

EXOTIC DRIFT SEEDS IN NORWAY: VERNACULAR NAMES, BELIEFS, AND USES

TORBJØRN ALM

Department of Botany, Tromsø Museum, University of Tromsø,
N-9037 Tromsø, Norway

ABSTRACT.—Seeds of some West Indian plants are sometimes transported across the Atlantic and deposited along the coast of Norway. The seeds of some Fabaceae species are sufficiently large and conspicuous to be noticed by the layman, including those of *Dioclea reflexa*, *Entada gigas* and *Mucuna sloanei*, which are the only "common" drift seed species in Norway. Such seeds have found a position in the folklore of all the ethnic groups living in Norway, especially among the Norwegian and Sámi inhabitants, but also among the Finnish and Gypsy (Romany- and Rodi-speaking) minority groups. Norwegian vernacular names reflect their supposed origin (e.g., *sjøbonner* 'sea beans') or uses (e.g., *løsningsstein* 'loosening stone' and *bustein* 'cattle stone'). In Norwegian folk tradition, the seeds have been used mainly as an aid during childbirth and to cure various diseases in cattle. In Sámi tradition the seeds seem to have been used only for humans, both during childbirth and to cure various diseases. In all ethnic groups, the seeds were considered rare and precious objects, as revealed both by some of their vernacular names and the strict traditions related to the way of handling and storage of such seeds.

Key words: drift seeds, Norwegian, Sámi, vernacular names, folk medicine.

RESUMEN.—En ocasiones, las semillas de algunas plantas de las Antillas son transportadas a través del Atlántico y depositadas en las costas de Noruega. En el caso de algunas especies de leguminosas (Fabaceae), las semillas son suficientemente grandes y conspicuas para que los lugareños reparen en ellas. Entre ellas, las de *Dioclea reflexa*, *Entada gigas* y *Mucuna sloanei* son las únicas especies con semillas de deriva "comunes" en Noruega. Estas semillas han hallado un lugar en el folklore de todos los grupos étnicos que viven en Noruega, especialmente entre los habitantes noruegos y Sámi, pero también entre los grupos minoritarios de finlandeses y gitanos (de lenguas Romani y Rodi). Los nombres vernáculos en Noruega reflejan su supuesto origen (por ejemplo *sjøbonner* 'alubias marinas') o sus usos (como *løsningsstein* 'piedra de aflojar' o *bustein* 'piedra del ganado'). En la tradición popular noruega, las semillas se han utilizado principalmente como ayuda al nacimiento de niños y para curar varias enfermedades del ganado. En la tradición Sámi las semillas parecen haberse utilizado exclusivamente para humanos, en el parto y para curar varias dolencias. En todos los grupos étnicos las semillas se consideraban objetos escasos y preciosos, como lo revelan algunos de sus nombres vernáculos y estrictas tradiciones en lo referente a su manipulación y almacenamiento.

RÉSUMÉ.—Des graines de plantes des Antilles dérivent parfois sur l'Atlantique et échouent sur les côtes de Norvège. Les graines de quelques espèces de Fabaceae sont assez grandes et distinctes pour attirer l'attention des profanes, y compris celles de *Dioclea reflexa*, *Entada gigas* et *Mucuna sloanei*, les seules graines "ordi-

naïves" à dériver jusqu'en Norvège. Ces graines font partie du folklore de toutes les ethnies de Norvège. On les trouve en particulier dans la tradition des Sames, et dans celle des minorités finlandaises et Roms/Tsiganes de langues romani et rodi. Les noms vernaculaires norvégiens reflètent leur origine supposée (par exemple *sjøbonner* 'haricots de mer') ou leur utilisation, (par exemple *løsningstein* 'pierre à dégager' et *bustein* 'pierre à bétail'). Dans la tradition populaire norvégienne, les graines étaient surtout utilisées pour faciliter les accouchements et soigner diverses maladies du bétail. Dans la tradition des Sames, il semble que les graines étaient utilisées uniquement pour les êtres humains dans les soins lors des accouchements et pour des affections variées. Pour toutes les ethnies ces graines étaient rares et précieuses ainsi que le révèlent certains de leurs noms vernaculaires et les règles anciennes strictes concernant leur utilisation et leur stockage.

INTRODUCTION

Norway has one of the longest coastlines of any country in the world—57,258 km—extending from 57°58' to 71°11' north latitude (excluding the arctic archipelago of Spitsbergen). It is also blessed with an unusually mild climate for its latitude, due to an extensive northwards transport of warm waters in the Norwegian coastal current, itself an extension of the Atlantic current, which crosses the North Atlantic from the Gulf of Mexico.

In addition to warm waters, this large-scale transport across the Atlantic brings flotsam from the West Indies and adjacent areas. Drift seeds of about a dozen tropical and subtropical species have been recorded along the coast of Norway (Alm and Nelson 1998, 2003; Nelson 1998a, 2000). Of these, the beans of *Dioclea reflexa* Hooker f., *Entada gigas* (L.) Fawc. & Rendl. and *Mucuna sloanei* Fawc. & Rendl. (Fabaceae) are the most frequent. Their seeds, ranging in size from 3–4 to 5–7 cm (*Entada*) are sufficiently large, attractive, and durable to arouse the interest of any finder. This has secured them a place both in Norwegian folk tradition and the scientific literature.

At an early date, drift seeds caught the attention of Norwegian scientists. The first mention is in Peder Claussøn Friis's topographical description of Norway, written in the late sixteenth century, but first published by Ole Worm in 1632 (and more readily available in a late nineteenth-century edition by Storm 1881). Drift seeds were also mentioned by Pontoppidan (1752), who considered but rejected the possibility that they could derive from the Americas; in his opinion, the stranded seeds were simply too well preserved. Strøm (1762), in his topographical description of Sunnmøre, western Norway, noted several species, and was convinced of their American origin. Only three years later, the bishop and scientist Johan Ernst Gunnerus wrote a paper on drift seeds, assembling data on species, records, and uses (Gunnerus 1765). Some further comments are found in Strøm (1779, 1784). A century later, Schübeler (1873–75) compiled data on drift seeds in Norway. He included a list of specimens then found at the Botanical Museum in Oslo (herb. O), many of which now seem to be lost, and added some ethnobotanical data. More comprehensive surveys of drift seeds in Norway were given by Lindman (1883) and Helland (1905).

Sources.—No previous attempt has been made to assemble the full body of evidence, scattered over (and often concealed in) a wide variety of topographical, folkloristic, botanical, and other literature. This paper reviews folk tradition related to drift seeds in Norway, including both Norwegian and Sámi ethnobotany, and some data on the traditions of the Finnish and Gypsy (Romany- and Rodi-speaking) minority groups. My study is almost entirely based on written sources. Although I have carried out extensive ethnobotanical field work in north Norway, I have so far failed to find more than a dozen persons who had firsthand knowledge of drift seeds and their traditional uses.

Most data relevant to Norway are found in Norwegian-language sources, although there are also a number of interesting references in Danish, Icelandic, Swedish, Finnish, German, French, English, and Latin. Unless otherwise noted, quotations from non-English sources have been translated from Norwegian. Translations or glosses are given in the style: *bustein* 'cattle stone'.

Ethnobotanical aspects of drift seeds in Norway were commented on in many of the early publications, including Gunnerus (1765), Pontoppidan (1752), and Strøm (1762, 1779, 1784). Minor compilations are also found in Helland (1905) and Schübeler (1873–75), and a few notes on vernacular names in Lindman (1883). Some comments are also found in Nelson (1983, 1998a, 2000). Except for some brief, popular accounts of drift seeds written by Norwegian botanists (Danielsen 1952; Gjørevoll 1976; Rønning 1955), there are few twentieth-century reports on drift seeds in Norway. Alm and Nelson (1998) made a preliminary survey of north Norwegian records of some species, including maps. A full revision of the Norwegian material, with maps for selected species, is forthcoming (Alm and Nelson 2003).

Some data from recent interviews are included in relevant sections; these are indicated as "interview + year" below. Interviews were carried out partly during a course on traditional plant uses given in Finnmark in March 2001, as some of the participants (all women, in their thirties to sixties) recognized a drift seed shown during the lectures. A newspaper note asking for information on drift seeds (Alm 2003a) yielded some response by mail, e-mail and telephone. The people who responded were mostly elderly, but ages ranged from about 40 to 95 years. Transcripts of the interviews are stored at Tromsø Museum, Department of Botany (TROM).

DISTRIBUTION OF DRIFT SEEDS IN NORWAY

Exotic drift seeds of at least eleven species have been recorded in Norway. Six or seven of these are seeds of legumes (Fabaceae s.l.), including the three most frequent seashore finds, *Dioclea reflexa*, *Entada gigas*, and *Mucuna sloanei*. A map showing records of these three species (based on extant herbarium specimens only) is included here (Figure 1); numerous further records from the scientific literature and herbarium specimens now lost are discussed by Alm and Nelson (2003). The other Fabaceae species recorded as drift seeds in Norway are all rare seashore finds: *Caesalpinia bonduc* (L.) Roxb. (four records), *Cassia fistula* L. (three records), and *Mucuna macroceratides* DC. (a single record). An old record of *Ery-*

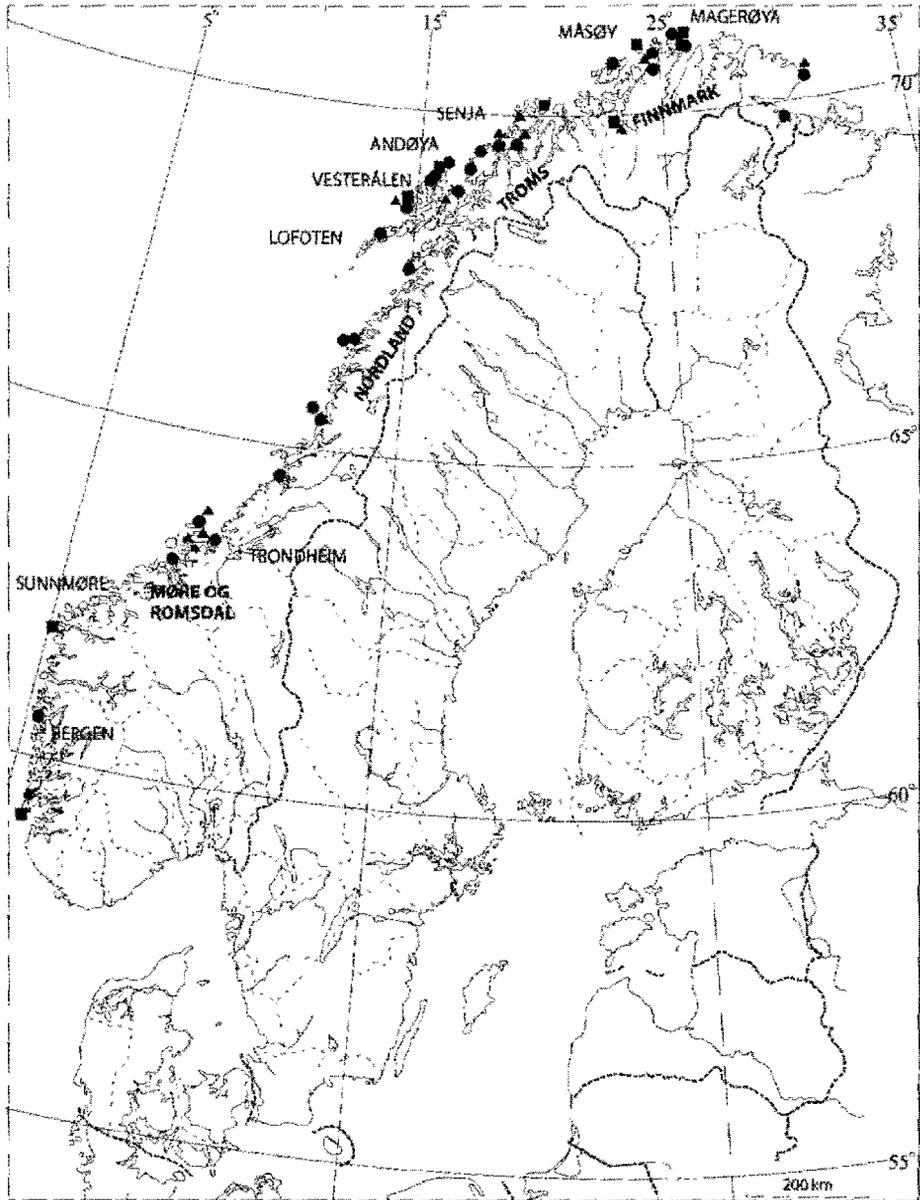


FIGURE 1.—Map showing records of the three most common drift seed species (all Fabaceae) along the coast of Norway, based on extant herbarium specimens (in herb. BG, O, TRH, and TROM): *Dioclea reflexa* (squares), *Entada gigas* (dots) and *Mucuna sloanei* (triangles). Many further records are known, partly with identity confirmed by Gunnerus (1765), Strøm (1762, 1779, 1784), Linnaeus (in his correspondence with Gunnerus and Strøm), Charles Darwin, Lindman (1883), and others, but without surviving herbarium specimens. They have been left out here, but confirm the distribution pattern of the present map. Compiled from Alm and Nelson (2003).

thrina sp. (Gunnerus 1765:21, no voucher specimen found) should be regarded as unverified.

