae:				
<i>Campanula rotundifolia</i> L.	2	dried whole	tea	B
<i>Campanula rotundifolia</i> L.	4	fresh in floral arrangements	decorative	MC
<i>Campanula rotundifolia</i> L.	4	dried	tea	B
<i>Campanula rotundifolia</i> L.	4	fresh, frozen in water for decorating cakes for special occasions	decorative	MC
<i>Campanula rotundifolia</i> L.	5	mix with sugar to make jelly	jelly	FO
<i>Campanula rotundifolia</i> L.	6	picked dry, cooked with water, gelatin, sugar and lemon juice	jelly	FO
<i>Campanula rotundifolia</i> L.	6	–	white flower tastes bad	I
<i>Campanula rotundifolia</i> L.	7	plucked from stem, dried	–	–
<i>Campanula rotundifolia</i> L.	9	fresh in floral arrangements	decorative	MC
Caryophyllaceae:				
<i>Stellaria media</i> (L.) Villars	5	–	eye bath	M
Cornaceae:				
<i>Cornus suecica</i> L.	3	fresh	food	FO
<i>Cornus suecica</i> L.	6	le, st, fl, fr	decorative	MC
<i>Cornus suecica</i> L.	6	fr	marmalade	FO
Crassulaceae:				
<i>Rhodiola rosea</i> L.	2	–	heard in stories that ancestors used it	U
<i>Rhodiola rosea</i> L.	3	le	food	FO
<i>Rhodiola rosea</i> L.	3	le	–	FO
<i>Rhodiola rosea</i> L.	3	le	impotence	M
<i>Rhodiola rosea</i> L.	5	–	tea	B
<i>Rhodiola rosea</i> L.	5	le	food	FO
<i>Rhodiola rosea</i> L.	5	–	wounds	M
<i>Rhodiola rosea</i> L.	5	–	delivery	M
<i>Rhodiola rosea</i> L.	8	st, le, fr	–	–
<i>Rhodiola rosea</i> L.	9	le, st, fl	decorative	MC

TABLE 2. Documented uses of plants, seaweeds, and fungi for South Greenland, listed alphabetically by family.^{1,2} Dashes (–) indicate that the consultant did not provide details for a given cell – *continued*.

