



Sambucus—Intercultural exchange and evolution

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Research

Abstract

The plants of the genus *Sambucus*, called elder or elderberry in English, have been associated with major and minor deities longer than history records. In contrast to gods and goddesses, other applications of *sambucus* are made in more secular ways. *Sambucus* and its variants have been applied to five entities—plants, a musical instrument (sambuca, from שַׁבְּכָה, *sabbēkā*), a military device (sambuca, from σαμβύκη, *sambykē*), a sailing vessel (**sambuq**, **sanbuq**, from زنبق), and a liquor (sambuca). Each of these connotations is separated, some slightly and others markedly, from the others by fragmented historical records. While the most ancient application known is for the musical instrument, the designation of a plant is not much, if any, younger. The war machine is almost the same age as the plant tradition. Considerably more recent are the labels of a ship and alcoholic drink. This synopsis puts these records together to reveal a history of intercultural exchange and the evolution of terminology.

Introduction

Plants in the genus *Sambucus* (Figure 1a) have a long and complicated association with humans around the world. Among the beliefs about *Sambucus* in Europe are those involving the spirits or deities living in them and their abilities. As an example, the Dutch physician Hermann Boerhaave (1688-1738) held the shrub in such regard that he doffed his hat each time he passed one (Austin 2004:594). This respect was given because “Frau Holle” (called by other cultures “Frigg” or “Elder Mother”) was believed to inhabit the plants (Figure 1b). That view was also documented by the German brothers Grimm (1812) and Danish Hans Christian Andersen (1845). Much earlier, Al-drovandi (1600:243) wrote of similar beliefs in Italy that “*Ex Sambuco magis canoram buccinam, tubamque eodem referente, fieri credit pastor, si ibi caedatur, ubi Gal-*

lorum cantum frutex ille non exaudiat” (the shepherds believe a more resounding **buccin** and war-trumpet can be made from the elder tree if this shrub could be cut down where it cannot hear the roosters crowing).

Moreover, religious beliefs about the plants span societies from Ireland through Europe and Asia to the Americas (e.g., Anderson 1845, Austin 2004:594, de Cleene and Lejeune 2002, Grimm & Grimm 1812, Moerman 1998:511-515, Ó Giolláin 1984, 1997, Vickery 1995:118-126). *Sambucus* is also part of the pharmacopoeia of all who live where it grows, but the plants figure prominently in other aspects of human existence. The plants have provided food, drink, wood, musical instruments, and otherwise enriched and enlivened lives since at least 1500 BCE. *Sambucus*, called “elder” or “elder-berry” in English, has many names in other languages and the very words we apply to them have complicated, inter-related histories reflecting human views of the plants.

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Ethnobotany Research & Applications 10:213-234 (2012)

Published: May 14, 2012

www.ethnobotanyjournal.org/vol10/i1547-3465-10-213.pdf

Many sources say that the origin of the word *sambucus* is uncertain (e.g., Quattrocchi 1999:2374), or that it was the classical Latin name, possibly derived from the Greek (e.g., Fernald 1950:1342). In spite of that, the word *sambucus*, *a*, *um* or *sambucus*, *a*, *um* came into both Greek and Latin from the Aramaic source **שַׁבְבָּקָא** (**sabbēkā**) (Oxford English Dictionary 2011, Southern & Vaughn 1997:276), originally used for a musical instrument. However, the Oxford English Dictionary (OED) (2011) contains five meanings of *sambucus* and its variants – plants (*Sambucus*), a musical instrument (*sambuca*, from **שַׁבְבָּקָא** **sabbēkā**), a military device (*sambuca*, from **σαμβύκη**), a sailing vessel (**sambuq**, **sanbuq**, **زنبق**), and a liquor (*sambuca*). This discussion examines the recorded history and origin of each usage to explore their relationships.

Methods

Because there are multiple meanings for the word *sambucus*, it was necessary to compare literature in several areas and disciplines. Primary among those fields were historical and linguistic discussions. Linguists deal as much with evolution of sounds and words as biologists do with organisms. Thus, linguists' views are of critical importance to examining the origins and applications of *sambucus*, *a*, *um*. Part of that investigation into names was the creation of a list of the primary designations various languages and cultures apply to the several meanings of *sambucus*. Since the plants themselves are intimately tied to pre-Christian beliefs of gods and goddesses, examination of ideas across cultures reveals multiple, sometimes related, views.

Results

Magico-Religious Ethnobotany

Many writers about elders or elderberries mention using them in magical remedies for diverse maladies. Those views came to be called "superstition," although that Latin-based word was first applied to views of the Jewish and Christian religions (Riess 1895). Other treatises on medical uses do not mention those views. Comments on beliefs give considerable insight into the ideas associated with *Sambucus*, and many other plants. In fact, much of the early literature on "medicine" contained large portions of magic (cf. Dobelis 1986).

The first known reference to medical use of *Sambucus* is from the Ebers Papyrus, thought to have been written about 1550 BCE. This compilation of magical formulas and remedies lists **bhh** in a recipe to treat polyuria (Carpenter *et al.* 1998). Saunders (2002:56) translated **bhh** as elderberry and Janick (2003:231) agreed. Hippocrates (ca. 460 BC - ca. 370 BC) also included the elder (as **ἀκτῆς**) in several recipes, for ulceration, pain, and strangury among others (Totelin 2009:34, 75, 78, 130). From

those known historical beginnings, the plant has a record of inclusion in remedies for numerous maladies around the world. Virtually every group who has lived near one or more of the species of *Sambucus* has used the genus in remedies.

One of the first comments on an otherworldly connection by *Sambucus* was given by Theophrastus (1916, III. xii. 8-xiii. I. p. 245) who wrote "The juice [of the fruit] is like wine in appearance, and in it men bathe their hands and heads when they are being initiated into the mysteries" (Translated by Sir Arthur Hort; both Greek and English given). Later classical authors mostly confined themselves to the secular uses of these plants for its wood, medicine, and food. For example, Dioscorides (1829, Book 4.155, p. 619) gave medical uses.