In folk tradition, the large seeds of *Dioclea reflexa*, *Entada gigas*, *Mucuna sloanei* and other Fabaceae stand out, simply because they are noteworthy and attractive objects. Almost all folk tradition extracted here, as far as voucher specimens, photographs and other documentation can tell, refer to the seeds of these three species (for details, see Table 1). Species with similar seeds, e.g., *Mucuna macroceratides*, would obviously not be rejected by the layman, and may have found similar use, but were much less likely to turn up.

Other exotic drift seeds recorded in Norway, all rare, are: *Anacardium officinale* L. (Anacardiaceae), coconuts *Cocos nucifera* (Araceae), calabashes or gourds *Cucurbita lagenaria* L. (Cucurbitaceae), *Garcinia mangostana* L. (Clusiaceae), and *Merremia discoidesperma* (J. D. Sm.) O'Don. (Convolvulaceae). A small seed depicted by Strøm (1779:315) may belong to *Ipomoea* sp. (Convolvulaceae). The few calabashes recorded in Norway are probably not true drift seeds, but rather discarded household utensils or decorative objects. These latter species are of little or no importance in folk tradition. A few stranded coconuts are mentioned in the literature, but there are no data to suggest that they played any role in folk tradition. A brief note on the ethnobotany of *Cocos nucifera* is found towards the end of the paper.

Drift seeds are anything but frequent along the coasts of Norway; finding one—even an *Entada gigas* seed—is sheer luck, at least nowadays. To some extent, their high value in folk tradition rests on their rarity. Some nineteenth-century sources suggest that drift seeds were somewhat more frequent in the past. Martins (1848:129), commenting on an *Entada* seed found by French botanists in Finnmark (see also Martins 1857), noted that the “Norwegian fishermen, like those of the west coast of Scotland, collect these seeds in fairly large numbers.” Habitat destruction in the source areas may have led to a reduced influx of drift seeds during recent years.

VERNACULAR NAMES

Table 2 lists all vernacular names so far recorded for drift seeds in Norway, based on the primary sources; numerous secondary references have been left out.

Norwegian Vernacular Names.—The conspicuous beans of *Entada gigas* are the most important drift seeds in terms of folk tradition. In Norwegian, they are usually referred to as *vettenyre* (singular) or *vettenyrer* (plural). This name is frequently mentioned in the literature on drift seeds in Norway (e.g., see Reichborn-Kjennerud 1942:276), but does not seem to be much used as a vernacular name. It was first noted as a name used in the Faroes by Peder Claussøn Friis in his description of Norway (and the old Norwegian territories), written in the late sixteenth century (see Storm 1881). Most later authors refer to Strøm (1762) and Gunnerus (1765), but neither of them refer explicitly to Norwegian sources for *vettenyre* as a vernacular name. In both these works, *vettenyre* is mentioned as a name used in the Faroes, as recorded by Debes (1673:169). The only unambiguous confir-

TABLE 1.—Identity of selected drift seeds used in folk tradition in Norway, with notes on documentation.*

Species, origin	Source and documentation	Related tradition
<i>Dioclea reflexa</i>		
Sunnmøre	Strøm (1762); scientific description	Vernacular name (<i>bustein</i>); used in folk medicine
<i>Entada gigas</i>		
Norway	Gunnerus (1765); scientific description	Vernacular names (<i>vettenyre</i> , <i>løsningsstein</i>), used as snuff-boxes and in folk medicine
Romsdal	Saxlund (1918:98, figs. 1, 3); photographs; specimens at Romsdalsmuseet, now lost	Vernacular name (<i>jettenyre</i>), used in folk medicine
Romsdal	Reichborn-Kjennerud (1921:1, 9); photographs, specimens at Romsdalsmuseet, now lost	Used in folk medicine
Nordland: Vesterålen	Photographs of specimens stored in TROM	Vernacular name (<i>lykkstein</i>) and associated beliefs
Troms: Senja	Brox (1970:83); specimen in TROM	Vernacular name; used in folk medicine
Troms: Karløy	Brooke (1823:317); specimen in TROM	Vernacular name (<i>sjøbonne</i>), used as snuffboxes
Finnmark: Måsøy	Kohl (1926b:958); photograph (fig. 5, left), specimen at Museum für Völkerkunde, Hamburg	Vernacular names; used in Sámi folk medicine
Finnmark: Kvalsund	Specimen at Norsk Folkemuseum	Used in Sámi folk medicine
Finnmark: Måsøy	Qvigstad (1932:15–16); specimen at Norsk folkemuseum	Used in Sámi folk medicine
Finnmark: Måsøy	Specimen in TRH (and attached note)	Used in Sámi folk medicine
Finnmark: Nordkapp	Martins (1848, 1857); specimen in Paris	Collected by fishermen
Finnmark: Nordkapp	Paulaharju (1935); glossary	Vernacular name; used in Quain folk medicine
Finnmark	Paus in Helland (1906:296); brief description	Seed interpreted as female
Norway	Gosner (1985:9); photograph	Snuffbox (at Historisk Museum, Bergen)
<i>Mucuna sloanei</i>		
Hordaland	Pontoppidan (1752:254); brief description	Of marine origin
Norway	Gunnerus (1765:21–22); scientific description	Vernacular names, used for snuffboxes
Sunnmøre	Strøm (1765); scientific description	Vernacular name (<i>bustein</i>); used in folk medicine
Finnmark: Måsøy	Specimen in TRH (and attached note)	Used in Sámi folk medicine
Finnmark: Måsøy	Kohl (1926b:958); photograph (fig. 5, right), specimen at Museum für Völkerkunde, Hamburg	Vernacular names; used in Sámi folk medicine

TABLE 1—(continued)

Species, origin	Source and documentation	Related tradition
<i>?Macuna sloanei</i>		
Finnmark	Paus in Helland (1906:296); brief description	Seed interpreted as male
Romsdal	Saxlund (1918:98, fig. 2); photograph, specimen at Romsdalsmuseet, now lost	Vernacular name (<i>bustein</i>), used in folk medicine

* Including voucher specimens (in herb. BG, O, TRH, TROM, and at some other museums), photographs, detailed descriptions, etc. Note, however, that the records of Gunnerus (1765), Lindman (1883), Schübeler (1873–75), and Strøm (1756, 1762, 1779, 1784) were all originally documented by voucher specimens, of which only a few have survived. The seeds of Gunnerus and Strøm were partly forwarded to Linnaeus for identification. Lindman's material may be stored in Stockholm (herb. 5), but has not been possible to locate. The last two seeds, listed as *?Macuna sloanei*, could also belong to other species of similar shape and size, e.g., *Dioctlea reflexa*.

TABLE 2.—Vernacular names for exotic drift seeds of Fabaceae species in Norway.*

Vernacular Name	English translation	Area	Source
a) Names used for <i>Dioclea reflexa</i> , <i>Mucuna sloanei</i> or species with similar seeds			
Norwegian			
<i>bustein</i> [Busten]	cattle stone	Norway	Gunnerus 1765:21
<i>bustein</i>	cattle stone	W Norway (Sunnmøre)	Gjerding 1932:87
<i>bustein</i>	cattle stone	W Norway (Romsdal)	Saxlund 1919:98, fig. 2
<i>bustein</i>	cattle stone	Norway	Reichborn-Kjennerud 1921:1, 9; 1942:276
<i>ormestein</i> [Orme-Sten]	worm stone	W Norway (Sunnmøre)	Strøm 1762:139
<i>ormestein</i> [Orme-Sten]	worm stone	Norway	Gunnerus 1765:21
b) Names used for <i>Entada gigas</i>			
Norwegian			
<i>bustein</i> [*buestene]	cattle stone	Norway	Lindman 1883:75
<i>bustein</i>	cattle stone	W Norway (Romsdal)	Saxlund 1919:98, figs. 1, 3
<i>bustein</i>	cattle stone	Norway	Reichborn-Kjennerud 1921:1, 9
<i>bustein</i> [*buestene]	cattle stone	N Norway (Værøy?)	Svendsen 1916:86
<i>forløsningsstein</i> [*forløsningsstene]	loosening stone	N Norway	Helland 1905:224
<i>forløsningsstein</i> [forløsnings-stein]	loosening stone	N Norway (Senja)	Brox 1970:83; specimen at Tromsø museum
<i>golfsnøtt</i> [*golfsnødder]	? Gulf nut	Norway	Lindman 1883:75
<i>golfsnøtt</i> [*golfsnøtter]	? Gulf nut	N Norway (Værøy?)	Svendsen 1916:86
<i>jættenyre</i> [*jættenyrer]	giant's kidney	W Norway (Romsdal)	Saxlund 1919:98
<i>lykkestein</i>	lucky stone	Andøya	interviews 2003; photographs in TROM
<i>løsningsstein</i> [Løsningssten]	loosening stone	Norway	Gunnerus 1765:15–16, 18, 21
<i>løsningsstein</i> [*Løsrings Steene]	loosening stone	Norway	J.E. Gunnerus in letter of 6 February 1762 (Dahl 1896:173)
<i>løsningsstein</i> [*løsningsstene]	loosening stone	Norway	Lindman 1883:75; cf. Svendsen 1916:86
<i>løsningsstein</i> [*Løsningsstene]	loosening stone	N Norway	Helland 1905:204
<i>løsningsstein</i> [*løsningsstene]	loosening stone	N Norway (Værøy?)	Svendsen 1916:86
<i>sjøbønne</i> [Søe-Bønne]	sea bean	W Norway (Sunnmøre)	Strøm 1762:138, 387
<i>sjøbønne</i> [*søbønner]	sea bean	Norway	Lindman 1883:75
<i>sjøbønne</i>	sea bean	N Norway	Helland 1905:204
<i>sjønøtt</i>	sea nut	N Norway (Troms: Karlsøy)	Brooke 1823:317

TABLE 2—(continued)

Vernacular Name	English translation	Area	Source
<i>sjønøtt</i> [*sønødder]	sea nut	Norway	Lindman 1883:75
<i>sjønøtt</i> [*sjønøtter]	sea nut	N Norway (Værøy?)	Svendsen 1916:86
<i>sjøtrenøtt</i> [Seetree-Nødd]	sea tree nut	Norway	Gunnerus 1765:15
<i>skateegg</i>	skate-eggs	N Norway (W Finnmark)	interviews 2001
<i>tangbønne</i> [*tangbønner]	sea-weed bean	Norway	Lindman 1883:75
<i>valnøtt</i> [*valnødder]	walnut	Norway	Lindman 1883:75
<i>vettenyre</i> [Vette-Nyre]	wight's kidney	Norway?	P.C. Friis, late 16th century (see Storm 1881)
<i>vettenyre</i> [*Vette-Nyrer]	wight's kidney	Norway?	Gunnerus 1765:15, 18
<i>vettenyre</i> [Vettenyre]	wight's kidney	Norway?	Strøm 1784:126
<i>vettenyre</i> [Vette Nyre]	wight's kidney	Norway?	Schübeler 1873-75:32
<i>vettenyre</i> [*Vette-nyrer]	wight's kidney	Norway	J.E. Gunnerus in letter dated 6 February 1762 (Dahl 1896:173-174)
North Sámi			
<i>gollegáamu</i> [Collegadno]	gold can	N Norway	Schübeler 1873-75:31
<i>guvdegeađgi</i> [Guvdegadge]	sea serpent stone	N Norway (Finnmark)	Kohl 1926a:133; see Qvigstad 1932:15
Finnish (Quain)			
<i>merenkivi</i>	stone of the sea	N Norway (Finnmark)	Paulaharju 1934, 1935
c) Names used in a collective sense for Fabaceae seeds, including <i>Dioclea reflexa</i> , <i>Mucuna sloanei</i> and <i>Entada gigas</i> , or other species with more or less similar seeds			
Norwegian			
<i>bustein</i> [*Buc-Stene]	cattle stone	W Norway (Sunnmøre)	Strøm 1756:fol. 56a, 79a; see Standal et al. 1997:125, 169
<i>bustein</i> [Busten]	cattle stone	W Norway (Sunnmøre)	Strøm 1762:138-139, 388; 1779:315-316
<i>bustein</i> [Bustenen]	cattle stone	Norway	Sundt 1852:152
<i>bustein</i>	cattle stone	W Norway (Sunnmøre)	Gjerding 1932:87
<i>løsnestein</i> [Løsne-Steen]	loosening stone	W Norway	Pontoppidan 1752:287
<i>løsningsstein</i> [Løsningsstenen]	loosening stone	N Norway	Nicolaissen 1889:17
<i>låsnestein</i> [Laasne-Steen]	loosening stone	W Norway	Pontoppidan 1752:287

TABLE 2—(continued)

Vernacular Name	English translation	Area	Source
North Sámi			
<i>diknægeadgi</i> [dignasgædge]	dog's nose-tip stone	Finnmark	note accompanying herbarium specimen, TRH
<i>gæggægeadgi</i> [gæggædge]	keg-stone	N Norway (E Finnmark)	Fritzner 1877:204
<i>gádnogædgi</i> [ganogædga]	can-stone	Finnmark	note accompanying herbarium specimen, TRH
d) Names used for Fabaceae seeds, data insufficient to allow further identification			
<i>sjonatt</i> [*Soc Nødder]	sea nut	N Norway (Nordland: Bø)	M. Bruun in a letter to Gunnerus 16 August 1759 (Dahl 1897:21)
<i>tryllestein</i> [tryllestén]	magic stone	N Norway (Finnmark)	Kohl 1926a:133, 1926b:959

* Modern spelling, singular form; original spelling, if different from present-day Norwegian and North Sámi, is given in square brackets; plural forms are indicated by an asterisk. Geographic origin is indicated if known.

mation of *vettenyre* as a vernacular name used in Norway is found in the correspondence of bishop Gunnerus, cited below.