Family and species	Consultant Part used	Preparation	Use	Category
Cupressaceae:				
<i>Juniperus communis</i> L.	1	br, le dried, mounted on wooden frame as a Christmas tree	decorative	MC
<i>Juniperus communis</i> L.	2	le, st dried whole	tea	B
<i>Juniperus communis</i> L.	2	br, le dried, mounted on wooden frame as a Christmas tree	decorative	MC
<i>Juniperus communis</i> L.	2	le, st dried whole	spice	S
<i>Juniperus communis</i> L.	2	fr spice for cookies, bread, rack of lamb	warned as children that eating berries caused illness	S
<i>Juniperus communis</i> L.	3	fr –	warned as children that eating berries caused illness	I
<i>Juniperus communis</i> L.	3	br fresh or dry, burned in the house to create smoke	cleanses house of bad energy or ghosts	R
<i>Juniperus communis</i> L.	4	le, st, fr dried, in floral arrangements, wreaths for Christmas	decorative	MC
<i>Juniperus communis</i> L.	4	le, st, fr dried, simmer for two days until very dark, do not strain, store in a cool place. Warm as needed, apply as compress with soaked cloth	–	M
<i>Juniperus communis</i> L.	4	le, fr dried, cook and rub eyes with needles and berries	arthritis pain, aches of being old	M
<i>Juniperus communis</i> L.	4	fr dried, crushed	eye treatment	M
<i>Juniperus communis</i> L.	5	– 300 g in 3 liters of water	spice	S
<i>Juniperus communis</i> L.	5	yt 50 g in 1 liter water	tea	B
<i>Juniperus communis</i> L.	5	– 50 g in 1 liter water	skin ailments	M
<i>Juniperus communis</i> L.	6	fr dried whole fruits (80%) mixed with dried <i>S. groenlandica</i> fruits (20%)	acne, pain relief for rashes	M
<i>Juniperus communis</i> L.	8	st, fr dried	–	–
Cyperaceae:				
<i>Eriophorum</i> sp.	2	fl dried in wreaths	decorative	MC
<i>Eriophorum</i> sp.	3	fl placed inside the vagina	abortive	M
Equisetaceae:				
<i>Equisetum arvense</i> L.	5	–	eczema	M
Ericaceae:				
<i>Empetrum nigrum</i> Lange ex Hagerup	3	fr fresh, only very ripe berries; freeze in freezer	food	FO
<i>Empetrum nigrum</i> Lange ex Hagerup	3	fr freeze in freezer. Eat in winter to alleviate depression	antidepressant	M
<i>Empetrum nigrum</i> Lange ex Hagerup	3	fr eat only when very black, not red or green	eating under-ripe fruit will cause a cough or cold	I
<i>Empetrum nigrum</i> Lange ex Hagerup	3	fr unclear whether fresh or dried	tea	B
<i>Empetrum nigrum</i> Lange ex Hagerup	3	fr mixed with seal fat in a seal stomach. eat with dried fish.	food	FO
<i>Empetrum nigrum</i> Lange ex Hagerup	7	fr prepared with <i>V. uliginosum</i> fruit, apple and rhubarb	marmalade	FO
<i>Empetrum nigrum</i> Lange ex Hagerup	8	st, le dried	–	–
<i>Phylodoce caerulea</i> (L.) Babington	3	– 2 handfuls of plant per water dish	hand or foot bath	M
<i>Phylodoce caerulea</i> (L.) Babington	5	–	do not eat or use this plant	I
<i>Phylodoce caerulea</i> (L.) Babington	5	fl take 2 nips of flowers, 2 nips of “linden” (<i>Tilia</i> sp.), 2 nips of thyme, 2 big soup spoons of boiling water. Take every evening for a week.	for preventing disease of urinary track or genital organs, particularly the prostate	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	2	le, fl dried, whole	tea	B
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	3	le dried	prevents colds	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	3	le collect before plant blooms otherwise taste is too strong	for use when sick with a cold	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	4	le dried	tea	B
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	4	le, st dried, in floral arrangements, wreaths for Christmas	decorative	MC
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	4	le place in a pillowcase and boil. Place warm pillowcase and leaves on the chest, cover with a towel, four times daily	lung problems	M

TABLE 2. Documented uses of plants, seaweeds, and fungi for South Greenland, listed alphabetically by family.^{1,2} Dashes (–) indicate that the consultant did not provide details for a given cell – continued.

Family and species	Consultant Part used	Preparation	Use	Category
Ericaceae – continued:				
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	5	boil and reduce	for relieving pain	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	5	after a bath use as an ointment	keeps the body healthy	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	5	store the soup-like mixture in a closed jar to strengthen	warm compress for eyes	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	5	50-60 grams in 1 liter of water	tea	B
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	5	–	wounds, excyema	M
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	6	mixed with <i>R. lapponicum</i>	tea	B
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	6	dried whole	–	–
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	6	dried whole with <i>R. tomentosum</i>	–	–
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	7	dried	tea	B
<i>Rhododendron groenlandicum</i> (Oeder) Kron & Judd	7	dried	for use when sick with a cold	M
<i>Rhododendron tomentosum</i> Harmaja	6	dried whole with <i>R. groenlandicum</i>	–	–
<i>Rhododendron lapponicum</i> (L.) Wahlenberg	3	wh	do not eat or use this plant; forbidden by the elders to use it.	I
<i>Rhododendron lapponicum</i> (L.) Wahlenberg	6	st, le, fl	tea	B
<i>Rhododendron lapponicum</i> (L.) Wahlenberg	6	dried, mixed with <i>R. groenlandicum</i>	tea	B
<i>Vaccinium uliginosum</i> L.	2	dried	tea	B
<i>Vaccinium uliginosum</i> L.	2	fr	food	FO
<i>Vaccinium uliginosum</i> L.	3	le	tea	B
<i>Vaccinium uliginosum</i> L.	3	le	eats them dry	FO
<i>Vaccinium uliginosum</i> L.	3	fr	fresh, eaten raw	FO
<i>Vaccinium uliginosum</i> L.	3	fr	freeze in freezer	FO
<i>Vaccinium uliginosum</i> L.	3	fl	fresh, eaten raw	FO
<i>Vaccinium uliginosum</i> L.	3	le	fresh, eat only in spring to avoid tannic acid of fully mature leaves; eat until full	FO
<i>Vaccinium uliginosum</i> L.	3	fr	–	M
<i>Vaccinium uliginosum</i> L.	3	fr	do not eat with arctic char or you will get a rash, swollen eyes and throat swelling	I
<i>Vaccinium uliginosum</i> L.	4	le	tea	B
<i>Vaccinium uliginosum</i> L.	5	le	medicine	M
<i>Vaccinium uliginosum</i> L.	6	le	tea	B
<i>Vaccinium uliginosum</i> L.	7	le	tea	B
<i>Vaccinium uliginosum</i> L.	7	fr	marmalade	FO
<i>Vaccinium uliginosum</i> L.	8	st, le	–	–
<i>Vaccinium vitis-idaea</i> L.	5	le	healing wounds	M
Gentianaceae:				
<i>Gentiana nivalis</i> L.	5	–	beneficial tea	M
<i>Gentiana nivalis</i> L.	5	–	–	B
Graminoids	9	le, st, fl	–	MC
Graminoids	4	le, st, fl	fresh in floral arrangements fresh and dried in floral arrangements	MC
Lamiaceae:				
<i>Thymus praecox</i> Opiz	2	le, st, fl	dried	B
<i>Thymus praecox</i> Opiz	3	le, st, fl	tea	B