In Ireland, the belief in fairies was firmly established, widespread, and complex when St. Patrick is said to have introduced the Christian religion in 432 (Ó Giolláin 1997). One of the aspects of Irish pagan religion was the existence of "fairy bushes," and many still leave these standing in their fields after 1579 years of Christianity (Vickery 1997, Ó Giolláin 1997). Chief among those sacred plants were the rowan (*Sorbus*), holly (*Ilex*), elder (*Sambucus*), and whitethorn (*Crataegus*). This reverence was, in fact, a Gaelic feature not confined to Ireland but to all areas where those people formerly dominated. Indeed, the same basic views were held also among the Baltic, Germanic, Italic, and Slavic peoples.

Lucas (1963) gave a synopsis of some aspects of these trees and their importance among the local people before and after the Christian religion reached the area. Lucas (1963:42) found that *Sambucus* was associated as a sacred tree with at least five holy wells in addition to being revered throughout Ireland. People believed that the fairies took revenge if the plants were not respected.

These fairies or spirits associated with plants were called by various names, including **leipreachán** (Irish), fairy-folk, **fée** (French), **hada** (Spanish), **fāta** (Latin), **huldrefolk** (Norwegian, Danish), **holda** (German), **bezdukai** (Lithuanian), and **menninkäinen** (Finnish). The spirits are equivalent or parallel to the Arabic jinn (جِنّ **ǧinn**). The association of these otherworldly inhabitants to plants gave rise to multiple beliefs.

In Ireland " ... twigs of rowan tree or elder were suspended from the rafters in an attempt to keep all kinds of evil away" (Sharkey 1985:78). Also in Ireland, the tree was so highly valued medicinally that even the clay from around the roots was said to cure toothache (Sharkey 1985:145); the root has also been boiled and used to treat rheumatism (Vickery 1995:124).

In Scotland, preparations of the flowers were a "protective" and tonic; the bark was used as a laxative (Be-

ith 1995:215); it had the same uses in Devon (Lafont 1984:35). In England, Ball (1997:66) noted that "... a twig of it tied into at least three knots and carried in the pocket was a charm against rheumatism. A cross made from elder was hung on the stables to keep all evil from the animals. An elder bush trimmed into the form of a cross was planted on a new-made grave, and if it blossomed, the soul of the person lying beneath it is happy. Green branches were also buried in the grave to protect the dead from witches and evil spirits, and in some parts it was customary for a hearse driver to carry a whip made of elder wood. Another old tradition advised that on Bertha Night (January 6) the Devil goes about with special virulence, so persons are recommended to remain inside a circle of elderberries gathered on St. John's night".

Teutonic folklore has many of the same views regarding trees (Grimm 1833:651-652). Grimm's account of *Sambucus* quotes one source as "Thus did our forefathers also hold the **ellhorn** holy, and if they must needs clip the same, they were wont first to say this prayer: 'Dame Ellhorn, give me somewhat of thy wood, then will I also give thee of mine, if so be it grow in the forest.' And this they were wont to do sometimes with bended knees, bare heads and folded hands, as I have oftentimes in my young days both heard and seen." That belief held in the Netherlands where the exact same phrase was rendered

**"Vrouw Ellhorn, geef mij wat van uw hout;
dan zal ik u ook een weinig van het mijne
geven, wanneer het in het bosch zal groeien"**
(Teirlinck 1892:77).

Vickery (1995:120) recorded this same belief and prayer to the Elder Mother in Leicestershire, England in 1983 with a request to cut wood from the plant. In fact, Dame Ellhorn or Frau Holle is traced by some to Scandanavian Huldra, völva Huld, and even to the Latin Hludana dating from 197 AD- 235 AD, or Frigg, Odin's wife, although the Latin translation has been questioned (Smith 2004). There is even a version of Frau Holle as a witch dating to at least the 14th century, yet giving rise to the modern ceremony of Hollekreis when a Jewish child was named (Trachtenberg 2004:41-43). Deeming Frau Holle a witch was a gross perversion of the older view that she was "a superior being, who manifests a kind and helpful disposition towards men, and is never cross except when she notices disorder in household affairs" (Grimm 1833:267, Thorpe 1852:98).

In England a peg of elder wood was put in a diseased pig's ear; when the wood fell out, it took the malady with it (Drury 1985:246). In Holland the vlierboom was considered sacred (van Asseldonk 2001:4), and physician Boerhaave (1688-1738) regarded them with great respect (Austin 2004:594). The Dutch considered *Sambucus* medicinal, antidiabetic, and as food (van Asseldonk 2001:12). In the 1800s people believed that sorcerers could change themselves into an elder tree; only dogs were not de-

ceived, because of the smell, but they cannot harm the "tree" (Teirlinck 1892:87).

Slavic people believed that Pušaitis (also Pushkait Puškaitis, Puszajitis) lived under the elder and they left bread and beer for him beside the plants (Grimm 1833:651-652, Tylor 1874:277, Dixon-Kennedy 1998:33). In Russia, the trees were believed to drive away evil spirits; the Czechs used *Sambucus* to take away fever (Ball 1997:66). It is not clear how those views compare with the Lusatian Sorb's idea of **Božalošć** (also **Božaloshtsh** or **Bozaloshtsh**). This spirit is described more like the witch version of Frau Holle of the Germanic people (van Schulenburg 1886:140-141), or maybe the Banshee of the Irish (Lysaghy 1974-76). Regardless of the comparison, this Božalošć is associated with *Sambucus*, and like the Celts and Teutonic peoples, there was a taboo about burning its wood.

Sambucus is also used in Slavic rain-making activities. Both *Sambucus nigra* L. and *Sambucus ebulus* L. have been recorded as used in making the clothing of the Papparuda (Bulgarian, Romanian), also called Dodolă (Romanian), Dudulë (Albanian), Tuntule (Greek), Dudulya and Didilya in South Slavic languages. The skirt of the young village woman representing Papparuda is made of *Sambucus* branches, with other plants, and she dances through the village stopping at every house where the inhabitants pour water on her (Burns 2008:220, Nedelcheva and Dogan 2011:93, Paliga 2003:49).

Iberian people also regard the elder for practical and magical reasons (Vallès *et al.* 2004). In fact, Alonso (1946:165) wrote that it was "... **común a toda Europa ... la veneración de este arbolillo**" (common to all of Europe ... the veneration of this little tree). The remarkable variety and number of beliefs he enumerates for the use of **sauco** (as he uses to refer to *Sambucus*) is impressive (Alonso 1946:18-32). He emphasizes that the tree was an integral part of the "**solsticio de verano**" (summer solstice) or St. John's day. While this festival became named after the birth of a Christian saint, it had its roots in the Midsummer Day of pre-Christian religions. In Asturias, the **binteiro** (elder) was the plant hung on openings to houses to keep out brujas (witches) and evil spirits. Alonso (1946:22-23) compares this practice with the use of *Hypericum* in England, France and Italy, with *Artemisia* in other parts of Spain, and even other plants. In addition, the respect for the tree is shown in the remarkable number of places named after *Sambucus* in Spain and Portugal (Alvar 1957).