Although weakly documented, *vettenyre* is a likely and perhaps once frequent vernacular name for *Entada* seeds in Norway, not least since the population of the Faroes is of Norse origin. The name reflects both their shape (*nyre* = kidney) and the magical properties ascribed to such seeds; *vette* is an old term (Norse: *vættir*) referring to a supernatural being. Fritznér (1896:982), in his Norse dictionary, translated it as "living being," in particular of a superhuman or godlike nature. Note, however, that Árnason (1862:649) suggested that *vettenyre* could derive from Norse *viðarnýra* 'wooden kidney'. More likely, perhaps, is a relation to the old Norse *vitt* or *vett*, meaning a magical remedy (Fritznér 1896:977). Saxlund (1919:98), in his otherwise well-informed paper, recorded that *Entada* seeds were "at some places" called *jættenyrer* 'giant's kidneys' (modern Norwegian: *jettentyrer*).

Another frequent name for drift seeds is *løsningsstein* (or *-sten*), a name reflecting the use of such seeds as a birth-mediating charm—*løsning* meaning to relieve or let loose (cf. *forløsning*, to give birth or relieve), and *stein* meaning stone (Table 2). Brox (1970:83) recorded a slightly deviant name, *forloysings-stein*, at Senja in Troms, north Norway.

Pontoppidan (1752:287) mentioned a closely related name, *Løsne-Steen* or *Laasne-Steen* 'loosen[ing] stone' (the latter dialectal; modern Norwegian: *løsnestein* and *laasnestein*). Reichborn-Kjennerud (1921:9, 1927:212, 1942:276) gave an alternative version, *lausnestein*. According to the description given by Pontoppidan (1752:285–287), his *laasnestein* must have been some kind of mineral, and not a drift seed. However, the related tradition is of interest in our context. In Pontoppidan's abridged version it reads:

... and is called by the peasants *Løsne-Steen*, signifying that a female about to give birth could get help from it if in trouble. (Pontoppidan 1752:287)

Kohl (1926a:133, 1926b:959) mentions *tryllestén* 'magic stone' (modern Norwegian: *tryllestein*) as Norwegian for drift seeds, a name probably from Finnmark.

Also frequent is the name *bustein* or *busten* 'cattle-stone' (Table 2), again suggesting its use; *bu-* refers to *bufe* 'cattle'. At Sunnmøre, the term *bustein* was used mainly for seeds of *Dioclea reflexa* and *Mucuna sloanei*, and rarely for those of *Entada gigas* (Strøm 1779:315–316). A little further north, in Romsdal, both *Entada* and *Dioclea/Mucuna* seeds were included in the concept (Saxlund 1919).

A less common vernacular name is *Orme-Sten* 'worm stone' or 'snake stone' (modern Norwegian: *ormestein*) (Gunnerus 1765:21; Strøm 1762:139). According to both authors, this name was mainly used for species other than *Entada gigas*, "even if they may by some be considered as belonging to *Løsnings-Stenene* or at Sunnmøre to *Bu-Stene* in general" (Gunnerus 1765:21).

Yet another set of vernacular names is based on the supposed origin of the seeds. Pontoppidan (1752:254ff) described a drift seed under the name "*Fabam marinam*, or *Søe-Bønne*," but the latter is not given as a vernacular name, as is evident from his text: "To this I in particular refer a sea-plant, which I for now will call *Fabam marinam*, a *Søe-Bønne*." According to its physical features, his sea bean was a *Mucuna* seed. The name *Søe-Bønne* 'sea bean' (modern Norwegian:

sjøbønne) is also mentioned by Strøm (1762:138, 387). Gunnerus (1765:15) recorded *Søctrae-Nødd* 'sea tree nut' (modern Norwegian: *sjøtrenøtt*) as a vernacular name. From Karlsøy in Troms, north Norway, Brooke (1823) mentioned "sea nuts" as an English translation of a local name for *Entada* seeds, probably *sjønøtt* in Norwegian:

... and it is rather singular, that some of the same were brought to me at Carlsøe under the name of sea nuts, and represented as being very scarce, and found only after great storms, when they are sometimes picked up on the coast. (Brooke 1823:317)

Lindman (1883:75) noted that *Entada gigas* seeds had a number of vernacular names along the coast of Norway, including *sjøbønner* 'sea beans', *sjønøtter* 'sea nuts', *tangbønner* 'seaweed beans', *valnøtter* 'walnuts', *golfsnøtter* 'Gulf [Stream] nuts' (?)—and the more widespread *bustein* and *løsningstein*. Note, however, that all vernacular names listed by Lindman are given for *Entada gigas*, and none for other species, but this is unlikely to be correct in terms of rendering folk tradition.

At least some of these names may derive from the Lofoten islands of Nordland, north Norway. The vicar Reinert Svendsen, whom Lindman met at the island of Værøy, mentioned *sjønøtter*, *golfsnøtter*, *løsningssiene* and *buestene* as vernacular names for drift seeds in a book describing his oceanic parish (Svendsen 1916:86). Unfortunately, neither Lindman (1883) nor Svendsen (1916) provide any details as to the source or geographic origin of these names. Thus, it is impossible to decide if Lindman's record is based partly on information provided by Svendsen—or vice versa.

The only extant vernacular names for drift seeds I have recorded in Norway are *lykkestein* 'lucky stone' in the Vesterålen islands, in four cases confirmed as referring to *Entada gigas*, and *skategg* 'skate eggs' in Finnmark. The latter was used for *E. gigas* in the tiny coastal Sámi settlement of Survik at the island of Seiland. Three sisters all knew them by the Norwegian name, again reflecting a maritime, if somewhat mysterious, origin (interviews 2001).

Sámi Vernacular Names.—Schübeler (1873–75:32) provided an important supplement to previous literature on Norwegian folk traditions related to drift seeds. Commenting on Gunnerus (1765), he also mentioned a Sámi vernacular name, *Gollegadno*. *Golle-* means gold; *-gadno* is a Sámi loan-word from Norwegian *kanne* 'can'. If so, the name (*gollegádnu* in modern North Sámi) could be translated as "gold can," reflecting a revered object. Unfortunately, Schübeler gave no source for his record. Fritzner (1877:204) recorded a second Sámi vernacular name while he was living in east Finnmark in the mid-nineteenth century, *gaggagæðge* (in modern North Sámi: *gággageaðgi*). *Gágga* means 'keg' (Qvigstad 1932:15); *geaðgi* is 'stone', i.e., 'keg-stone'. A third Sámi vernacular name for drift seeds, *guovdegeaðggit* 'sea serpent stones', is mentioned by Qvigstad (1932:15), probably based on Kohl (1926a:133), though the latter gave the name in singular form (*guovdegeaðgi*) and somewhat misspelled (*guvdegadge*). A note enclosed in a herbarium collection at TRH (see quote in the section on folk medicine below) provides two further names, both from Måsøy in west Finnmark: *dignagæðge* (probably = *dik-*

ņageaðgi 'dog's nose-tip stone', and *ganogæðga* (= *gádnogæðgi* or *gátnogæðgi*) 'can-stone'.

Finnish Vernacular Names.—Paulaharju (1934, 1935) recorded medicinal use of *Entada* seeds among the Finnish (Quain) ethnic minority at Magerøya island, Finnmark, north Norway. In an appendix to the latter work, Paulaharju (1935) explained the meaning of some "strange words" occurring in his text. Drift seeds are mentioned as *merestä koutunut [ruskea] kivi*, i.e., "a [brown] stone that has drifted/floated from the sea." The term *koutua [koutunut]* may be translated as "arise from water" or "float from water." This word is not included in the main Finnish dictionary *Nyky-suomen sanakirja* (Sadeniemi 1975-76), which includes more than 200,000 words. Thus, it is likely to be a term used only among the Finnish inhabitants of coastal Finnmark. The most likely vernacular name for drift seeds among them is *merenkivi* 'stone of the sea', a term used several times by Paulaharju (1934, 1935).

ORIGIN OF DRIFT SEEDS ACCORDING TO FOLK TRADITION

In parts of Norway, drift seeds were conceived as fruits deriving from submarine trees. This belief is reflected in some of the vernacular names mentioned above, e.g., *sjetrenøtt* 'sea tree nut'. Gunnerus (1765:15) noted, "Many consider it to be a fruit, which grows at the bottom of the sea and refer it to the corals or sea trees, which is why some call it *Søetæe-Nødd*." This belief may not have been restricted to the layman. In a letter to Professor G.K. Oeder in Copenhagen, dated 6 February 1762, Gunnerus, who was bishop in Trondheim, suggested that even his clerical subordinates were prone to the same belief, for which reason he desired to be sent an entire pod with seeds:

(. . .) for in addition, I would be pleased if all the vicars in Finmarken and Nordlandene [i.e., north Norway], who believe that such beans grow on some sort of kelp in the sea, should see their *Løsnings Steene* [loosening stones] or *Vette-nyrer* [wight's kidneys] peep at them from the pods, hanging on their stalks, complete with their leaves. (cited from Dahl 1896: 173-174)

Professor Oeder commented on this belief in his reply to Gunnerus, dated 27 March 1762:

The good vicars, who think that these beans grow on some kind of kelp in the sea, should have many thanks, but those who can confuse such a fruit with *vesicis fucorum* are really not sufficiently acquainted with natural history to be able to say *quid distent æra lupinis*. (cited from Dahl 1898:51, translated from Danish)

It should be noted that the "sea trees" referred to by Pontoppidan (1752) and some other early authors are not plants (algae) at all; the name usually refers to the large corals and other colony-dwelling animals abounding in deep waters off the coasts of Norway, where some of the world's greatest coral reefs are hiding. Fragments were frequently brought up to the surface by fishermen, as noted by

Brooke (1823:315). The seeds' supposed origin from submarine plants is repeated in a seventeenth-century record from Finnmark, north Norway, which goes on to note that such seeds, according to folk belief, were of two sexes:

There is a plant, that grows in the sea, of color and size as a chestnut, with a brown shell and a white kernel. Its shape is sometimes like a flat chestnut and sometimes like a flat heart. Of these, there are supposed to be males and females, and the former may be discerned from the latter by a black belt along the rim." (Ludvig C. Paus, in an eighteenth-century manuscript entitled "Samlinger til Finnmarkens historie," cited by Helland 1906:296)

Paus was vicar in Vadsø in east Finnmark. Far from demonstrating different sexes, the description in fact indicates two different species: *Entada gigas* (the flat heart) and *Mucuna sloanei* or perhaps *Dioclea reflexa* (with a dark peripheral band). A similar tradition must have existed in neighboring northwest Russia. Qvigstad (1932:15) noted a Russian vernacular name for drift seeds, *zhivoi kamen* 'living stone', from the White Sea.

DRIFT SEEDS AS SNUFFBOXES

In Norway, the seeds of *Entada gigas* have been used to make small containers such as snuffboxes (see Danielsen 1983). The only contemporaneous sources which mention such snuffboxes belong to the eighteenth century. Of these, Strøm (1762: 161) merely stated that the peasants used the seeds for snuffboxes; a diary note made during his travels in 1756 is slightly more detailed:

The sea-beans Pontoppidan talks of is here called *Bue-Stene*, and are as large as a modestly large snuffbox of birch, for which purpose they are also used by some. (Strøm 1756:fol. 57a, cited by Standal *et al.* 1997:125)

Gunnerus (1765:15-16, 20) offered a brief, but somewhat more detailed description of such snuffboxes:

They [drift seeds] are used mainly for snuffboxes, which is done in two ways. Some drill a hole through the top, through which the kernel is removed, and those who would like to and can afford it, may have a silver foot and neck added. Other split the shell and use one part as lid and the other as bottom in a box, where the rest is made of silver. (Gunnerus 1765:15-16)

Gunnerus' account may partly be based on a letter (dated 16 August 1759) he had received from Mathias Bruun, vicar at Øksnes in Nordland, north Norway. He had provided some sea beans for inclusion in the bishop's collection of naturalia—and obviously misunderstood Gunnerus' scientific purpose:

Of the so called *Søe Nødder* [sea nuts] follow those I can deliver at the moment; for the largest I had planned, to provide a pin and screw, to make a snuffbox; but when I understood the most pious master's purpose with them, to use them, for the mentioned sea tree, I have, for this time,

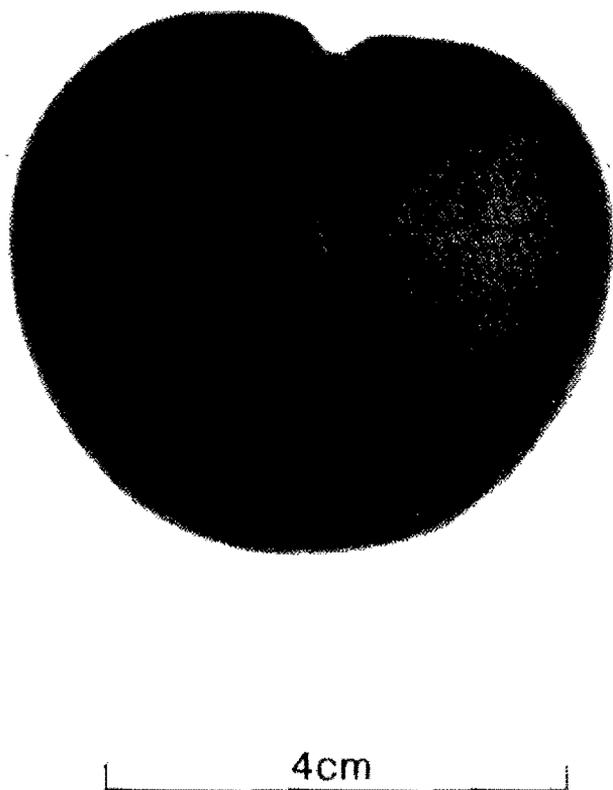


FIGURE 2.—*Entada gigas* seed collected by Arthur de Capelle Brooke during his visit to north Norway in 1820 (herb. TROM). Brooke (1823) saw such seeds used as snuffboxes by the coastal Sámi inhabitants of Karlsøy, Troms county, and made some notes on folklore. Photograph by Adnan Iĉagic, Tromsø Museum.

refrained; should the shipment of further such objects please the high-favored [bishop], it will also be a desired matter, with all diligence, to carry out. (cited from Dahl 1897:21)

Brooke (1823) recorded a similar use among the coastal Sámi population of Karlsøy (Troms county, north Norway):

The Sea Fins, when they find them, scoop out the inside, which resembles the kernel of a chestnut, and convert them into snuff-boxes. (Brooke 1823: 317)

An *Entada* seed collected by Brooke during his visit to north Norway in 1820 is preserved at Tromsø Museum (TROM), see Figure 2.