TABLE 2. Documented uses of plants, seaweeds, and fungi for South Greenland, listed alphabetically by family.^{1,2} Dashes (–) indicate that the consultant did not provide details for a given cell – *continued*:

Family and species	Consultant Part used	Preparation	Use	Category
Lamiaceae – continued:				
<i>Thymus praecox</i> Opiz	3	le, st, fl	condiment for “Gule” soup from a box	S
<i>Thymus praecox</i> Opiz	4	le	–	B
<i>Thymus praecox</i> Opiz	5	le, fl	–	B
<i>Thymus praecox</i> Opiz	5	–	used in perfume	MC
<i>Thymus praecox</i> Opiz	5	–	handful to 1 liter of water, cook for 10 minutes	M
<i>Thymus praecox</i> Opiz	6	le	dried, whole leaves, no stems, occasional flowers	B
<i>Thymus praecox</i> Opiz	7	le, st, fl	dried	B
<i>Thymus praecox</i> Opiz	8	le, st, fl	dried, for roasted lamb, trout, peas	S
Lycopodiaceae:				
<i>Calvatia cretacea</i> (Berk.) Lloyd ⁶	5	–	place in nostrils	M
Lycopodiaceae:				
<i>Huperzia selago</i> auct. s.l.	3	wh	dried, used as Christmas decorations	MC
<i>Huperzia selago</i> auct. s.l.	3	–	–	I
<i>Huperzia selago</i> auct. s.l.	5	sp	–	M
<i>Lycopodium clavatum</i> L. ⁷	3	–	use as fireworks	MC
<i>Lycopodium clavatum</i> L. ⁷	3	–	–	I
Onagraceae:				
<i>Chamerion angustifolium</i> (L.) Holub	4	le, st, fl	dried	B
<i>Chamerion angustifolium</i> (L.) Holub	8	le, st, fl	–	–
<i>Chamerion latifolium</i> (L.) Holub	4	le, st, fl	fresh in floral arrangements	MC
<i>Chamerion latifolium</i> (L.) Holub	4	le, st, fl	dried	B
<i>Chamerion latifolium</i> (L.) Holub	4	fl	fresh, frozen in water for decorating cakes for special occasions	MC
Orchidaceae:				
<i>Plantianthera hyperboreum</i> (L.) Lindley	5	–	tea	B
Orobanchaceae:				
<i>Euphrasia frigida</i> Pugsley	5	–	1 tsp to 1 cup water	M
Palmariaceae:				
<i>Palmaria palmata</i> ⁸	3	–	–	FO
<i>Palmaria palmata</i> ⁸	5	–	favorite seaweed of most people	FO
Parmeliaceae:				
<i>Cetraria islandica</i> (L.) Acharius ⁸	5	–	cooked in water	M
Phaeophyceae:				
<i>Ataria</i> sp.	5	–	edible seaweed	FO
<i>Ascophyllum nodosum</i> (L.) Le Jolis ⁸	5	–	edible seaweed	FO
<i>Laminaria</i> sp.	3	–	–	I
Plumbaginaceae:				
<i>Armeria scabra</i> Pallas ex Roemer & Schultes	4	fl	dried in wreaths	MC
Polygonaceae:				
<i>Bistorta vivipara</i> (L.) Delarbre	3	ro	wash and eat fresh	FO
<i>Oxyria digyna</i> (L.) Hill	3	–	mixed fresh with seal fat in a seal stomach. eat with dried fish.	FO
<i>Oxyria digyna</i> (L.) Hill	5	–	0.5 kg with 8 liters of water	B
<i>Oxyria digyna</i> (L.) Hill	5	ju	–	M
<i>Oxyria digyna</i> (L.) Hill	5	–	poultice	M