The names **bonarbre** (Catalan) and **benteiro** (variants **bieito**, **bieiteiro**) (Galician), **binteiro** (Asturian) allude to the ancient sacred nature of the trees (Alonso 1946, Romero 2006). These last names were, in fact, taken from the Latin *benedictu* (blessed), and reflect the ancient regard for these useful plants that are inhabited by otherworldly beings (Alonso 1946). Vallès *et al.* (2004:466)

note that in Catalonia there is at least one tree near rural houses, and it is used in mixtures to prevent “climatic adversities,” much like those among the Slavic groups. As with other Europeans, there is a taboo against cutting or burning the elder. These authors found that similar beliefs held in other Iberian regions.

In Italy, the elderberry was used to treat **cigli alla testa** (migraine) by presenting the illness to **cumpa'** Savuchè or San Savuchè/Sambuco. A **cumpa'** is a close family member, **padrino** or godfather (Quave & Pieroni 2005:70). San Savuchè is not a Catholic saint, but a spirit helper analogous to Frau Holle of the Germans and the **leipreachán** of the Irish. These Albanians were using southern Italian Basilicata words. The prayer found by Pieroni *et al.* (2002:236) is familiar to those who know the Celtic and Teutonic variants for speaking to the spirit of the tree – “**Buon giorno compa' Savuco ... ti giuro e ti prometto che dento u' fuco nu te metto**” (Good day **compa'** Savuco ... I swear and I promise that I will not put you in the fire). Sicilians kept sticks of the wood to kill serpents and drive away robbers (Ball 1997:66).

The pre-Christian views clashed with the introduced religion in many areas and, as they did with many aspects of indigenous cultures, the Church manipulated the old ideas to make them less palatable to their new converts. One example is the medieval view that Judas hanged himself on the elder tree (Ball 1997:66). Because of the conflict between “pagan” beliefs and Christianity, the elder also became associated with witches (e.g., Vickery 1995:118-126).

The Species

Early Greek authors such as Theophrastus and Dioscorides recognized two kinds of plants – **acte** and **chamaeactae**. Theophrastus (1916 III, xiii, 1–4, p. 245) wrote of the tree that “The elder also grows chiefly by water and in shady places, but likewise in places which are not of this character. It is shrubby, with annual branches which go on growing in length till the fall of the leaf ... the wood is porous and light when dried, and has a soft-heartwood, so that the boughs are hollow right through, and men make of them their light walking sticks. When dried it is strong and durable if it is soaked, even if it is stripped of the bark; and it strips itself of its own accord as it dries” (Translated by Sir Arthur Hort). Dioscorides (Book 4.155, p. 619) described the two kinds –

“**Sambuci [Acte in Greek] duo genera. Unum in arborem assurgit surculos ... alterum genus, Chamaeactae vocatur, Romanis Ebulus, longe humilus est, magna herbaceo generi ...**”

(Two kinds of elder. One grows into a tree ... There is another called **Chamaeactae**, by the Romans Ebulus, entirely herbaceous) (my translation).

Pliny (Vol. 5, Liber XXIV, chap. xxxv, 51-53) wrote of both Greek **actae** and **chamaeactae**, but also used their alternate Roman names, **sabucus** and **ebulum**. The entire Latin text is given by Thayer (2010), while Bostock and Riley (1856:23-24) provided a translation:

“There are two kinds of elder, one of which grows wild and is much smaller than the other; by the Greeks it is known as the **chamaeacte**, or **helion**. A decoction of the leaves, seed, or root of either kind, taken in doses of two cyathi, in old wine, though bad for the upper regions of the stomach, carries off all aqueous humours by stool. This decoction is very cooling too for inflammations, those attendant upon recent burns in particular. A poultice is made also of the more tender leaves, mixed with polenta, for bites inflicted by dogs. The juice of the elder, used as a fomentation, reduces abscesses of the brain, and more particularly of the membrane which envelopes that organ. The berries, which have not so powerful an action as the other parts of the tree, stain the hair. Taken in doses of one acetabulum, in drink, they are diuretic. The softer leaves are eaten with oil and salt, to carry off pituitous and bilious secretions.

The smaller kind is for all these purposes the more efficacious of the two. A decoction of the root in wine, taken in doses of two cyathi, brings away the water in dropsy, and acts emolliently upon the uterus: the same effects are produced also by a sitting-bath made of a decoction of the leaves. The tender shoots of the cultivated kind, boiled in a saucepan and eaten as food, have a purgative effect: the leaves taken in wine, neutralize the venom of serpents. An application of the young shoots, mixed with he-goat suet, is remarkably good for gout; and if they are macerated, in water, the infusion will destroy fleas. If a decoction of the leaves is sprinkled about a place, it will exterminate flies. **Boa** is the name given to a malady which appears in the form of red pimples upon the body; for its cure the patient is scourged with a branch of elder. The inner bark, pounded and taken with white wine, relaxes the bowels.”

Pliny (Vol. 5, Liber XXVII, chap. xxvi) also discusses **Actaea**, in another place, with

“**Actaea** has leaves with a powerful smell, rough knotted stems, a black seed like that of ivy, and soft berries. It grows in umbrageous, rugged, watery localities; and is used, in doses of one full **acetabulum**, for female complaints.”

(translation by Bostock and Riley 1856:232). Of this plant he says that it repels serpents (p. 127), is a remedy for ery-

sielas when mixed with other species, is useful against dropsy, with others expels “calculi from the bladder.”

The *sabucus* of Pliny, a Latin version of the Aramaic **sabbekā** (שבבא, שבבא), was first recorded in the **Ketuvim** (כתובים) of the Tanakh (נב"ח). This text was possibly written during or after the Babylonian Exile of 586-538 BCE (Kohn & Moore 2007). Subsequently, the word appeared in Greek (σαμβύκη), then Latin (*sambūca*, *sambucum*) by Lucilius (ca. 160s - 103/2 BCE, cf. Lucciano 2008) and Pliny (23-79 CE).