Gosner (1985) carried out an extensive search for snuffboxes made from drift seeds in publications and museums (cf. Danielsen 1983). He was only able to locate two specimens, one in Norway and one in Iceland. Vesta boxes seem to be somewhat more frequent (Nelson 1998b), but are not known from Norway.

FOLK MEDICINE

As suggested by the Norwegian name *løsningsstein* 'loosening stone', the beans of *Entada gigas* and some other drift seeds were supposed to ease the birth process, and thus played a role in folk medicine (Faye 1885; Gotfredsen 1956:359; Gran 1976:54–55; Grundtvig 1878:166; Helland 1906:295–296; Reichborn-Kjennerud 1921:9; Rønning 1955:8; Svendsen 1916:86). Gotfredsen (1956:359) related the seeds to a more general concept of 'rattle stones' where the internal seed is a symbol of a fetus within the womb (cf. Nelson 2000:48–49). For Norway, this interpretation was first mentioned by Worm (1655:198; cf. Grundtvig 1878:165). There are numerous Norwegian literary records referring to the use of drift seeds as an aid during the birth process. All sources that explicitly refer to drift seeds as a birth-mediating agent are related to north Norway, where such use is known in both Norwegian and Sámi tradition (Reichborn-Kjennerud 1933:67).

Drift Seeds in Norwegian Folk Medicine.—During the birth process, drift seeds could be applied in several ways (Høegh 1986:8, 2001:32). Six different modes of application are mentioned in Norwegian literature:

- 1) During birth, the woman could hold the seed in her hand (Fritzner 1877:204; Helland 1906:296; Reichborn-Kjennerud 1933:67, 1942:276; Svendsen 1916:86);
- 2) The seed could be rubbed against the stomach of the woman in labor (Høegh 1986:8, 2001:32; Wevle 1975:28);
- 3) The seed could be tied to the thigh (Fritzner 1877:204; Helland 1906:296; Reichborn-Kjennerud 1933:67, 1942:276). According to Gotfredsen (1956:359) it could also be tied to the arm or held in the hand, but his record seems to be related to the more general concept of "eagle stones";
- 4) The seed was placed in boiling water, and the "extract" was given to the woman (Bang 1902:279; Helland 1905:224; Nicolaissen 1889:17; Reichborn-Kjennerud 1933:67);
- 5) The woman was given an alcoholic beverage (beer, wine or spirits), using the hollow seed shell as a cup. This method is noted from north Norway by Gunnerus (1765:16) and "from other places" (also in north Norway) by Nicolaissen (1889); see also Høegh (1986:8, 2001:32) and Reichborn-Kjennerud (1933:67);
- 6) The seed could also be placed in the bed (Brox 1970:83; Drageøy 2001:98; Høegh 1986:8, 2001:32): "They placed a *forloysings-stein* in the bed of the birth-giving, if they had one at the farm. Then the birth would be easier" (Brox 1970:83).

Pontoppidan (1752) provided a detailed account of the use of a *Torden-Steen* 'thunder stone' (modern Norwegian: *tordenstein*—in this case probably a mineral) serving as a birth-mediating agent, based on a letter from Vicar F. Arentz in Sundfjord, western Norway, dated 22 September 1750:

... the peasants call such stones *Laasne-Steen*. The name derives from the effect the stone is said to have. The females, especially old midwives, revere this stone as a holy object, and it is difficult to persuade them even

to display it, not to speak of giving it away. The reason is this: When a woman is having trouble during birth, beer is poured on such a stone, and given the woman to drink, by [doing] this, they think that the child will come loose and appear into daylight; because according to the peasants' dialect, it is said: *Dæ laasne*, that is, it is let loose. (Pontoppidan 1752: 287)

Fritzner (1877) noted the obvious similarity with both Icelandic tradition related to *lausnarsteinen*, and to the widespread European tradition of "eagle stones" or *aetifes* (see Nelson 2000:49), a connection also noted by Helland (1906:296), Jónasson (1911:376), Reichborn-Kjennerud (1921:10), and Storaker (1928:24):

Of this stone, it is said that it is the size of a nut, and within it is found a lesser stone, like a ring, which you can tell as soon as it is shaken; then also a woman who is about to have a baby will have an easy birth when she holds it in her hand or it is tied to her thigh. (Fritzner 1877:204)

It is likely that some of the objects passing for "eagle stones" were in fact drift seeds. An old German source notes that eagle stones were found at the seashore, and that their color was *pumiceus*, i.e., purple red—rather fitting, e.g., for *Entada* seeds (Fritzner 1877:205 n. 1). The "eagle stone" tradition is reflected in a record made by Brooke at Karlsøy in Troms, north Norway. Commenting on drift seeds (*Entada*) found at the local shores, he noted that: "They are also now and then found in the nests of the ravens, which build in the high cliffs and rocks" (Brooke 1823:318).

Surprisingly, Faye (1885:683–685), in his otherwise thorough review of past Norse and Norwegian traditions related to pregnancy and birth, included only a brief reference to drift seeds and other "stones" serving as birth-mediating agents, largely based on sources related to Iceland and the Faroes. Weiser-Aall (1968), in her treatise on pregnancy and birth in nineteenth- and twentieth-century Norwegian tradition, also fails to mention drift seeds.

Saxlund (1919) emphasized the use of drift seeds to cure diseases in cattle, and does not seem to have been aware of their use as a birth-mediating agent. Such use may, however, explain his note that the *bustein* was a female possession, and was passed on from mother to daughter.

Among Norwegian scientific sources, Nicolaissen (1889:18–19) is unique in suggesting that *Entada* seeds were much desired and sought-after items among midwives, to the extent that they would steal them from others if they saw a chance. This may also indicate that there was no particular superstition as to the mode of acquiring the seed, in contrast to British sources, which suggest that it would only bring luck to the person who had actually found it (Nelson 2000).

Svendsen, commenting on drift seeds in Lofoten, north Norway, and their vernacular names, noted that they were called:

løsningssteue and *bustene* due to its [their] supposed power to heal humans and animals. It is the common belief that pregnant women who carry this nut, will have an easy delivery when they are giving birth. (Svendsen 1916:86)

According to Dragøy, the "stone" should be heated before it was placed in

the bed; in this case, it is somewhat less certain if the *løysningsstein* was a drift seed:

(. . .) when a female was about to give birth, then a large *løysningsstein* was heated and placed in the bed, since then the birth would be easier. (Dragøy 2001:98)

Although the written sources do not explicitly state it, in most cases people probably used the intact seed. Schübeler (1873-75:32) suggested that only the interior part was used in folk medicine, but this may be based on a misinterpretation of Gunnerus (1765:16). However, the notes accompanying a voucher specimen of *Entada gigas* at Tromsø Museum (Table 1) confirm that the kernel was sometimes used. Edel Kristiansen, a woman living at the island of Senja (Troms county, north Norway), received the seed as a gift from Peder Jørgen Pedersen in 1920. Pedersen was then 71 years old and had a reputation for being able to relieve pain and stop bleeding. Edel was told it was a "remembrance," but if she would ever need it, e.g., if she got ill, she should open the "stone" and eat some of the contents.

Drift Seeds in Sámi Folk Medicine.—Based on available evidence, the use of drift seeds as a birth-mediating agent seems to have been much more widespread in Norwegian than in Sámi tradition. Leem (1767:495), Qvigstad (1932:152), and Steen (1961:50) all include sections on various remedies used to facilitate birth among the Sámi, but none of them mentions drift seeds. A whole range of other objects have been used, ranging from ordinary stones (Qvigstad 1932:152) to worm or snake skin (Steen 1961:50). The only explicit reference to Sámi use of drift seeds as a birth-mediating agent is by Fritzner—a highly interesting source, since it was based on his own observations during a seven-year (1838-1845) stay in Finnmark (see Munthe 1929), as vicar in Vadsø:

One such [drift seed], which had repeatedly been used to help women during birth . . . came into my possession shortly after my arrival in east Finnmark, and I still have it. (Fritzner 1877:204)

In the late nineteenth century, the ethnographer and linguist J.K. Qvigstad made an extensive inquiry into life and traditions among the coastal Sámi of north Norway, based on a printed 16-page questionnaire. Part VIII, question No. 4, ran: "Are there remedies to ease the birth (give them fish-liver oil, spirits to drink, *gaggagæðge*)?" (Qvigstad 1896:14). Qvigstad may have attained his knowledge of the use of drift seeds, also known as *gággagenæðgi*, through Fritzner's note. It is not known how many replies Qvigstad got to his questionnaire. Of the few that have been printed, not a single answer contained information on drift seeds. Even Ole Thomassen's extensive and well-informed reply has nothing to offer on this subject: "The so-called *gaggagenæðgi* I do not know" (Thomassen 1999:109).

Drift seeds were also supposed to aid in the final stages of the birth process, after the baby had been born. According to Gunnerus (1765:16), "superstitious people in north Norway consider it a precious means of delivering the afterbirth (*Secundinas*)."

It may be drift seeds that are hidden in an account of a remedy used to deliver the afterbirth in Sámi folk medicine, from Lyngen in Troms, north Norway:

At some places at the sea one can find a kind of round stone. One takes such a stone, when the sea is halfway to ebb tide, puts it in boiling water and takes the kettle from the fire, so that the water ceases boiling. If the stone makes a sound when it is put into water, it is a "healing stone." When the water has cooled so that the hand can tolerate it, one bails it by hand at the waist and back of the female and rubs her with it for a short while. Then the expulsion of the placenta will be easy. (Qvigstad 1932:160; translated from German)

In Sámi folk medicine drift seeds were used for treating a number of diseases. Qvigstad (1932:15–16) recorded an interesting example:

An old woman in Snefjord in western Finnmark used the bean to treat tumors, panaritium, tooth ache, rash (*æ nabosta*) and other diseases. She rubbed the stone repeatedly at the sick part and around this to prevent the spread of the evil (*gar'dot šaddalmasa*, make a fence around the tumor). While doing this, she read an incantation. A bean, which looked like a sitting frog, was particularly valuable. (Qvigstad 1932:15, translated from German; Sámi retained in Qvigstad's spelling)

The seed was identified as *Entada gigas* by Qvigstad (1932). A voucher specimen is found at Norsk Folkemuseum (Norwegian Folk Museum). According to the museum's catalogue, it was found:

... stranded in Finnmark. Used by a woman in Måsøy to heal various diseases; the bean was rubbed on and around the sick part. Collected by J. Qvigstad and donated to UEM [University of Oslo, Ethnographic museum; later transferred to the Norsk Folkemuseum] February 27, 1931

With regard to the desired frog shape of the bean, it should be noted that frogs were frequently used in Sámi folk medicine, e.g., as an aid during birth (Kohl 1926b:957–958; Qvigstad 1932), as they were in Norse and Norwegian folk medicine (Falk and Reichborn-Kjennerud 1923).

Another *Entada gigas* seed at Norsk Folkemuseum, also donated by Qvigstad, derives from the nearby area of Revsbotn, Kvalsund. It is accompanied by a brief note: "The Sámi use this as a medicine."

Kohl (1926a:133, 1926b:959) is an important source of further details concerning the use of drift seeds to heal various diseases in Sámi tradition (see also Qvigstad 1932:125–126). The author, a German doctor, spent the years 1919–1925 practicing in east Finnmark, and encountered a living tradition of folk medicine. His acquaintance with drift seeds, however, came through a nurse who had moved to Snefjord in Måsøy, on the northwest coast of Finnmark:

Even if a European doctor or an educated nurse is consulted, one can still in most cases assume that at the same time some kind of remedy from folk medicine is used.