TABLE 2. Documented uses of plants, seaweeds, and fungi for South Greenland, listed alphabetically by family.^{1,2} Dashes (–) indicate that the consultant did not provide details for a given cell – *continued*.

Family and species	Consultant Part used	Preparation	Use	Category
Ranunculaceae:				
<i>Ranunculus</i> sp.	4	le, fl, st	fresh in floral arrangements	decorative
<i>Ranunculus</i> sp.	4	fl	dried	tea
Rosaceae:				
<i>Alchemilla alpina</i> L.	5	le	eaten fresh	food
<i>Alchemilla glomerulans</i> Buser	3	le	would never eat it because she never saw her elders eat it	inedible
<i>Alchemilla glomerulans</i> Buser	5	le	eaten fresh	food
<i>Alchemilla glomerulans</i> Buser	5	–	freshly crushed herb used as a poultice	insect bites and wounds
<i>Alchemilla glomerulans</i> Buser	5	le	cook briefly	inflammation and hormonal shifts of the female body; promotes desire
<i>Potentilla</i> sp.	6	le	fresh in floral arrangements	decorative
<i>Potentilla</i> sp.	9	le	fresh in floral arrangements	decorative
<i>Sorbus groenlandica</i> (Schneider) A. & D. Löve	3	fr	make a jelly of the fruit, eat the berries	food
<i>Sorbus groenlandica</i> (Schneider) A. & D. Löve	6	fr	dried whole fruits (20%) mixed with dried <i>J. communis</i> fruits (80%)	–
<i>Sorbus groenlandica</i> (Schneider) A. & D. Löve	7	ba or wo	–	tastes like marzipan
<i>Sorbus groenlandica</i> (Schneider) A. & D. Löve	7	leaf	plucked from leaf vein, dried, ground	spice
Scrophulariaceae:				
<i>Rhinanthus minor</i> L.	6	se pod	mature seeds within calyx on stem used in floral arrangements	decorative
Sphagnaceae:				
<i>Sphagnum</i> sp.	5	–	–	oil lamp wick
<i>Sphagnum</i> sp.	5	–	–	bandage
Unclassified, other:				
Seaweed	5	–	don't eat in the summer, wait until October	food
Turf 2	–	–	harvest in blocks and burn to heat a home	fuel
Woody species	4	br	used for making mobiles, to hang kitchen utensils	decorative, functional
Generic herbs	5	le	put herbs in cold water in a pot. Heat to boil, strain herbs out.	medicine

¹ Plant Latin names and authors taken from Rune (2011), unless otherwise noted.² Codes, listed alphabetically. Plant authors: auct. s.l. = by various authors in a broad sense, coll. = collective species, ex = first validly published by the second author, L. = Linnaeus, sp. = species. Part used: ba = bark, br = branches, ca = catkins, fb = fruiting body, fl = flower, fr = fruit, in = inner bark, ju = juice or sap, le = leaves leaf = leaflets, ro = roots, se = seeds, se pod = seed pod, sp = spores, st = stalk or stem, wh = whole plant, wo = wood, yt = young twigs. Category: B = beverage, MC = material culture, FO = food, FU = fuel, I = inedible or contraindicated, M = medicine, R = ritual, S = herb/spice or condiment, U = unknown.³ Species Fungorum. <http://www.speciesfungorum.org/Names/GSDSpecies.asp?RecordID=220647>.⁴ USDA, NRCS, 2012.⁵ While this name was provided by the consultant, no field guides report it as growing wild in Greenland. It is possible that it was grown in personal gardens.⁶ Ponce de Leon (1976).⁷ Although the consultant reported use of this species, it does not grow in South Greenland, although *L. annotinum* L. does.⁸ Guiry and Guiry, 2014.