Some suggest a Persian (Farsi) origin, while others propose Semitic Phoenician. There is consensus that the term is not Semitic, Greek, or Latin in origin but that it was loaned into those languages (Braun 2002:33-34, Chantaine 1968:986, Desprez & Williams 1865:16, Gesenius 1836:703, Gulick 1928:175, Lindsay 1894:65, Mitchell 199:18, OED 2011). Indeed, Mitchell (1992:18) suggested that the use of both ש/ש (š/s) in Aramaic further indicates a foreign loan-word (Tables 1, 2).

Benfey (1998:928), Hubschmid (1963), and Pictet (1859:228) thought that Sanskrit **sambhūka** or **sabhūka** was the original source. Their interpretation is that the Sanskrit **sambhūka** comes from सम् **sam**, with, and भूक **bhūka**, a hole, cavity, with both words attested (Monier-Williams 2008, Malten *et al.* 2009). The word **sambhūka**, however, does not appear to be attested in Sanskrit (Monier-Williams 2008, Malten *et al.* 2009, Böhlingk & Roth 1855:333). Moreover, no indication was found that **bhūka** is attested in Vedic or epic Sanskrit, the period before 500 BCE. There is one source suggesting that **bhūka** in Sanskrit is actually a loan from a Dravidian source (Burrow-Emeneau 1961); however, the second edition of that book does not make the same connection (Burrow 1984:376). Added to this is the discussion by Malkiel (1956:137-138) saying "... intermittent attempts to trace it [**sab(b)ūcus**] to Indo-European ... have proved unsatisfactory".

In the historical records the earliest writers linked the musical instrument sambuca with an oriental source. Most commonly mentioned among the players of this instrument were women from Lydia (e.g., Gulick 1928:175, Hordern 2003, Péché 2002, Sinclair 1908:210, Tillyard 1907:162). If the instrument and word originated with them, sambuca may be in Lydian, one of several extinct languages in the Anatolian group of the Indo-European language family. Lydian was “[a]n ancient language spoken on the coast of western central Anatolia. Most texts are in a variety of the Greek alphabet, though some are in Old Phrygian. These texts date from as early as the 8th century BC, though most are from the 4th and 5th centuries BC.” (Linguist List 2011). A different interpretation comes from Titus Flavius Clemens (ca 150 - ca 215), known as Clement of Alexandria. He wrote “In music, Olympus the Mysian practised the Lydian harmony; and the people called Troglodytes invented the sambuca, a musical instrument” (Wilson

1868). “Olympus the Mysian” [Ὀλυμπος] was a musician who lived in the 7th century BCE. The “Troglodytes” were a group of people who lived on the African side of the Red Sea coast. It has been speculated that these people were the modern Afar of Eritrea and neighboring peoples, or the Tuareg, inhabitants of the Saharan interior of North Africa, and possibly the Tubu of northern Chad, but also in Libya, Niger and Sudan. The reason for the statement by Clement of Alexandria is not given and the preponderance of other historical references are to a Lydian source.

Unfortunately, in spite of many decades of trying, the ultimate source **sabbekā** (שבבא, שבבא), a loan word in Biblical Aramaic, has not been identified by linguists. In any event, the word **sabbekā**, from whatever original Eastern source, spread across southern Eurasia to evolve into *sambucus*, and was incorporated into Armenian, Greek, Indo-Iranian, Italic, and Semitic languages. Other language families have names based on different terms (Table 1). Intriguingly, some of those words are also thought to be from the quality of being “hollow”.

The concept of “hollow” plays a role in the origin of the Baltic names. Gliwa (2008:41) discusses the complicated possibilities and some of the meanings in Lithuanian. He concluded that **saiva** or **šeivā** means “**Stricknadel, Spule, Weberspule, Schiffchen**” (knitting needle, spool, weaver-spool, little vessel). Another interpretation is that **saiva** may mean “bone” or “tubule” and the term is applied to a channel for tapping birch sap. He also claims that Latvian **plūškoks** (Gliwa 2008:51) or its variants should be read as “**Schwimmerbaum**” (float-tree).

German **Holunder** and **Holder** also suggest a connection with hole or hollow, from the tubular plant stems (OED 2011, Pictet 1859:228). The same meaning applies in Celtic languages including Welsh **ysgau** and Breton **skaven** which mean hollow or excavated (Pictet 1859:228). Moreover, Alonso (1946:11-12) makes a case for **baíto** (< **benito**, Castilian, Asturian), **canillero** (“**salm**.” = Salamanca?), **couloubriñé**, **boumbardelié** (both Provençal) meaning “hollow”.

Origins of Slavic names including **bez** are not agreed upon by linguists. There are three possible origins – a reference to an unpleasant smell, a “he-goat” (Blažek 2002:202, Gliwa 2008:50), or a color (Hyllested 2011). The unpleasant smell can be derived from the addition of a -d- to provide words such as **bezdás** (fart), **bezdís** (stink), and **bezdalas** (dust), which are applied to *Sambucus racemosa* L. The same allusion is found in dialectic German **Scheißbeer** (feces-berry), also for *S. racemosa*. An alternate suggested by Blažek (2002:202) and Gliwa (2008:50) is that Indo-European ***b^hug**-(o), he-goat, probably also reflects the odor (cf. also Austin 2004:593).

In contrast to the view of Blažek (2002:202) and Gliwa (2008:50), an interpretation of **bez** / **buz** is that both spell-

Table 1. Selected common names for *Sambucus nigra* L.