In this way I came into possession of a so-called magic stone (Norwegian: *tryllesten*; Sámi: *guvdegadge*), and this by way of a Sámi nurse, who had worked for a long time among the coastal Sámi in the Tana fjord area, and later continued her arduous and devoted task in Snefjord (west-

ern Finnmark). The magic stone itself is not at all a stone, but a fruit shell of unknown origin, perhaps from tropical areas, which has been carried into the Arctic ocean by the ocean current.

She [the nurse] gave an account of the stone: "Such stones are found in the sea, but they are rare. People believe that they have considerable power to heal various diseases, to take away pain or infection and the sort. In the autumn, as I started my work here, there was an epidemic of measles, and some people had [an] ear infection as a complication. Then they got hold of an old Sámi woman, who was in possession of two such stones. This woman, it was assumed, could heal people with the help of these stones. One day after I had made my visits to the patients, having tried to treat them, as I considered, as well as possible, the woman followed [behind] me and carried out her business with the help of the stones. At first, she rubbed the painful area with oil, and then she repeatedly rubbed the stone over it and said a few words. One evening, I found her at the home of a man who had a painful back, while she was massaging his back and rubbing the "stone" over it. It is an ancient remedy among the people here. However, it is just a few who are able to heal the sick with these stones. (Kohl 1926a:133, translated from German)

The "stones" depicted in Kohl (1926b:958) may be identified as *Entada gigas* and *Mucuna sloanei* (or perhaps *Dioclea reflexa*) seeds (see Table 1). It is worth pointing out that Kohl had not encountered a similar tradition in his own district in east Finnmark.

Qvigstad (1932:16) also apparently had questioned two Sámi females from interior Finnmark about their knowledge of similar "stones." One of them, otherwise well informed on Sámi folk medicine, had no knowledge of such stones, whereas the second had one in her possession:

Susanna Spein from Kautokeino did not know the bean. Inga Gaup in Karasjok used one against tumors, swollen glands and aching teeth. Her bean is very old and "has been used by five old women." Such "stones" are found at the coast on midsummer's eve. (Qvigstad 1932:16, translated from German)

Interesting information on Sámi traditions related to drift seeds is also provided by a note accompanying a box collection comprising one seed each of *Entada gigas* and *Mucuna sloanei* in herb. TRH (Figure 3). This material also derives from Måsøy (Snefjord) in Finnmark, and was submitted by Bertrand M. Nilsen on 23 December 1936; the donor worked in a mission society. The attached note, written by Ove Arbo Høeg (then curator at TRH), must be based on information from B. M. Nilsen:

[The seeds] are used by the Sámi as medicine under a common name dignasgædøge or ganogædøga, by the Sámi [living or staying] at the coast in all of Finnmark. [An] *Entada* [seed], which is supposed to be especially powerful if it is rattling, is placed on the painful spot, and is used, e.g., by women about to give birth. Nowadays mostly for toothache.

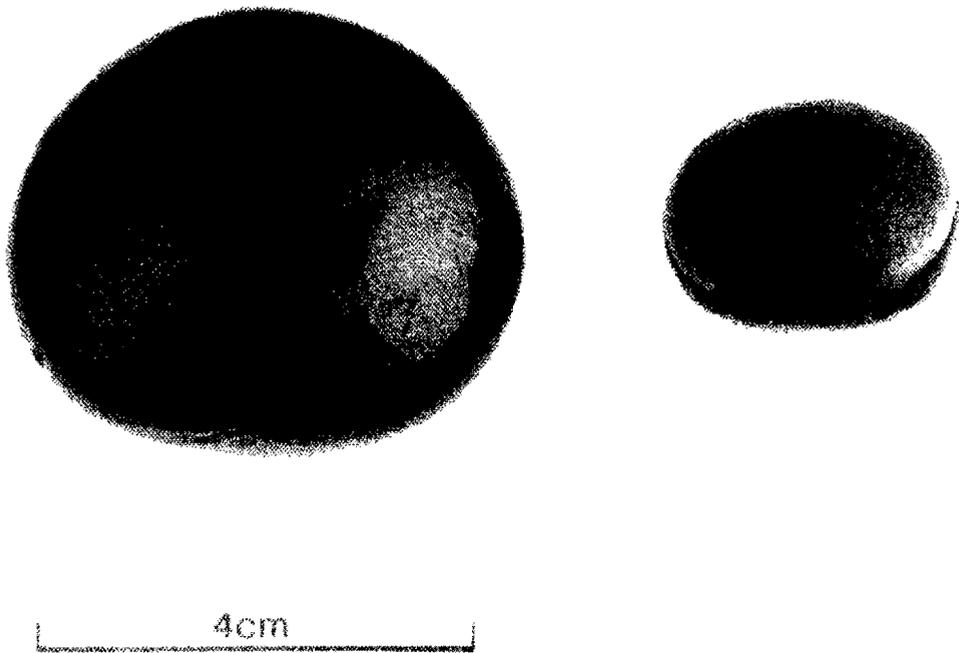


FIGURE 3.—Seeds of *Entada gigas* (left) and *Mucuna sloanei* (right) from Måsøy, Finnmark, now in herb. TRH. Both seeds had been used in Sámi folk medicine, as recorded in an accompanying note (see text). Photograph by Adnan İçagic, Tromsø Museum.

Drift Seeds in Finnish (Quain) Folk Medicine.—Mainly from the eighteenth century onward, numerous ethnic Finns from north Finland and northeast Sweden settled in north Norway, including the coastal districts of Finnmark. During the early twentieth century, the Finnish ethnographer Samuli Paulaharju carried out extensive studies of their traditions and way of life. His writings reveal that the Finnish (Quain) ethnic group, too, had incorporated drift seeds in their folklore. Again, *Entada gigas* seeds (identified as such in Paulaharju's appended glossary) were used to cure diseases. Paulaharju recorded two examples of such cures:

With a brown stone drifted from the sea, Loukunen has healed an old woman, whose arms and legs were full of [the] black prints of five fingers pressed by the dead, and furthermore her arms [were] so badly crooked that the poor woman could not take care of her child. But when Mikko had pushed her a few times with his sea-stone, her arms soon started to straighten. (Paulaharju 1935:49–50, translated from Finnish)

The seeds were also used to cure sore skin:

When the sea is injurious, evil forces from the green waves or angry foam-crested breakers of the sea attack the Christian people, making the whole skin blister, at the end exposing the naked flesh, then, one has to go to the shore and talk with the evil-doer. With three sea-stones [*Entada* seeds], one pushes the sick part and reads an incantation:

If you have come from the earth, take your rash away!
 If you have come from the water, take your rash away!
 If you have come from the wind, take your rash away!
 The earth should not hate the earth.

The earth and air may also cause injury, and with the same words the incantation is read, and one pushes with a stone. For the stone is the heart of the earth, formed of the same poisonous soil as the sinful poor man. (Paulaharju 1935, translated from Finnish)

These records derive from Magerøya island (Nordkapp municipality), Finnmark, as is evident from the inclusion of similar material in the separate paper of Paulaharju (1934), commenting on folklore from the Nordkapp (North Cape) area.

FOLK VETERINARY MEDICINE

In Norwegian folk tradition, drift seeds were also considered a valuable medicine for cattle. The vernacular name *bustein* reflects this use. The prefix *bu-* usually means a settled area or a farm (see Fritzner 1883:204-206), but should in this context rather be interpreted as shorthand for *bufe* 'cattle', and the whole name thus as 'cattle stone'. Strøm (1762) stated that they were used as medicine for certain diseases in cattle (see also Storaker 1928:20). In his large Norwegian dictionary, Aasen (1873:92) defined *bustein* simply as "a sort of medicine for cattle."

It should be noted, however, that the *bustein* name is ambiguous, and has been used for a number of different objects. An extensive discussion of the various types of *bustein* is found in Reichborn-Kjennerud (1921). The concept may include:

- 1) The hair-balls that are often formed in the digestive organs of ruminants and horses (see Grundtvig 1878:166; Gunnerus 1765:16; Reichborn-Kjennerud 1927:186; Storaker 1928:20-21; Strøm 1756:fol.79a). Strøm (1762:387) considered this to be the "true" *bustein*. Such hair-balls have been held in special reverence in many countries ever since antiquity (Reichborn-Kjennerud 1921:2);
- 2) Stone embryos (lithopaedion), mainly from cattle. According to Reichborn-Kjennerud (1921:3, 1933:72) and Ross (1895), this kind of *bustein* has been recorded at a number of sites in southern Norway. They were kept as a remedy, in one case for more than 200 years (Reichborn-Kjennerud 1921:4);
- 3) A more mythical object, the *ormestein* ('worm stone' or 'snake stone'). It was supposedly formed during an assembly of snakes competing for who should become a dragon. The weakest was killed, and reduced to a stone. Both the name and the legend have been recorded from several areas in southern Norway (Quisling 1918:21; Reichborn-Kjennerud 1921:4-8; Storaker 1928:25);
- 4) Minerals or rock fragments, usually with a somewhat peculiar shape or outlook, e.g., rock crystals and garnets (Bang 1902:290; Faye 1885; Grøn 1906; Reichborn-Kjennerud 1921:11-14; Troels-Lund 1914a) and in one case even a meteorite (Storaker 1923:108). According to Pontop-

pidan (1752:285–287), such stones have also been used to facilitate birth, and were then termed *løsnesteiner* 'loosening stones'. The mode of use was similar to that recorded for drift seeds, i.e., facilitating birth or relieving illness in cattle. They could be heated and placed on the stomach, or water in which they had been submerged was given to the sick animal (Reichborn-Kjennerud 1921:12). According to Reichborn-Kjennerud (1921:13), the term *bustein* was also used for larger stones or boulders, firmly rooted in the ground. If people bought cattle, the animals were led around a *bustein* of this sort to prevent them from returning to their former home, obviously a magical cure. Such large stones were also used for treating human diseases, both in Norwegian and Sámi tradition;

- 5) Drift seeds (Reichborn-Kjennerud 1921:9–10; Saxlund 1919; Strøm 1756:fol.57a, 79a, 1762:138, 387).

All five categories of *bustein* are noted in the Norwegian dictionary of Hellevik (1966). The explanation offered for why the name was also applied to drift seeds is, however, rather strange: "... seeds of a kind of pod that comes with the Gulf Stream from the American coast (and considered a *bustein* because at the coast one may find it in the intestines of animals)" (Hellevik 1966:1113). This entry must be based on a lexicographical note in "Norsk allkunnebok" explaining *bustein* as: "1. Seeds of a pod type that come with the Gulf Stream from the American coast. The cows consume it along the coast. In folk tradition, this kind [of *bustein*] is explained as a stone embryo, because it is found in the intestines of cows" (Sudmann 1949:666). The likelihood of cattle accidentally eating drift seeds must be remote indeed, though such a belief may have existed. Both entries seem to mix up different traditions.

For drift seeds serving as a *bustein*, Saxlund (1919) is a primary source of information. He provides a detailed description of their mode of use in Romsdal, western Norway. According to him, their main purpose was to treat *busot* 'cattle illness'. In folk tradition, this was supposed to be a particular disease, most frequent in older cows and manifested by loosening teeth. The latter symptom could in fact suggest scurvy, a frequent disease in inadequately fed cattle (cf. Alm 1996:191). The cure was carried out by giving the sick cow *buvatten* 'cattle water', which was prepared by placing a *bustein* in clear water from a spring. It was put there in the morning, and left until midday, by which time the water supposedly had accumulated sufficient healing power. Obvious elements of magic were involved: those who came to collect the water should not speak to anyone on their way home, and if they had to do so, the water had to be hidden away. Upon arrival at home, the water should immediately be brought to the barn and given to the sick cow. The cure never failed—except that it held no power for the person who owned the *bustein*. At the time Saxlund (1919) wrote there were still people alive who believed in the power of the *bustein*, and one such "stone" had been used just a few years before. Two types of *bustein* are described and illustrated; one is easily identified as *Entada gigas* and the other may be *Mucuna* sp.

The notion that such stones were sacred and secret objects is confirmed by

Hans Strøm, in a diary note made during a travel at Sunnmøre in western Norway in 1756:

[The name] *Bue-Stene* is usually used for the round balls of hairs and excrements that are found in the rumen of cattle; [they] are placed in water and given the animals to drink against several diseases, *Rødsødt* ['red disease', probably some kind of haemorrhage]/*Busødt* ['cattle disease'], constipation, etc., *vassødt* [dropsy]. Another kind of *Buestene* are those which are found at the seaside [i.e., drift seeds] by old women, who like to have them and earn money from them; they are kept as sacred objects or secrets, and must not be touched with [the] naked hands. (Strøm 1756:fol. 79a; cited by Standal *et al.* 1997:169)

Strøm's diary contains a second entry on similar use of drift seeds, alias *bustein*, in the Haram (Kjerstad) area of Møre og Romsdal, western Norway:

Others, on the other hand, place it [the stone] in water, which is then given to the animals against *Vassødt* [dropsy] etc. (Strøm 1756:fol. 57a; cited by Standal *et al.* 1997:125)

Almost two centuries later, Gjerding (1932:87-88) described a *bustein* from the same area (Sunnmøre in western Norway) that must have been a drift seed, with some details related to the mode of use:

Bustein was used as a healing remedy for cattle. It is about the size of a hazelnut, and so light that it will float in water. The color is dark, but if one puts it in water for three days, the water becomes brown, and then it has healing properties for different kinds of diseases, especially for *tåver* and *ristveng*.