Danish. They were second in the number of uses they knew (23%) and were also the only consultants to know about ritual use of plants and to report a shaman family member. They were one of two consultants who believed plants to be inedible that others reported as edible or medicinal, and only they knew of several such examples. Another consultant was aware that her ancestors had made use of a plant (*Rhodiola rosea*), but did not know how it was used.

One group of consultants had access to an unpublished manuscript in Danish. We were given a copy in the summer of 2010 by an employee of the National Museum, who informed us that it was compiled by a Danish woman in the 1980s whose wish it was that copies of her work be disseminated to share her love of plants with the people of Greenland. The manuscript is a scrapbook covering approximately 100 species of terrestrial plants, seaweeds, mosses, and fungi, with illustrations and text from the only Greenlandic/Danish field guide available at the time, *Nunatta naasui* (Foersom et al., 1997), as well as personal notes, photographs, recipes, and newspaper clippings. It also contains handwritten notes, many of which are Greenlandic names different from those published in *Nunatta naasui*, which were approved by the Greenland Language Secretariat. Unfortunately there are no notes regarding the regional or dialectal provenance of the names. One of our consultants is the granddaughter of the author and had a copy given to her by the author, as well as a copy of *Nunatta naasui* with the author's handwritten notes in the margins. While she was the keeper of the manuscript within her community, she deferred to another consultant who had memories of plant uses from childhood and whose interest in harvesting wild plants had been rekindled after taking a class from Anne Sofie Hardenberg, culinary ambassador of Greenland, and also a possessor of the unpublished manuscript.

Most of the text is in Danish; from this we gather that the uses are not traditional to Greenland. One example supporting this hypothesis is *Euphrasia frigida*, a small herb known commonly in Western herbal practices as “eye-bright.” While the herb is available online as a supplement or tincture, no consultant recognized the dried specimen or photographs of the plant. However, the consultant who interviewed elders did have notes regarding its uses for eye inflammation. It is possible that this was knowledge shared from Europe that has now been nearly lost. Supporting this hypothesis is the etymology of the Kalaallisut name for the plant (see below). Other references (Jones, 1983; Ziegler et al., 2009) on Inuit uses do not mention this plant.

Naming Strategies

All consultants were able to name and discuss plants in Kalaallisut. All Kalaallisut plant names in the field guide *Nunatta naasui* (Foersom et al., 1997) were approved by the Greenland Language Secretariat; therefore we consider that publication to be the authoritative resource for Greenlandic plant names. Some plant names are given in *Oqaatsit*

(Berthelsen et al., 2006), the Kalaallisut-Danish dictionary, also approved by the Greenland Language Secretariat. Some differences in plant names between these two works are noted below.

Consultants identified the majority of plants, with some differences in naming strategies. Of the more than 50 plants we asked consultants to identify during detailed interviews, only 12 were identified by all participants (Table 3). Significantly, all have food or medicinal uses, or both. Only one plant (*Euphrasia frigida*, discussed above) was not known to any of the speakers we interviewed. Foersom et al. (1997:54) provide the Kalaallisut name *isiginnaq*, but none of the speakers we met suggested either this name, or the Danish *Arktisk øjentrøst*. The Kalaallisut name *isiginnaq* comes from the root *isi* ‘eye’ and the suffix *-ginnaq* ‘only,’ ‘just’ or ‘pure,’ as in ‘pure eye,’ which reflects the European use of this plant for curing eye ailments such as conjunctivitis and eye strain.