LANGUAGE FAMILY	LANGUAGE / DIALECT	NAMES	SOURCES / COMMENTS
FAMILY SUBGROUP			
Afro-Asiatic			
Semitic	Andalusi Arabic	šabūqah	Corriente 1997:272
	Arabic	بيلسان (<i>baylisân</i>), بشام (<i>basham</i>), الخَمَان (<i>al khamân</i>), سوبق (<i>sabūqah</i>)	Bedevian 1994:527, Webster 2011
	Aramaic	שבבא (<i>šabb°kā</i>), שבבא, שבבא (<i>sabb°kā'</i>) (<i>šabk, śin, samek; ś°bākā</i> or lattice work, network, supposedly from the verb <i>šābak</i> , to interweave)	Mitchell & Joyce 1965
	Hebrew	סמבוק שחור (<i>sambūk</i>), סמבוק שחור (<i>shachr [black] sambūk</i>)	Daniel 3:5, 3:7, 3:10, 3:15
Altaic			
Turkic	Azerbaijani	angurè koli, qara kəndəlaş	<i>Sambucus nigra</i> 2012, Miraldi <i>et al.</i> 2001:80
	Kazakh	мойыл (moyil), жаужұмыр (jawjumir)	Grzywacz 2010:11
	Turkish	mürver ağ, mürver ağacı, kara mürver (black elder), belesen (a loan from Arabic, or <i>vice versa</i> ?)	Bedevian 1994:527, Kultur 2007:345
Indo-European			
Albanian	Gheg (Serbian)	Зова, baz, baza, bazga, bazgovina, crna bazga, cma zova, zova, zovika	Webster 2011
	Arbëreshë	shtog	Pieroni <i>et al.</i> 2001:231
Armenian	Armenian	թանթրաւենի [թանթրվենին, թանթրվենու] (tantravenee or tantrveni), թանթրուենի (tantroenee), շամբուկ (shampoug), կնդեղի (khngheghee), բալանթաշի ձառ (tzar = tree), փորքիչ (porkeech)	Bedevian 1994:527
Baltic	Lithuanian	šėivā-medis	Witczak 1992:201 Stančikaitė 2008
	Latavian	plūškoks, plūdu koks	Gliwa 2008:51
Celtic	Breton	skaven, skawen (singular), skaó, skav, scaw (plural) (from Welsh ysgau , hollow, excavated)	Le Gonidec 1821:397, Pictet 1859:228, Stokes 1897:24
	Cornish	skawenn, scawen	Stokes 1897:24
	Cumbric	scaw-tree, scow-tree, scew-tree	Dickson 1880: 48-49
	Gaulish	σχοβιήν, acobien	Dioscorides 1829:665-666; Pectet 1821:228
	Irish	ruis (red; perhaps because of the red fruiting stems; mistakenly used for the “elder-tree,” the fifteenth letter of the Ogham alphabet), trom (heavy), tromm, troum, tromán	Cameron 1900:46, Colgan 1915:15, Ellis 1997, Stokes 1897:24
	Manx	tramman, trammon, berrish-tramman, berrish hrammanagh (berrish = berry, hrammanagh =elder, yn villey hramman (hramman =elder, hilley = tree))	Cameron 1900:46, Kelly 1866:245, 260, Webster 2011
	Scot Gaelic	truim from drum, druman, droman	Cameron 1900:46

	Welsh	dagrau lesu, ysgaw [ysgawen, ysgawlwyn, pren ysgaw, pren ysgo] (ysgau = hollow, excavated; also lilac, Syringa)	Davies 1813, Pictet 1859:228, Cameron 1900, Stokes 1897:24
Germanic	Anglo-Saxon	aeld (fire, age), aeldrum , hylder , hylantree	Bosworth & Toller 1898
	Danish	hyld , almindelig hyld , hyldetræ	OED 2011
	Dutch	hadik (from Latin <i>acte</i> , Greek ἀκτέα), viler , vlierboom (viler = lilac, boom = tree)	Vercoullie 1925: 121, 372; Witczak 1992:203
	English	bore tree, bour tree, boortree (“bower tree” cf. Wall 1998:72), boon-tree (maybe from Middle English (ME) boon < Old Norse bón , cognate with ME bene n., prayer), bothery-tree (etymology unknown), elder [black elder, common elder] (ellæn by ca. 700, ME eldyr, ME helren, hilder (-tre); Witczak 1992 argues that the Indo-European base for this word is *ə₂k̑péwā), pipe tree (used by 17th cent. to translate post-classical Latin syringa in its then wide sense of any of several shrubs called syringa by 16th- and 17th-cent. herbalists), whusselwood (probably from “whistle”, cf. OE–ME hwistle, wistle; from Old English hwistle (also wuduhwistle), sambuca (by 1382, < Latin <i>sambūca</i> , < Greek σαμβύκη , q.v.	Brockett 1829:55, Grieve 1931, OED 2011, Mitchell & Joyce 1965, Witczak 1992
	Flemish	elhoren , alhoren	OED 2011
	German	Hollunder , Holder (a connection of some kind with hole), Flieder (color lilac, Syringa or Sambucus), Middle Low German ellern , elderne , alhorn , elhorn (Old High German holuntar , Middle High German holander , holder)	OED 2011, Webster 2011
	Icelandic	yllir	Dicts.info. 2003-2011, Wales & Sanger 2011
	Low Saxon	Eldrum	Grieve 1931
	Norwegian	hyell , hulle	Mossberg & Stenberg 1994:424, Webster 2011
	Swedish	hyll , fläder (fläder = elder), vanlig fläder (vanlig = common, fläder = elder), äkta fläder (äkta = true elder)	OED 2011, Webster 2011
Yiddish	rukhes-shtekns (rukhes = spirits or ghost, shtekns = sticks or trees), sheydim-shtekns (sheydim = half-human, half-angel, shtekns = sticks or trees), meshugene graypelekh (meshugene = crazy one; graypelekh =?)	Schaechter 1987:58	
Greek	Greek	ἀκτέα , ἀκτέος , ἀκτής , ἀκτή (ακτη = littoral, shore cf. Lancelot 1810:11, 78; Attica, in Classical times, a peninsula called Akté [Ἀκτή], sometimes Acte or Akte, now mount Athos), σαμπούκος , σαμβύκη (from Aramaic ṣabb'ka or sabb'ka , possibly from Sanskrit sabhūka)	Benfey 1998:928, Dioscorides 4:174, Lancelot 1810:11, 78
Indo-Iranian	Persian	اقطي (aqta)	Gotfredsen 2011, Wales & Sanger 2011, Webster 2011