When a cow was ill, they used to put the index finger into the ears and shake her. Then at once they would see if the cow was affected by *tåver* or not. The teeth would usually loosen in animals with *tåver*. For both *tåver* and *ristveng* [perhaps the same as colic] they would give the cows a little of this *busteinvatnel* [cattle stone water], and it helped.

According to Gjerding's description, the disease hiding behind the old term *tåver* was probably scurvy; again, loosening teeth is a typical symptom. *Tåver*, more frequently *tauver*, derives from the Norse *tauvr* 'witchcraft', i.e., a disease brought on by evil forces.

Storaker (1928:22) recorded a similar tradition in Mandal, southernmost Norway, with some interesting supplements: Common to all types of *bustein* was their rarity. If someone had such a stone, this would be widely known, and people could travel long distances to collect healing water prepared from it (see Reichborn-Kjennerud 1921:17). The "stone" could float and was to be kept in water until it sank. As this would take years for a drift seed, this particular *bustein* may have been something else, perhaps a hairball.

Similar elaborate instructions for handling a *bustein*, including a whole range of magical precautions, have been recorded at Solør in southeast Norway (Reichborn-Kjennerud 1921:15), unfortunately without any details as to the kind of "stone" that was used. The flask used to collect the liquid was brought to the

(female) owner of the stone at sunset, and on the way there it was forbidden to talk or give in to bodily needs. The healing water was always prepared after sunset. In this case, the *bustein* was handled with a piece of cloth, lifted out the chest where it was hidden and put into the flask, and the Lord's Prayer read. Afterwards, the flask was transferred to the box and stored there until sunset the next day. Thus, it would take at least 24 hours to acquire the healing water, which was given to the sick cow as a drink. The fluid could also be used for human diseases, following the same complicated procedure.

Hammer (1797) described three different specimens of *bustein* then in use at Hadeland, southeast Norway. None of them seem to have been drift seeds, but their mode of use is of some interest here:

When these *Bustene* are put in water overnight and [the fluid] given to the cow, which has *Busot* ['cattle illness'], hidden in a dough for *Bukager* ['cattle cakes'], the illness disappears, which consists of an inflamed head and loss of appetite. Peasant wives keep them secret, and will not willingly show them, because they are afraid they [the stones] will lose their power. (Hammer 1797:131)

A similar tradition recorded in Gudbrandsdalen, interior southeast Norway, leaves little doubt that *busot*, the disease cured by a *bustein*, was scurvy. Again, there is no indication of the kind of *bustein* used:

The most frequent cattle diseases here are: 1) *Bue-Sot*, which causes the teeth to loosen during winter. It is cured by rubbing the teeth with tar and salt; some also put a *Bue-Steen* in water, which is given the cattle to drink, as a remedy for this and other diseases; but I regard this more as a superstition than a real medicine. (Hiorthøy 1785)

Drift Seeds in Gypsy Tradition.—Troels-Lund (1914a) mentioned that various "stones," including *løsningsstenen*, were considered one of two possible cures for rabies when the disease was transferred to livestock from wolves or dogs. He described it as follows:

The second remedy, which only a few could get hold of, was the so-called *Bu-Sten*, which should be placed in the water the cattle got to drink. Its power stopped the illness [rabies]. Later, it was mainly the Gypsies who claimed to possess these powerfully working stones. (Troels-Lund 1914a: 93; translated from Danish)

The last paragraph is probably based on Sundt (1852). His classic study of the Gypsies in Norway contains a brief passage on "*Bustenen*," translated here:

Bustenen is a very mysterious thing. Every rural child has heard about it; some "wise women" of our own lay people believe that they know its secret. But they are wrong, the Gypsies claim; its secrets are so deep, that they cannot even find words to express them. It should be black of color and somewhat bigger than a nut; but otherwise the only thing you get to hear about its nature is that it derives from the outermost part of Finnmark, and that all power of magic is hidden in it. (Sundt 1852:152, see also Storaker 1928:20)

Sundt suggested that the Gypsy women could collect suitable magical objects at the seashore, e.g., the teeth of some fishes, and the bladders of *Fucus* spp. However, he is probably wrong in supposing that *bustein* was nothing more than such vesicles; it is much more likely and in accordance with his own description that the "stone" revered by the Gypsies was a drift seed. If so, they had probably incorporated the old Norwegian tradition in their own folklore; the first Gypsies appeared in the kingdom of Denmark-Norway during the sixteenth century (Troels-Lund 1914a). The reference to Finnmark, the northernmost county of Norway, may be based on the area's long-standing reputation as a remote land abounding in witchcraft and magicians; the Sámi in particular were said to be able to produce suitable winds for sailing, cast spells, etc. Finnmark was also affected by the harshest witch trials on record in the twin kingdom of Denmark-Norway (see Alm 2003b).

DRIFT SEEDS AS LUCKY CHARMS

In some countries, such as Great Britain, drift seeds are considered lucky charms in a more general sense (Nelson 2000:53ff). Apart from their value in mediating birth and curing cattle, there is only a single specific mention of *Entada* seeds as "lucky charms" in Norwegian literature:

A century has passed by since Gunnerus [1765] wrote this, and yet even today this superstition is so common in Finnmark, at least among the Sámi, that anyone who has the luck to find such a bean, will bring it with him as a talisman or amulet. Thus the Sámi name *Gollegadno*, i.e., gold can. (Schübelier 1873-75:32; translated from German)

Fritzner (1877) provided an interesting description of the way such a drift seed was conceived by the Sámi in east Finnmark. The reference to precious metals suggests an object held in high esteem:

The Sámi termed it *gaggagædøge* and made me notice that when shaken, one could hear something moving inside it, of which they said, there was living silver inside (*læ ælle silbe sist*). (Fritzner 1877:204)

A recent newspaper note (Alm 2003a) requesting information on drift seeds and their uses yielded an interesting supplement. Four replies from the Vesterålen islands, north Norway, all referred to drift seeds (of which three were confirmed as *Entada gigas*) as *lykkestein* ("lucky stone"). One seed, found at Bø, was more than a hundred years old, and had passed through four generations in the same family. Only one informant was willing to send his seed by post for confirmation; two others offered to bring their seeds for inspection. In the Bø case, the reason was explicitly stated; losing (or even lending out) the seed could ruin the family luck: "It may cause mischief to send it away. My grandma called it *lykkestein*. She is 93 years old and remembers that it was always stored in the 'Russian chest' at home at Bø" (interview 2003). Another *Entada gigas* seed, found at Haugnes at the northern tip of Andøya in the early twentieth century, was also known as a *lykkestein*. According to the present owner, his father had "often brought it with him" when travelling, obviously as a lucky charm (interview 2003).

HANDLING AND STORING THE PRECIOUS OBJECT

Both *løsningsstein* and *bustein* were precious and sought-after objects. As such, they could pass down generations through inheritance, and they were often stored in special containers in order to preserve their healing properties (Reichborn-Kjennerud 1921:16; 1942:276).

Saxlund (1919) described a *bustein* from Romsdal, western Norway, which for several generations had been stored in a special book-shaped box in a matrix of caraway (*Carum carvi* L.) seeds. He suggested that such use of *Carum* seeds was frequent, mainly to prevent the "stone" (in this case an *Entada gigas* seed) from being worn. Similar book-shaped boxes are known from the late medieval period onwards in Norway, but most may be dated to the late eighteenth or nineteenth century. They were used for storing various valuable assets, not least hymnbooks (Gjærder 1981:53ff).

According to Strøm (1762:387), the "stone" should not be touched by hand; a similar tradition is recorded from Hadeland (Hammer 1797:131), Mandal (Storaker 1928:22) and Solør (Reichborn-Kjennerud 1921:6, 1942:276), all in the southern part of Norway, but in the latter three cases not necessarily referring to drift seeds; Hammer referred to a "worm-stone."

Storaker (1928:22) gave a simple explanation for these precautions: a *bustein* would lose its power if it was touched by hand. Wooden utensils or a spoon could be used instead (Reichborn-Kjennerud 1942:276). In Mandal, southernmost Norway, two sticks were used (Storaker 1928:22). Saxlund (1919:97) provided further details: the *bustein* was lifted out of its box with a wooden spoon, specially commissioned for this use and kept within the box. Again, the "stone" was never touched with the fingers.

DRIFT SEEDS AS TOYS AND HUMBLE DECORATIONS

The only record of drift seeds used as toys in children's games derives from the island of Seiland in western Finnmark. Here, at least three women raised in the small Sámi settlement of Survik were well acquainted with such seeds—or *skateggan*. They had found several *Entada gigas* seeds during their childhood years. Their comments (interviews 2001) suggest that the seeds were collected with a combination of curiosity and slight fear: "There was something strange about those *skateggan*"; "one did not feel comfortable if one was walking along the shore and found those *skateggan*." Still, the seeds were used as toys: "We made a shop . . . and those *skateggan* were certainly sold in the shop."

Although inconclusive, such use of the formerly esteemed drift seeds may suggest that the old tradition of using them in folk medicine was forgotten; in this particular case at least in the 1960s. Nordhagen (1961:83) noted that *Entada gigas* seeds were frequently seen in the homes of fishermen along the coast of Norway, probably based on his own observations during extensive travels and field work in the 1930s. The seeds were no longer used, only exhibited as curiosities and decorations "together with [various] bric-a-brac."

ETHNOBOTANY OF *COCOS NUCIFERA*

Contrary to some other flotsam, coconuts (*Cocos nucifera* L.) do not seem to have been held in much esteem in Norwegian folk tradition. With Gunnerus (1765: 23-24), Lindman (1883:92), and Strøm (1762:192) as noteworthy exceptions, there is hardly any mention of coconuts in the literature. The only suggestion of a vernacular name is given by the two eighteenth-century clergymen, who called them *Ege-Nødder*—which would be *eikenøtter* (plural) in modern Norwegian—a name otherwise reserved for *Quercus* nuts (*eik* 'oak', *nøtter* 'nuts').

A single exception to the general silence in the later literature may be noted, from the outermost Lofoten islands. Svendsen (1916:86-87) reported: "Lately, people have become aware that they are edible." Thus, until the end of the eighteenth century, there is nothing to suggest that coconuts were considered anything more than curious objects.

TIME LINE

Most of the sources quoted here derive from the eighteenth century or later. However, the Norwegian tradition related to drift seeds and other "strange stones" is probably much older. It may be traced back to the Viking age, mainly through Icelandic manuscripts, an invaluable source of Norse tradition. According to Pering (1941), *Háfsdrápa* 2 contains a line mentioning an object called the *singastein* or *háfnýra*, which the Norse god Heimdall stole from Loki:

The experienced, famous protector of the land of the gods grabbed the "singasteinn" from Loki; the courageous son of nine mothers ruled over the beautiful sea kidney (Pering 1941:210, translated from German).

The name *háfnýra* 'sea kidney' is strongly evocative of the kidney-shaped *Entada* seeds, which may thus have held a position in Norse legends. Pering (1941) suggested that *brisingamen*, the famous centerpiece of the goddess Freyja's necklace, was just such a drift seed—a fitting object for a goddess of fertility (see discussion in Brodersen 1974 and Meaney 1983). According to Pering (1941:219) the old Norse name for *Entada* seeds may have been *signasteinn*. Brodersen (1974) found the argument convincing, both on linguistic and folkloristic grounds.

Thus, it is likely that *Entada* seeds were used as birth-mediating agents in the Viking age, though conclusive evidence is lacking. With the potential exception of *brisingamen* and its centerpiece, medieval manuscripts do not refer to *vættinyrer* 'wight's kidneys' or similar terms known to designate drift seeds. However, it may be more than a coincidence that the Norse poem called *Óðdrunargrátr* (in *Sæmundar Edda*) contains a magic song which was used to help a woman during a hard birth (Faye 1885:675-676), calling on help from good "*vættir*, *Frigg ok Freyja*" (Fritzner 1896:982), i.e., good wights, Frigg and Freyja. Freyja was Odin's wife. She was also the goddess of marriage, the one who listened to the prayers of childless couples (Falk and Torp 1903-06), and the Norse fertility goddess. If drift seeds were involved, at least the presence of favorable *vættir* could be ensured.

The Norse (Icelandic) sagas contain several other references to magic

"stones," including the *lyfsteinn* 'magic stone' or 'healing stone', which could be attached to swords and would protect from injury, and the *sigrsteinn* 'victory stone', which ensured victory in battle (Brodersen 1974; Grøn 1906:99–100, 1908:133). Thus, "stones" as revered and powerful objects were an established part of Norse folklore.

The tradition of using "stones" to treat sick animals may also be traced back to pre-Christian Norse tradition. It is mentioned in early medieval manuscripts, e.g., in the Icelandic *Grágás*, in which two Icelandic bishops warned against believing in stones as a remedy for people and animals (Finsen 1852:23).

In general, the Norwegian tradition of drift seeds is closely related to that of Iceland (Árnason 1862:649) and the Faroes (e.g., Debes 1673), both in terms of vernacular names and various superstitions—not surprising given the common Norse origin of the three peoples. Folklore related to *lausningssteinen* and its use as a birth-mediating agent is common to Norway and Iceland; see the comments on *lausnarsteinnin* in Maurer (1860:180) and Jónasson (1911:376). Maurer (1860:181) noted that an *Entada* seed found in the Faroes was accepted by people from Iceland as a typical *lausnarsteinn*.