The names in Table 3 are provided in standard Kalaallisut spelling (from Foersom et al., 1997), ignoring some differences in pronunciation that we recorded in our fieldwork. (Most notably, *C. rotundifolia tikiusaq* [tʃikiusa:q] was regularly given as *tikiisaq* [tʃiki:saq], a variant showing progressive assimilation of the vowel [u] to the preceding [i].) As shown in Table 3, for certain plants some speakers gave the citation form (in absolutive case) in the singular, and some in the plural (e.g., *Vaccinium uliginosum kigutaarnaq* abs-sg vs. *kigtarnaat* abs-pl), although all viewed the same photographs. The choice appears to depend on a speaker's decision to individualize one berry or plant, or to collectivize the whole, although further research is needed. All speakers questioned identified each of these 12 plants, although one speaker gave the Danish, not the Kalaallisut, name for *Thymus praecox* (*timian*). Another thyme species, *Thymus vulgaris*, the common culinary herb, is sold in stores in Greenland as a spice from Denmark, which may explain why the speaker used the Danish term more readily. This case supports our general sense that Greenlanders in the south have just recently begun to learn about their native plants; they are more likely to purchase commercial, imported thyme than to pick it wild. This also corresponds to information from Anne Sofie Hardenberg, who has made a concerted effort to raise public awareness of the availability and value of native plants. See, for example, an online interview with Hardenberg (n.d.), in which she declares: “Our meat is the best in the world, and the herbs too.”

Other plants for which speakers provided the Danish name are *Rhododendron lapponicum*, *Plantago maritima*, *Rhodiola rosea*, and two different seaweeds, *Ascophyllum nodosum* and *Fucus vesiculosus*. No Kalaallisut name is provided for *Achillea millefolium* in Foersom et al. (1997), although one consultant gave the Kalaallisut *inneruulaaq* (*Taraxacum*). The lack of a common name is arguably due to the introduction of the plant by the Norse about 1000 years ago (Schofield et al., 2012), although this is more than ample time for a term to develop in the spoken language.

TABLE 3. From the 54 plant images shown, only the 12 plants listed below were identified by all six detailed interviews. Significantly, all have food or medicinal uses or both.

Scientific name	Kalaallisut ¹	English
<i>Campanula rotundifolia</i>	<i>tikiusaaq/tikiisaaq</i>	bluebell
<i>Vaccinium uliginosum</i>	<i>kigutaarnaq/-t</i>	blueberry
<i>Empetrum nigrum</i>	<i>paarnaq/-t</i>	crowberry
<i>Betula nana</i>	<i>avalaqiaq</i>	dwarf birch
<i>Vaccinium vitis-idaea</i>	<i>kimmernaq/-t</i>	lingonberry, cowberry
<i>Taraxacum</i> sp.	<i>inneruulaq</i>	dandelion
<i>Rhodiola rosea</i>	<i>tullerunnaq</i>	rose root
<i>Angelica archangelica</i>	<i>kuanneq/-t</i>	angelica
<i>Thymus praecox</i>	<i>tupaarnaq</i> (1 <i>timian</i>)	thyme
<i>Rhodendron groenlandicum</i>	<i>qajaasaq</i>	Labrador tea
<i>Sorbus groenlandica</i>	<i>napaartoq</i>	Greenland mountain ash
<i>Eriophorum scheuchzeri</i> ²	<i>ukaliusaq</i>	white cottongrass

¹ Kalaallisut column includes all variants provided by speakers, *tikiusaaq* (standard) and *tikiisaaq* (dialect), and a notation if name was given in the singular/plural.

² This is the only species given in Foersom et al. (1997:31). Rune (2011) lists several other species of *Eriophorum*, but none with Kalaallisut names. We are uncertain if *ukaliusaq* would be used for these other species.

Another reason to think the plant was possibly introduced by Danes is its important role in European folk medicine (the generic name refers to its use by Achilles on the battlefield). Interestingly, we documented several medicinal uses from the consultant who interviewed nursing home residents, so the plant was known for its uses among elders but only by the Danish name *røllike*.