Uralic			
Italic	Amognard	seu	Webster 2011
	Asturian	sabudiellu, sabugu [xabugu], sabugueiru, binteiro (blessed, by St. John, cf. Alonso 1946:29)	Academia de la Llingua Asturiana 1995, Alvar 1957:39, Romero 2006:80
	Berrichon	sui [sus, suin]	Ruel 1537:249
	Bourguignon	seuler, seu	Webster 2011
	Bresciano	lantà	Melchior 1817 :316, Webster 2011
	Napoletano-Calabrese	sammùcu (Doric influenced)	Logos Group 2008
	Catalan	sabuc, saüc, saüquer, saüquer(a), bonarbre (good tree, a euphemism cf. Alonso 1946:12-16)	Alvar 1957 :40-41, Rigat <i>et al.</i> 2007:270, Logos Group 2008, Vallès <i>et al.</i> 2004 :467
	Charolais	soiré	Webster 2011
	Corsican	sambügu	Webster 2011
	French	sureau [suseau] (from Latin <i>sabūcus</i>)	Estienne 1543:641, Webster 2011
	Friulan	saût, saudâr	Logos Group 2008
	Galician	sabugueiro (one meaning for sabugo is pith, implying hollow), benteiro, binteiro, bieito, bieiteiro (blessed, < Latin <i>benedictu</i>)	Alonso 1946:8, Alvar 1957 :41-42, Logos Group 2008
	Italian	sambúco, sambreo, sambü/g, savucu, zambucu, sammüch	fide Priscianese 1540, from Latin <i>sabūcus, sambucus</i> ; Bonomi 2004-2008; Hubschmid 1963:380, Idolo <i>et al.</i> 2010:392, Ricchi 2006:16, Tagarelli <i>et al.</i> 2010:4
	Latin	<i>acte</i> (from Greek), <i>sambucus, sambuci, sambuca, sabucum, sabucus</i> (musical instrument; also used by Pliny for the elder tree; from Aramaic שבבא sabb'ka , a stringed instrument, pronounced sab-bek-aw')	Cawley 2011, Fuchs 1542:63, Gesenius 1836:703, Desprez & Williams 1865:16, Lindsay 1894:65, Quattrocchi 1999, Whitaker 1993-2007
	Lorrain	soûgnon, séu, seilgnan	Webster 2011
	Picard Rouchi	séhu	Webster 2011
	Portuguese	sabuco, sabugo, sabugueiro (the suffix -eiro is from Latin <i>-etum</i> , a botanical grouping), sabugueiro preto	Alvar 1957:24, Webster 2011
	Provençal	saiuc	Cioranescu 2001
	Romanian	soc, socul	Pop 2004, Postolache <i>et al.</i> 2006:28
	Emiliano-Romagnol	sambugh, zambûgh	Hubschmid 1963:380
Sardinian	sambucu	Atzei <i>et al.</i> 1991:142, Bacchetta <i>et al.</i> 2007:149	

	Spanish	saúco (by 1520, from Latin <i>sabūcus</i>)	Alvar 1957 :41, de Nebrija 1520, Diccionario de la Lengua Española 2011
	Venetian	sanbugaro	Webster 2011
Slavic	Belarusian	бузіна чорная (buzina = elder, čornaja = black)	Савушкіна & Леонов 2008:25
	Bulgarian	Черен бълз (čeren = black, bŭz = elder)	Ploetz 2000:Appendix 1
	Czech	bez, bezinka , a semantic shift from beech (<i>Fagus</i>)	Blažek 2002:201, Campbell 1990:167, Webster 2011
	Croatian	baz, bâz, bôz, bezinka , a semantic shift from beech (<i>Fagus</i>)	Blažek 2002:201, Campbell 1990:167, Webster 2011
	Polish	bez czarni (bez = elder, czarni = black)	Blažek 2002:201, Gliwa 2008:49, Webster 2011
	Russian	боз (boz = elder, shifted from beech)	Blažek 2002:201
	Slovene	bezeg	Črepinšek & Zrnec 2005
	Ukrainian	бузе, бузіна чорна (buzina = elder, chorna = black) , a semantic shift from beech (<i>Fagus</i>)	Blažek 2002:201, Campbell 1990:167, Webster 2011
Finnic	Estonian	must-leeder	Martsoo n.d.:25
	Finnish	selja	Waller <i>et al.</i> 2001:34
Hungarian	Hungarian	bodza	Webster 2011

Table 2. An abridged history of the word associated with or confused with *sambucus*.

NAME	AUTHOR	DATE OF ORIGIN	SOURCE
שבבא, שכבא, שבבא (sabb* <i>kā</i>)	Daniel ,3:7 ,3:5 דניאל 7) 3:15 ,3:10th Century - 6th Century BCE)	586 - 538 BCE	Ketuvim (כתובים) of Hebrew Bible (instrument)
ἀκτῆ (akte)	Hippocrates (ca. 460 - ca. 370 BCE)	ca. 460 - ca. 370 BCE	Hippocrates & Ilberg 1894: 213
ἀκτῆ (akte)	Theophrastus (ca. 371 - ca. 287 BCE)	ca. 371 - ca. 287 BCE	Theophrastus 1916 (plant)
<i>sambūca</i>	Titus Maccius Plautus (ca. 254 BC – 184 BC)	(ca. 254 BC – 184 BC)	Coleman-Norton 1948:5 (instrument), Southern & Vaughn 1997:276
σαμβύκη (sambykē)	Polybius (ca. 208 - 118 BCE)	ca. 208 - 118 BCE	Polybius, Histories (book 8, chapter 6, cf. Thayer 2010), (war machine)
<i>sabucum</i>	Gaius Lucilius (ca. 160s - 103/2 BCE)	ca. 160s - 103/2 BCE	Lucilius, Satires XXVII, 23; 711 "Ardu <i>m</i> , miserin <i>um</i> atque infelix lignum, sabucum voca <i>t</i> " (Poor and miserable, unproductive wood, called sabucum); cf. Lucciano 2008