The name *vettenyre* for *Entada gigas* seeds is known only from Norway and the Faroes. At the latter islands, some people believed them to be growing "among sea-weeds in the sea, and people had great confidence in them, as they believed, it would bring luck to the house, if they were stored" (Gunnerus 1765:19); the supposed derivation from sea-weeds is quite similar to the "marine" origin of the seeds suggested by many Norwegian vernacular names. Peder Clausson Friis's sixteenth-century comment on drift seeds in the Faroes may suggest further similarities between the folklore there and in Norway:

So there is found [in the Faroes] a small stone floating at the shores, which is shaped as a flat heart or kidney [the seed of *Entada gigas*], which they call *Vettenyre*, and they believe, that this stone can give birth to another, when it is stored for a long time, which will be further described under the description of Norway. (cited from Storm 1881:432)

Unfortunately, there is no further reference to *vettenyret* in the manuscripts of Friis (Grundtvig 1878:163, footnote; Storm 1881:432, footnote). Still, his comment strongly suggests that a similar belief was found in Norway.

PRESENT STATUS

Except for my own brief notes (Alm 2001, 2003a), the last authors to mention contemporary sources for a living tradition of naming and using drift seeds in Norway are Brox (1970:83), Kohl (1926a, 1926b), and Saxlund (1919). Folklore related to drift seeds is missing in all postwar studies of ethnobotany in Norway, including the massive collection of Høeg (1974). Thus, as far as drift seeds are concerned, it seems likely that the old traditions are now mostly forgotten. If their use in folk medicine survives anywhere in Norway, coastal north Norway seems the most likely area to search for the last remnants of a long tradition. As noted above, the only extant tradition of using drift seeds I have encountered in Norway

is their surviving use as lucky charms in the Vesterålen islands, and their recent use as toys in coastal west Finnmark.

MEDICAL EFFECTS OF DRIFT SEEDS: PHARMACOLOGY, PSYCHOLOGY, OR BOTH?

The seeds of *Dioclea* spp., *Entada* spp., and *Mucuna* spp. contain a range of chemical compounds. Most studies so far have been carried out on species other than those found in Norway. *Entada gigas* seeds contain a poisonous oil (as noted by Reichborn-Kjennerud 1922), flavonoids and saponins (Hariharan 1974), and at least some L-dopa (Janardhanan and Nalini 1991). In spite of being somewhat poisonous, they are consumed as a pulse by some ethnic groups in India (Janardhanan and Nalini 1991). *Mucuna* seeds are also poisonous (Mabberley 1998). The seeds of *Mucuna sloanei* and related taxa are the richest known natural source of free L-dopa, which is used to treat Parkinson's disease (Buckles 1995; Rai and Saidu 1977). *Mucuna* seeds also contain N-dimethyltryptamine (DMT), which may induce hallucinations and psychosis (Infante et al. 1990).

Both *Entada gigas* and *Mucuna sloanei* seeds have been used in folk medicine in the source areas. In India, *Entada gigas* seeds have some reputation as a tonic, emetic, anthelmintic and anti-periodic (Hariharan 1974). In Africa, *Mucuna sloanei* seeds have been used to prevent miscarriage in pregnant women (Ajiwe et al. 1997:259). The use for female complaints in widely separate areas is worth noting, and may suggest some real pharmacological property.

In Norwegian folk medicine, drift seeds have mostly been used externally. Such use may have had beneficial psychological effects, e.g., during the birth process. A weak pharmacological effect could possibly occur when the seeds are soaked in water for use in folk veterinary medicine. Alcohol is more likely to extract chemical constituents of potential pharmacological interest, though drinking beer or ale from an empty seed cap during birth, as mentioned in some sources, could hardly provide a more than a very weak extract. Otherwise, there is little evidence of internal use of drift seeds in Norway, although it is hinted at by Schübeler (1873-75). It may also be noted that both Pontoppidan and Gunnerus mentioned the taste of the seeds, suggesting that the idea of consuming them was known. Pontoppidan (1752:254) described the taste of his drift seed (probably *Mucuna sloanei*) as "hardly different from that of a salt bean." According to Gunnerus (1765:18), the *Entada* kernel (i.e., the seed) at first has a cloying taste, and later becomes bitter, though Gunnerus noted that some seeds had lost more of their taste and power than others. The only indisputable evidence of internal use of drift seeds as medicine in Norway is the record from Senja (Troms county), where a woman was instructed to eat the seed kernel in case of disease. Based on the prevalence of records of external use, Nettelbladt (1981:6-7) is probably right in concluding that the use of drift seeds in Norwegian folk medicine was "mainly of a magic or psychological nature."

CONCLUDING DISCUSSION

The larger drift seeds are curious and pleasing objects, and have probably attracted people's attention since time immemorial. In Europe, their relative rarity has obviously contributed to their role and reputation in folk medicine.

The Norwegian traditions related to drift seeds are closely aligned with those of Iceland and the Faroes, all with populations of Norse origin. The use of drift seeds as an aid during childbirth is known throughout the old Norse domain (Faye 1885; Grundtvig 1878; Helland 1905:224; Jonásson 1911; Maurer 1860). A number of other beliefs are also common, such as the supposed marine origin of the drift seeds, according to widespread folk belief from some kind of submarine trees or other submerged plants. The interpretation of the seeds as some kind of floating stones, sometimes believed to be "pregnant" stones due to the rattling seed inside, is connected to the widespread European tradition of eagle stones or aetites, known since classical times (Fritzner 1877:204–205; Grundtvig 1878:49ff; Nelson 2000:49; Reichborn-Kjennerud 1921:10).

The British Isles are another major destination of exotic drift seeds carried across the Atlantic. Nelson (1983, 1988, 2000) provides extensive surveys of folk traditions related to drift seeds in that area. British and Irish folk uses and beliefs resemble those of Norway in many respects, not least in the use of drift seeds as birth-mediating objects, in their supposed ability to cure sick animals, and more mundane uses such as snuffboxes. A striking difference between the two areas, however, is the lack of religious connotations in Norway. In the British Isles, drift seeds are often placed and interpreted in a Christian context. For example, the seed of *Merremia discoidesperma*, with its cross-shaped markings, and *Caesalpinia bonduc*, with a white coat, are held in particularly high regard (Nelson 1983, 1988, 2000:44ff, 101); vernacular names commonly refer to the Virgin Mary (e.g., *Mary's beans*).

According to Nelson (1983, 2000:47), such beliefs are a characteristic feature of the folklore of the Outer Hebrides, where the Roman Catholic Church has remained the dominant faith. Although Norway nowadays is mainly Protestant, its Catholic (pre-Reformation) past could easily have disseminated similar interpretations and vernacular names in Norway. Indeed, many plant species still have Norwegian vernacular names that associate them with the Virgin Mary or Catholic saints.

For some other magical plant remedies, such as the tubers of the orchid *Dactylorhiza maculata* (L.) Soó, an abundance of "Christian" vernacular names has long since replaced forgotten (but obviously once extant) "heathen" names in parts of Norway (see Alm 2000). One could assume, perhaps, that drift seeds in Norway have retained their old vernacular names (e.g., *vettenyre*) simply because the existing terms were "harmless" and not closely related to the pre-Christian Norse pantheon—and thus did not have to be purged by the Church. By retaining old names and interpretations, e.g., as floating or pregnant "stones," or nuts derived from submarine plants, the drift seed traditions in Norway have, in some ways, preserved a fair share of man's natural curiosity towards nature.

ACKNOWLEDGMENTS

Thanks are due to Dr. E. Charles Nelson (Wisbech, UK), who stimulated this study and provided much information; Marit Anne Hauan, curator at Tromsø Museum, for locating seeds and related data in the collection of the Cultural History Department; Eli Fremstad and Sigmund Sivertsen, curators at Vitenskapsmuseet, Trondheim, for tracking

down and sending material from herb. TRH; Thomas Karlsson, curator at the Swedish Museum of Natural History, Stockholm, for trying to locate Lindman's material in herb. S; Prof. Tom G. Svensson at the Ethnographic museum, University of Oslo, for information on drift seeds formerly in their collection; Leif Pareli, curator at Norsk Folkemuseum, for information on drift seeds in their collections; Bjørn Austigård, curator at Romsdalsmuseet, for information on book-shaped wooden boxes (and an attempt at locating Sæxlund's drift seeds); Marianne Iversen, who has accompanied me on several trips aimed at collecting Sámi ethnobotany in Finnmark; Prof. Ole Henrik Magga, Sámi allaskuvla, for comments on Sámi vernacular names; and Mikko Pürainen, University of Helsinki (Finland), who has provided a translation of and valuable comments to Paulaharju's Finnish texts. Svanhild Andersen, Asgeir Andreassen, Andreas M. Blix, Ulrik Dale, Trygve Nygård, and some of their relatives supplied data on drift seeds and their use in the Vesterålen islands. Peggy Pedersen, Ibrun Pedersen and Vivian Sachs provided information on recent use of drift seeds as toys. The staff at the library of Tromsø Museum has faithfully tracked down whatever obscure literature sources could not be found in the museum's own library. Two anonymous referees and *Journal of Ethnobiology* editor Naomi F. Miller provided useful comments.

REFERENCES CITED

- Aasen, Ivar. 1873. *Norsk Ordbog*, 2nd ed. Mallings Boghandel, Christiania.
- Ajiwe, V. I. E., C. A. Okeke, B. Nnabuike, G. A. Ogunleye and Emeka Elebo. 1997. Applications of oils extracted from African star apple (*Chrysophyllum africanum*), horse eye bean (*Mucuna sloanei*) and African pear (*Dacryodes edulis*) seed. *Bioresource Technology* 59:259-261.
- Alm, Torbjørn. 1996. Bruk av skjorbuksurt (*Cochlearia officinalis*) i Nord-Norge. *Blyttia* 54(4):185-192.
- . 2000. *Dactylorhiza maculata* (L.) Soó—Norwegian and Sámi ethnobotany of a magical orchid. *Journal europäischer Orchideen* 32(2):189-221.
- . 2001. Vetternyrer og andre eksotiske frø i Finnmark. *Lappreisen* 25:51-53.
- . 2003a. Har du funnet vetternyrer i fjæra? *Andøyposten* 08.04.2003
- . 2003b. The witch trials of Finnmark, northern Norway during the 17th century: evidence for ergotism as a contributing factor. *Economic Botany* 57:403-416.
- Alm, Torbjørn and E. Charles Nelson. 1998. Nordnorske funn av vetternyrer og andre langdrevne frø. *Polarflokken* 22(2):155-160.
- . 2003. Exotic drift-seeds in Norway. *Det Kongelige Norske Videnskabers Selskabs Skrifter* 2003 (1) (in press).
- Árnason, J. 1862. *Íslenzkar þjóðsögur og æfintýri*, vol. 1. J.C. Hinrichs's Bókaverzlunar, Leipzig.
- Bang, A. C. 1902. Norske Hexeformularer og magiske Opskrifter. *Skrifter udgivne af Videnskabselskabet i Christiania. II. Historisk-filosofisk klasse* 1901(1):I-XXXII, 1-762.
- Brodersen, Micha. 1984. Frejas klenodie. *Danske studier* 1974:103-109.
- Brooke, Arthur de Capelle. 1823. *Travels through Sweden, Norway and Finnmark to the North Cape in 1820*. Bodwell and Martin, London.
- Brox, Arthur. 1970. Folkeminne frå ytre Senja. *Norsk folkeminnelags skrifter* 105:1-170.
- Buckles, Daniel. 1995. Velvetbean: A "new" plant with a history. *Economic Botany* 49:13-25.
- Dahl, Ove. 1896. Biskop Gunnerus' virksomhed fornemmelig som botaniker tillegemed en oversigt over botanikens tilstand i Danmark og Norge indtil hans død. III. Johan Ernst Gunnerus. Tillægg II. Uddrag af Gunnerus' brevveksling, særlig til belysning af hans videnskabelige system. Hefte 1. *Det kongelige norske videnskabers selskabs skrifter* 1895(3):11-224.
- . 1897. Biskop Gunnerus' virksomhed fornemmelig som botaniker III. Tillægg II. Uddrag af Gunnerus' brevveksling, særlig til belysning af hans videnskabelige system. Hefte 2. *Det kongelige norske videnskabers selskabs skrifter* 1896(4):1-91.