The use of Danish names is striking, given that all consultants speak Kalaallisut as their preferred language and that interviews were conducted either entirely in Kalaallisut (with an interpreter) or in a mixture of English and Kalaallisut. We (the authors) do not speak Danish and thus did not use the language in elicitation or conversation. In assessing our consultants' knowledge of plants and their uses, we are also interested in determining the source(s) of their knowledge. The language they use to name the plants is directly relevant. Unlike other Arctic indigenous communities that are characterized by language shift, Greenlanders know their ancestral language. If they learned about plants from their elders, it is highly likely that they acquired the knowledge through Kalaallisut. Only a few of our consultants had acquired their knowledge from elders, however. Some were self-taught (sometimes through trial and error); others learned from published sources, particularly in Danish; others from people of their same generation. Many combined a variety of sources of knowledge to educate themselves. They are primarily interested in knowing how to use plants, and less concerned with "traditional" or "ancestral" methods than with simply knowing what the plants can provide. (See also Grenoble and Whitecloud (in press) for more detailed discussion on sources of knowledge and ideologies about local knowledge.) Thus, when speakers provide a name in Danish, it suggests that either they encounter the

plant in a Danish-dominant context (as in the case of thyme) or that they acquired the information via Danish sources. Several of our consultants had Danish guidebooks in their homes, both field guides and texts with uses of plants, and consulted them while answering our questions.

Language and Uses across the Arctic

A preliminary investigation of the literature comparing plant names and uses across the North American Arctic along the migration route of the Thule is inconclusive. Certain plant names and uses vary among Inuit from Alaska to Greenland, while others are consistent. A comparison of uses beyond those of the Inuit (e.g., compared with Yup'ik) also yields differences from Greenlandic uses (e.g., Oswalt, 1957; Andrews, 1989; Griffin, 2001) but is beyond the scope of this paper. In southern Greenland, we recorded that *Eriophorum* species were used decoratively or as an abortive, while in Nunavut, Canada, an elder describes many uses for *Eriophorum* species, such as umbilical stump care and lamp wicks (Ziegler et al., 2009). Bandringa and Inuvialuit elders (2010) of northwestern Canada recorded the use of *Eriophorum* seed heads in amulets (for promoting longevity), tinder and lamp wicks, and absorptive rags or diaper linings, as well as the use of the leaves in mattresses or woven mats. Alaskan Inuit were documented as eating the underground stems, gathered either by collecting them or by harvesting them from caches made by tundra mice (Heller, 1953; Anderson et al., 1977; Jones, 1983). We did not document harvesting from animal caches in Greenland, which may have to do with the availability of plants: *Hedysarum alpinum* is commonly gathered from caches, but does not grow in Greenland. However, *Eriophorum* species are abundant across the Arctic, including in Greenland. It is possible that such cache-harvesting began after the Thule migration, a hypothesis supported by differences in language. The Iñupiaq word for *H. alpinum* is *masru*, but the plant is called *nivi* when taken from a mouse cache, while *nivi* in Kalaallisut means 'girl.'

Greenlanders are not opposed to using plants gathered by other animals. We did document several households that used birch catkins (*Betula* sp.) collected in the crop contents of Rock Ptarmigan (*Lagopus mutus*) as a spice for lamb and caribou. The crops were tied closed with bows and hung as decorations in kitchens and living rooms. One consultant recalled that adults relished the fermented stomach contents of caribou (*Rangifer tarandus*), at times mixed with the raw liver. She did not think this was a practice that was continued today. Binford (1978) documented the Nunamiut of Alaska also eating caribou stomach contents.

Some of the most commonly used plants vary in name across the Arctic, as seen in the common names for Labrador tea (*Rhododendron groenlandicum*) and the closely related *R. tomentosum* (Table 4).

The Kalaallisut word *qajaasaq* is derived from the noun *qajaq* 'kayak' and a suffix *usaq* 'like, resembles,' so that the name literally translates to 'like a kayak,' a reference to the

TABLE 4. Comparison of common names for Labrador tea (*Rhododendron groenlandicum* and *R. tomentosum*) from different Inuit communities.