άκτη (akte)	Pedanius Dioscorides (ca. 40 - 90 CE)	ca. 40 - 90 CE	Ruel 1552 (plant)
<i>actaea, ebulum, chamaeacte, helion, sambucus</i>	Gaius Plinius Secundus (23 AD - 79 CE)	23 - 79 CE	Pliny <i>et al.</i> 1554 (plants, musical instrument)
<i>Acte, hoc est sambucus & chamaeacte, id est ebulus</i> (<i>Acte</i> , that is <i>sambucus</i> and <i>chamaeacte</i> , that is, <i>ebulus</i>)	Paulus Aegineta (625?–690? CE)	625?–690? CE	Aegineta 1553 (plant)
<i>De Ebulo et Sambuco</i> (of <i>ebulus</i> and <i>sambucus</i>)	Yahya ibn Sarafyun (9th century)	9th century	Serapion <i>et al.</i> 1531 (plant)
Sambuke	John Wycliffe (ca. 1328 - 1384)	ca. 1382	Wycliffe Bible 1382 (instrument)
<i>Sambucus holderboum. Invenitur sinem sabucus apud Seruiū</i> (<i>Sambucus holderboum</i> ; found without <i>sabucus</i> in Seraphion).	Hermannus Torrentinus (Herman van [der] Beek [Beeke], ca. 1450 - ca. 1520)	1509	Hermannus <i>et al.</i> 1509 (plant)
<i>Sambucus</i>	Paracelsus (Philippus Aureolus Theophrastus Bombastus von Hohenheim, 1493 - 1541)	1529, 1531	Weeks 2007 (plant)
<i>Sambuci et ebulum ad Aloem comparator</i> (<i>Sambucus</i> and <i>ebulus</i> compared to the Aloe)	Symphorien Champier (1471–1538)	1533	Champier 1533 (plant)
<i>Sambucus</i> (<i>Acten, Romani sambucum vocant</i>) (<i>Sambucus</i> (called by the Romans <i>Acte</i>)	Johann Baptist Ruel (1634 - 1685/1715)	1537	Ruel 1537 (plant)
Sambuci, χαμαιάκτη, άκτη	Antonio Muso Brassavola (1500 - 1555)	1537	Brasavola 1537 (plant)
De Sambuco, άκτη, Sambucus, Sabucus, Holder	Theodor Dorsten (Theodore Gluntius, 1492 or 1500-1505 - ca. 1552)	1540	Dorsten 1540 (plant)
άκτη & Sambucus	Leonhart Fuchs (1501 - 1566)	1542	Fuchs 1542 (plant)
<i>Sambucus, Acte, Holder, Ebulus, χαμαιάκτη, Attich</i>	Otto Brunfels (ca. 1488 - 1534)	1543	Brunfels 1543 (plant)
zambucos, zambuco	Fernão Lopes de Castanheda (1500 - 1559)	1551	de Castanheda 1833 (ship)
Sambucos, zanbuco	Nicholas Lichefield	1582	Translation of de Castanheda 1551 (ship)
viler, sambucus	Rembert Dodoens (1517 - 1585)	1563	Dodoens 1563 (plant)
Sambucus	Caspar [Gaspard] Bauhin (1560 - 1624)	1623	Bauhin 1623 (plant)

ings were derived from proto-Indo-European ***kieh-yo** (dark gray) (Hyllested 2011). This author suggests that perhaps the terms were borrowed from Old Turkish **boz** (gray), with cognates in Old Russian **busyj, bosyj** (gray) and modern Russian **buzlak** (*Crocus reticulatus*) or **bu-zan** (white stork).

Elsewhere Gliwa and Stančikaitė (2008) discuss the probable association of Lithuanian **šėivā-medis** with a borrowing from Polish **bez**, which came to be associated with the “goblins” called **bezdukai**, meaning “living beneath the elder.” He noted that these Slavic terrestrial sprites were as-

sociated with **Pušaitis**. Both **bezdukai** and **Pušaitis** were associated with helping provide good harvests for people.

Naming History

Plants. We have long been told that Theophrastus (ca. 371- ca. 287 BCE) and Dioscorides (ca. 40 - 90 CE), among other classical authors, called certain plants *sambucus* (e.g., Bauhin 1623:455-456, Grieve 1931). Examination of those Greek documents reveals that they actually did not use that word. Theophrastus (1916:244) wrote **ἀκτέος, ἀκτή** as did Dioscorides (1829: vol. 5:175). *Sambucus* and **ἀκτής, ἀκτή** were associated later when the Greek texts were translated into Latin (Tables 1, 2).

The word *sambucum* was used by Lucilius (ca.160s - 103/2 BCE, cf. Lucciano 2008) for a plant. Later Pliny (23 BCE - 79 CE) called a plant and a musical instrument *sambuca*, *sambucus*. Linnaeus (1753:269-270) subsequently fixed the Latin to the genus *Sambucus*, comprising subshrubby herbs, shrubs, and trees in the family Adoxaceae (Figure 1a). At the same time, he applied the Greek **ἀκτέος** to the Ranunculaceae herbs as **Actaea** (Linnaeus 1753:504).

Various scholars have recognized 5 - 30 species in *Sambucus*, with no consensus on the number. The latest study by Bolli (1994) seems reasonable for at least the *S. nigra* complex. Bolli's view makes the plants in Europe *S. nigra* subsp. *nigra*, those in eastern North America *S. nigra* subsp. *canadensis* (L.) Bolli, and those in the southwestern United States and Mexico *S. nigra* subsp. *cerulea* (Raf.) Bolli. There are other species, such as *S. ebulus* and *S. racemosa*, but this discussion focuses on *S. nigra* in the Old World, particularly Eurasia.

Musical instrument. The instrument (Figure 1c) called a *sambuca* (Middle English, *sambuke*, *sambuce*, *sambuque*, 1800s *sambuc*) first appeared in the English translation of the Wycliffite Bible in 1382 (OED 2011). References to the *sambuca* in other languages are fairly common from the 5th century BCE onward. Landels (1966:69) gives a summary of the bibliographic history after that century and discusses fanciful etymological origins.

The King James Version of 1611 termed the instrument a "sackbut," a word mistranslated from its occurrence in Daniel 3, where it is Aramaic **שבבא**. The Greek Septuagint calls it **σαμβύκη** and Latin Vulgate *sambūca*, a stringed instrument. Coverdale (1535) rendered **שבבא** as "shawmes," thus, like the Wycliffite Bible, he mistook it for a wind instrument. The "sackbut" and "shawmes" are now thought to have nothing to do with the biblical reference since both were wind instruments, forerunners of trumpets (sackbut) and oboes (**shawmes**) (Galpin 1906-1907:3-4).

Perhaps part of this misunderstanding arose because of earlier interpretations of *sambuca* as a wind instrument. Among those espousing that view was Isidoro de Sevilla (ca. 560 - 636), who describes it in his *Etymologiae* as:

"*Sambuca in musicis species est symphoniarum. Est enim genus ligni fragilis unde et tibiae componuntur*" (Elder is a kind of symphonium. It is also a kind of softwood from which these pipes are made) (Lindsay 1911, Liber III:21,7).