- . 1898. Biskop Gunnerus' virksomhed fornemmelig som botaniker tilligemed en oversigt over botanikens tilstand i Danmark og Norge indtil hans død. III. Johan Ernst Gunnerus. Tillægg II. Uddrag af Gunnerus' brevveksling, særlig til belysning af hans videnskabelige sysler. Hefte 3. F. Breve til Gunnerus. *Det kongelige norske videnskabers selskabs skrifter* 1897(4):1–80.
- Danielsen, Anders. 1952. Vette-nyrer. *Universitetet i Bergen, små godbiter fra samlingene* 2(5).
- . 1983. Snusdåse etterlyses. *Museumsmytt* 32(1):II.
- Debes, Lucas Jacobson. 1673. *Færøe et Færoa reserata*. Mathias Jørgensen, Kiøbenhafn.
- Dragøy, Trond. 2001. *Nord-norske dialektord med tyding*. Kragera.
- Falk, Hjalmar and I. Reichborn-Kjennerud. 1923. Frosken og padden i nordisk folkemedisin. *Maal og minne* 1923:58–73.
- Falk, Hjalmar and Alf Torp. 1903–1906. *Etymologisk ordbog over det norske og det danske sprog*. Kristiania.
- Faye, A. L. 1885. Oplysninger om Forhold og Skikke vedrørende Svangerskab og Fødsel hos de gamle Nordboere. II. Fødselen. *Norsk magasin for lægevidenskaben*, 3die Række 25:663–706.
- Finsen, V., ed. 1852. *Grágás*, vol. 1. København.
- Friis, Peder Clausson. 1632. *Norriges oc om-liggende Øers sandfærdige Beskriffuelse*, ed. O. Worm. Kiøbenhafn.
- Fritzner, Johan. 1877. Lappernes Heden-skab og Trolddomskunst sammenholdt med andre Folks, især Nordmændenes Tro og Overtro. *Historisk tidsskrift* 4: 135–217.
- . 1883. *Ordbog over Det gamle norske Sprog*, vol. I, 2nd ed. Den norske for-lagsforening, Kristiania.
- . 1896. *Ordbog over Det gamle norske Sprog*, vol. III, 2nd ed. Den norske for-lagsforening, Kristiania.
- Gjærder, Per. 1981. *Esker og tiner*. C. Huitfeldts forlag, Oslo.
- Gjerding, J. 1932. *Folkeminne frå Sunnmøre II*. Ålesund.
- Gjærevoll, Olav. 1976. Merkelige frø i den norske fjæra. *Fortids kultur—samtids na-tur* 1976:23.
- Gosner, K. L. 1985. The Penzance snuff box. *Underwater Naturalist* 15(3):7–12.
- Gottfredsen, Edvard. 1956. Barsel. In *Kul-turhistorisk leksikon for nordisk middelalder fra vikingetid til reformasjonstid*, vol. 1, ed. F. Hødnebo, pp. 354–366. Gylden-dal, Oslo.
- Gran, Lorents. 1976. Gamle jordmorråd. Hva besto de av? *Naturen* 100:51–57.
- Grøn, Frederik. 1906. Træk af norsk folke-medicin. II. *Tidsskrift for norsk bondekul-tur* 1:97–116.
- . 1908. *Altnordischen Heilkunde*. Ja-nus 1908.
- Grundtvig, F. L. 1878. *Løsningsstenen. Et sagnhistorisk studie*. Karl Schønbergs boghandel, København.
- Gunnerus, J. E. 1765. Efterretning om de saa kaldede Løsning-Stene, eller Vette-Nyrer, om Orme-Stene og nogle andre udenlandske Frugter, som findes hist og her ved Stranden i Norge. *Det Thron-dhjemske selskabs skrifter* 3:15–32.
- Hammer, Christopher B. 1797. (Fortsættelse af) Sogne-Beskrivelse over Hadeland udi Aggershus Stift i Norge &c. *Topo-graphisk journal for Norge* 1794(21):111–192.
- Hariharan, V. 1974. Chemical constituents of the seeds of *Entada scandens* Benth. *Current Science* 43:180.
- Helland, Amund. 1905. *Norges land og folk. Topografisk-statistisk beskrivelse over Fin-markens amt*, vol. 1. Kristiania.
- . 1906. *Norges land og folk. Topografisk-statistisk beskrivelse over Finmarkens amt*, vol. 2. Kristiania.
- Hellevik, Alf., ed. 1966. *Norsk ordbok. Volume 1*. Det norske samlaget, Oslo.
- Hiorthøy, H. F. 1785. *Physisk og Ekonomisk Beskrivelse over Gulbrandsdalen Provstie i Aggershuus Stift i Norge*. Første Deel. København.
- Hæg, Ove Arbo. 1974. *Planter og tradisjon. Floraen i levende tale og tradisjon i Norge 1925–1973*. Universitetsforlaget, Oslo-Bergen-Tromsø.
- Høegh, Margrethe. 1986. Barseltradisjoner. *Ottar* 162:3–9.
- . 2001. Barseltradisjoner. *Lofotboka* —02:28–35.
- Infante, M. E., A. M. Pérez, M. R. Simao, F. Manda, E. F. Baquete, A. M. Fernandes and J. L. Cliff. 1990. Outbreak of acute toxic psychosis attributed to *Mucuna pruriens*. *The Lancet* 336:1129.
- Janardhanan, K. and K. Nalini. 1991. Stud-ies on tribal pulse, *Entada scandens*

- Benth.—chemical composition and antinutritional factors. *Journal of Food Science and Technology* 28:249–251.
- Jónasson, J. 1911. Um fæðingu og dauða í þjóðtru Íslendinga. *Maal og minne* 1911: 373–389.
- Kohl, Ludwig. 1926a. *Nordlicht und Mitternachtsonne. Erlebnisse und Wanderungen in Lappland*. Verlag von Strecker und Schröder, Stuttgart.
- . 1926b. Heilmethode und Aberglauben bei den norwegischen Lappen. *Münchener medizinische Wochenschrift* 4. Juni 1926:957–959.
- Leem, Knud. 1767. *Beskrivelse over Finmarkens Lapper, deres Tungemaal, Levemaade og förrige Afgudsdyrkelse, oplyst ved mange Kaaberstykker*. København.
- Lindman, Carl A. M. 1883. Om drifved och andre af hafsströmmar oppkastade naturföremäl vid Norges kuster. *Göteborgs Kongl. vetenskaps- och vitterhetssamhälles handlingar, ny tidsföljd* 18:1–106.
- Mabberley, D.J. 1997. *The Plant-book. A Portable Dictionary of the Vascular Plants*, 2nd ed. Cambridge University Press, Cambridge.
- Martins, C. 1848. *Voyage botanique le long des cotes septentrionales de la Norvège, depuis Drontheim jusqu'au Cap Nord. (Extrait des voyages en Scandinavie et au Spitzberg de la corvete la Recherche)*. Libraire de la Société de Géographie, Paris.
- Martins, C. 1857. Expériences sur la persistance de la vitalité des graines flottant à la surface de la mer. *Bulletin de la Société Botanique de France* 24:324–338.
- Maurer, K. 1860. *Isländische Volkssagen der Gegenwart*. J.C. Hinrichs'sche Buchhandlung, Leipzig.
- Meaney, Audrey. 1983. Drift seeds and the Brisingamen. *Folklore* 94:33–39.
- Munthe, C. O. 1929. Fritzner, Johan. In *Norsk biografisk leksikon*, vol. 4, eds. E. Bull and E. Jansen, pp. 299–301. Aschehoug, Oslo.
- Nelson, E. Charles. 1983. Tropical drift fruits and seeds on coasts in the British Isles and western Europe II: history (1560–c. 1860) and folk-lore. *Scottish Naturalist* 1983:11–63.
- . 1988. Exotic drift fruits and seeds from the coasts of Britain and adjacent islands. *Journal of the Royal Institution of Cornwall* 10(2):147–177.
- . 1998a. "Lösungsstein, vettenyrer & ormestein" and other sea-beans. *Pölarflokken* 22(2):161–163.
- . 1998b. Sea beans as vesta boxes and snuff boxes. *The Drifting Seed* 4(2): 9–10.
- . 2000. *Sea Beans and Nickar Nuts. A Handbook of Exotic Seeds and Fruits Stranded on Beaches in North-western Europe*. BSBI, London.
- Nettelbladt, Mats. 1981. Litt om folkemedisin før og nå. *Ottar* 130:5–14.
- Nicolaissen, O. 1889. *Fra Nordlands fortid. Sagn og historie*. Alb. Cammermeyer, Kristiania.
- Nordhagen, R. 1961. Johan Ernst Gunnerus som naturforsker og hans forbindelse med Linné. *Det kongelige norske videnskabers selskabs forhandlinger* 33 (1960): 63–93.
- Paulaharju, Samuli. 1934. Mageröyn suomalaisten sanaa, runoa ja taikaa. *Kalvalaseuran vuosikirja* 14:130–138.
- . 1935. *Rudjan äärimmäisillä saarilla*. Porvoo, Helsinki.
- Pering, Birger. 1941. *Heimdall: religionsgeschichtliche Untersuchungen zum Verständnis der altnordischen Götterwelt*. Lund.
- Pontoppidan, Erik. 1752. *Det første Forsøg paa Norges Naturlige Historie. Første Deel*. København.
- Quisling, Nils Andreas. 1918. *Overtroiske kure og folkemedicin i Norge*. Kristiania.
- Qvigstad, Just. 1896. *Veiledning til Undersøgelse af Lappernes Forhold*. Kristiania.
- . 1932. *Lappische Heilkunde. Institutet for sammenlignende kulturforskning, serie B, skrifter* 20:1–270.
- Rai, P. P. and M. Saidu. 1977. Characterisation of L-dopa in seeds of *Mucuna sloanei*. *Current Science* 46: 778.
- Reichborn-Kjennerud, I. 1921. *Bustein. Maal og minne* 1921:1–17.
- . 1922. *Våre folkemedisinske lægeurter. Følgeskrift til Maal og minne*. Kristiania.
- . 1927. *Vår gamle trolldomsmedisin. I. Det norske videnskabs-akademi i Oslo, skrifter II. Historisk-filosofisk klasse* 1927 (6):1–284.
- . 1933. *Vår gamle trolldomsmedisin. II. Det norske videnskabs-akademi i Oslo, skrifter II. Historisk-filosofisk klasse* 1933 (2):1–212.
- . 1942. *Folkemedisin og lægevidenskab. In Norsk kulturhistorie. Billeder av folkets dagligliv gjennom årtusener*, vol. 5, eds. A.

- Bugge and S. Steen, pp. 253-293. Cappelen, Oslo.
- Rønning, Olaf I. 1955. Om saa kaldede Løsnings-stene eller Vette-nyrer. *Ottar* 3:8-9.
- Ross, Hans. 1895. *Norsk Ordbog. Tillæg til "Norsk Ordbog" af Ivar Asen.*
- Sadeniemi, Matti. 1975-76. *Nykysuomen sanakirja*, vols. 1-6. WSOY, Porvoo.
- Saxlund, H. 1919. "Busteina" og "buvatten." *Maal og minne* 1919:97-99.
- Schübel, F.C. 1873-75. *Die Pflanzenwelt Norwægens. Ein Beitrag zur Natur- und Culturgeschichte Nord-Europas.* Universitetsprogram, Christiania.
- Standal, Ragnar, Kari Aalberg and Terje Aarset 1997. Hans Strøm: Annotations Boog over de Merkværdigheder som udi Syndmørs Fogderie forefindes indrette[t] Anno 1756. *Skrifter frå Haram kulturhistoriske lag* 41:I-XXXI, 1-311.
- Steen, Adolf. 1961. Samenes folkemedisin. *Samiske samlinger* 5(2):1-62.
- Storaker, J. T. 1923. Rummet i den norske folketro. *Norsk folkeminnelags skrifter* 8:1-112.
- . 1928. Naturrigerne i den norske folketro. *Norsk folkeminnelags skrifter* 18: 1-292.
- . 1932. Sygdom og forgjørelse i den norske folketro. *Norsk folkeminnelags skrifter* 28:1-130.
- Storm, Gustav, ed. 1881. *Samlede Skrifter af Peder Claussøn Friis.* Kristiania.
- Strøm, Hans. 1756. *Annotations Boog over de Merkværdigheder som udi Syndmørs Fogderie forefindes indrette Anno 1756.* Handwritten manuscript, 128 double folio pages, printed (with some comments) in Standal et al. 1997.
- . 1762. *Physisk og Oeconomisk Beskrivelse over Fogderiet Søndmør, beliggende i Bergens Stift i Norge*, vol. 1. Sorø.
- . 1779. *Beskrivelse over Norske Søevæxter. Det kongelige norske videnskabers selskabs skrifter* 12:299-316, 2 pls.
- . 1784. *Anmærkninger til Søndmørs Beskrivelse. Det kongelige norske videnskabers selskabs skrifter*, Ny samling 1: 103-170.
- Sudmann, A., ed. 1949. *Norsk allkunnebok*, vol. 2. Fønna forlag, Oslo.
- Sundt, Eilert. 1852. *Fante- eller Landstrygerfolket i Norge. Bidrag til Kundskab om de læreste Samfundsforholde*, 2nd ed. Christiania.
- Svendson, Reinert. 1916. *Historiske efterretninger om Væroy og Røst.* Aschehoug, Kristiania.
- Thomassen, Ole. 1999. *Lappenes forhold, med tillegg av Peder Arild Mikalsen. Sámi giellaguovddáš/Samisk språksenter, Gáivuona suohkan/Kålfjord kommune.*
- Troels-Lund, T. F. 1914a. *Dagligt Liv i Norden i det sekstende Aarhundrede. Illustreret Udgave*, vol. 1, 3rd ed. Gyldendalske Boghandel Nordisk Forlag, København-Kristiania.
- . 1914b. *Dagligt Liv i Norden i det sekstende Aarhundrede. Illustreret Udgave*, vol. 8, 3rd ed. Gyldendalske Boghandel Nordisk Forlag, København-Kristiania.
- Weiser-Aall, Lily. 1968. *Svangerskap og fødsel i nyere norsk tradisjon.* Norsk folkemuseum, Oslo.
- Wevle, Margrethe. 1975. Litt om nordnorsk folkemedisin. *Ottar* 85:23-28.
- Worm, Ole. 1655. *Museum Wormianum seu historia rerum rariorum, tam naturalium, quam artificialium, tam domesticarum, quam exoticarum, quæ Hafniæ Danorum in ædibus Authoris servantur.* Lugduni Batavorum [Leiden].