Region	Language	Common name	Source
<i>Rhododendron groenlandicum</i> :			
Greenland	Kalaallisut	<i>qajaasaq</i>	Foersom et al., 1997:73
Canada	Inuvialuktun	<i>nittiirnat</i>	Bandringa and Inuvialut Elders, 2010:100-1
Canada	Inuktitut	no name found ¹	Ziegler et al., 2009
Alaska	Iñupiaq	<i>tilaaqquiq</i> ²	Anderson et al., 1977; Jones, 1983:60
<i>Rhododendron tomentosum</i> :			
Greenland	Kalaallisut	<i>qajaasaaraq</i>	Foersom et al., 1997:73
Canada	Inuvialuktun	<i>nittiirnat</i>	Bandringa and Inuvialut Elders, 2010:100-1
Canada	Inuktitut	<i>qijuktaaqpait</i>	Ziegler et al., 2009:16, 78
Alaska	Iñupiaq	<i>tilaaqquiq</i>	Anderson et al., 1977:285; Jones, 1983:60

¹ According to the range maps in Hultén (1968:718), *R. groenlandicum* does not occur in Nunavut, except in one very small area. Ziegler et al. (2009) make no mention of this species, and from photos in that guide it is evident that they are referring to *R. tomentosum*. It appears that there is no recognition of *R. groenlandicum* in Inuktitut.

² *tilaaquiq* in Jones 1983:60.

shape of the leaf. The Kalaallisut name for *R. tomentosum* is further derived from this name: the suffix *-araq* ‘small, little’ is added, to literally mean ‘like a little kayak.’ This linguistic distinction corresponds to real-world differences: *qajaasaq* refers to the large-leafed species, and *qajaasaaraq* to the smaller- or narrow-leafed species.

The lack of a name for *Rhododendron groenlandicum* in Iñupiaq is hardly surprising, given that the species grows only east of Hudson Bay. Note, however, that each language uses a totally different strategy for naming the narrow-leafed species, and none of these three names are cognate.

Other findings imply that some plant knowledge was carried along the Thule migration, although with ambiguity. The Kalaallisut name for *Angelica archangelica* is *kuanneq*, which is reconstructed by Fortescue et al. (2010) as deriving from the Old Norse *hrǫnn*, pl *havannir* ‘angelica.’ This etymology can be questioned, because what appears to be the pan-Inuit cognate term is used to refer to seaweed elsewhere in Inuit territory, as in Eastern Canadian Inuit *kuanniq* ‘type of edible seaweed’ (Fortescue et al., 2010) or Inuktitut *kuan-niq* ‘seaweed’ (Dorais, 1977). Schneider (1985:149) distinguishes two different Inuktitut words: *kuan-niq* ‘angelica’ and *kuanniq* ‘kelp-type of edible seaweed.’ The Norse may have had contact with Inuit in the eastern Canadian Arctic, but an Old Norse source of the name for seaweed remains questionable. Despite hypotheses (see Seidenfaden, 1933) that the Old Norse brought many plants with them to Greenland, few cases appear to be accurate. Porsild (1953:57) argues that the only two sure cases are *Stellaria media* (p. 52) and *Anthoxanthum odoratum* (p. 88). Of course, there is no a priori reason to assume that the Old Norse brought the name with the plant, but by the same token, there is no strong evidence that the name comes from them. In fact, the Inuit migrations spread eastward, from Alaska and Canada to Greenland, so if Schneider (1985) is correct, then it is most plausible that the Inuit brought the word with them to Greenland.

CONCLUSIONS

The question of consistency of plant uses across the North American Arctic requires further study, which should occur on two fronts: historical and contemporary. Published sources documenting historical uses and names will allow comparison of knowledge across the Arctic along the Thule migration route. Contemporary interviews of knowledge keepers from across the Arctic measure how much knowledge remains, and how this knowledge differs across the Arctic. Missing information from interviews does not necessarily indicate a lack of use, but could be merely a loss of knowledge that could be validated by historic records where they exist. Documenting contemporary knowledge will in turn fill the holes in the historic record, as is the case in southern Greenland, where plant knowledge persists among a small but dedicated group of practitioners. An important part of Inuit cultural heritage, plant knowledge is also seen as instrumental in making local, available resources usable for modern life, which is of particular interest as Greenlanders strive to attain independence from Denmark. Interest in plant use is expanding and developing into a more modern practice, which includes a culinary ambassador of Greenlandic cuisine. In south Greenland, knowledge is acquired from outside sources, particularly Danish, but has also been maintained and evolved along traditional lines. Interest in resourcefulness and self-sufficiency will only serve to promote the maintenance of plant knowledge.

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