A glossary by Hoffmann (1838:368) also called it a **vloite** (flute) and Wulstan (1973:45) agreed. Some supporters of the flute translation for *sambuca* claim it came from from the Latin *tibia* -ae [the shin-bone, tibia; a pipe, flute (originally made of a hollow bone)]. Wharton (1889:177) went so far as to claim that *sambucina* < *sambuci-cina* was formed from **tibi-cina**, a combination of Latin and Greek. No linguistic support has been found for this theory, and the fact that both *sambuca* and *tibia* appear in the same old Latin documents, plus the older word **sabbekā'** in Aramaic, mitigates against Wulstan's idea.

Most sources interpret the *sambuca* as a harp-like instrument, which is typically portrayed as a "triangular stringed-instrument of a very sharp shrill tone" (OED 2011). The possible instrument meant (Figure 1C) is also illustrated by Krishna Murthy (1987:37) and Yates (1875:1007). Sinclair (1908:210) disagreed, saying that "[i]t is not known what kind of instrument the celebrated *Sambuca* of the captivating Lydian [modern Turkish provinces of Manisa and inland İzmir] dancers [*sambucistriae*, **σαμβυκίστριαι**] was." In this Landels (1966:69 *et seq.*) concurred because there is disagreement among classical authors. Still, the shape being compared with both the war engine and sailing vessel suggests a harp-like instrument (Figures 1c-e), and even Landels (1966) agreed with that.

The **σαμβύκη** apparently was introduced into Greece by or before the late fifth century BCE (Landels 1966:69). Principal use of the *sambuca* was to provide music during licentious festivals; the word for the female **σαμβυκίστριαι** (*sambucistriae*) was synonymous with **πορνή** (**porn**), at least among some (cf. Hordern 2003, Péché 2002). Neither Athenaeus's *Deipnosophistae* nor Strabo's *Geography* considered the *sambuca* to be of Greek origin (Derenbourg & Morris 1887:9). Strabo (64/63 BCE - ca. CE 24) wrote "and some of the instruments have been called by barbarian names, [**ναβλα**] "nablas," [**σαμβύκ-η**] "sambuce," [**βάρβιτος**] "barbitos," [**μάγαδις**] "magadis," and several others" (Strabo 1924: 10.3.17). Athenaeus (*fl.* end of 2nd and beginning of 3rd century CE) also said that Sappho brought its use from Lydia (Gulick 1928:175, Tillyard 1907:162). The translation of Athenaeus by Gulick (1928:175) says "As for the instrument called the 'triangle' Juba, in the fourth book of his History of the Stage, says that it is a Syrian invention, as is also the so called 'lyre-Phoenician' . . . and the 'sambuca'." (See also Boyle (1863:57).

Even Persian scholar Avicenna (**Ibn Sīnā** سینا ابن سینا, ca. 980 - 1037 CE) listed the **salbāq**, interpreted as the sambuca by Farmer (2004:1149), among the instruments he considered imported. Farmer viewed the **šanj jīna** or **šjīni**, also mentioned by Avicenna, as the Chinese metallophone.

Some, like Strabo (1924: 10.3.17), equate the Latin sambuca and the Phoenician **sabecha** (from the same Aramaic origin), the magadis, the Latin *pectis*, and the Egyptian **nanga** (from Acholi **naŋa**, **naang'a**, **nanga**, **naŋ'a**) (e.g., Ceulemans 2002:13, Landels 1966:74, Schlesinger 1910:299, Tillyard 1907:162, Williams 1897-1898:134). In reality, these names represent several similar, perhaps identical or perhaps variations of instruments, that are poorly known except for the nanga which is still in use. They may be the same as those illustrated on Egyptian tombs, but the exact identity of the sambuca is elusive.

Siege engine. The sambuca / **σαμβύκη** (Figure 1D) was used during Roman times as an instrument of war for surmounting walls (OED 2011). Athenaeus said in his *Diepnsophistae* that it was invented by Heraclides of Tarentum (Gulick 1928:14.634). It was said to be used first by Marcus Claudius Marcellus during the Roman siege of Syracuse in 213 BCE (Polybius book 8, chapters 4-6, Thayer 2010). Sambuca with this meaning came into English by 1489.

Greek writer Polybius (ca. 208 - 118 BCE) wrote in his *Histories* (book 8, chapter 6, Thayer 2010):

“He had also eight **quinqueremes** from which the oars had been removed, the starboard oars from some and the larboard ones from others. These were lashed together two and two, on their dismantled sides, and pulling with the oars on their outer sides they brought up to the wall the so called “**sambykē**” [σαμβύκη]. These engines are constructed as follows. A ladder was made four feet broad and of a height equal to that of the wall when planted at the proper distance. Each side was furnished with a breastwork, and it was covered in by a screen at a considerable height. It was then laid flat upon those sides of the ships which were in contact and protruding a considerable distance beyond the prow. At the top of the masts there are pulleys with ropes, and when they are about to use it, they attach the ropes to the top of the ladder, and men standing at the stern pull them by



Figure 1A. *Sambucus nigra* L (Köhler 1897). **Figure 1B.** Frau Holle is shaking out her feather pillows to make snow (Deutsche Bundespost, Berlin 1967). **Figure 1C.** Musical instrument sambuca (upper right) compared to harp (Smith 1875). **Figure 1D.** Reconstruction of a Greek sambuca siege engine (Wikipedia Commons, http://en.wikipedia.org/wiki/Sambuca_%28siege_engine%29). **Figure 1E.** Painting of a Maldivian **baggala**, a type of **dhow** similar to the sambuca, by Xavier Romero-Frias 2009 (Wikipedia Commons 2012 <http://en.wikipedia.org/wiki/Dhow>). **Figure 1F.** Liquor. Sambuca Inferno Ice (left), Sambuca Gold (middle), Sambuca Black (right) (Wikipedia Commons 2012, <http://en.wikipedia.org/wiki/Sambuca>).

means of the pulleys, while others stand on the prow, and supporting the engine with props, assure its being safely raised. After this the towers on both the outer sides of the ships bring them close to shore, and they now endeavour to set the engine I have described up against the wall”.

Then he added,

“εἰκότως δὲ τὸ κατασκευάσμα τῆς προσηγορίας τέτευχε αὐτῆς· ἐπειδὴν γὰρ ἔξαρθῆ, γίνεται τὸ σχῆμα τῆς νεῶς αὐτῆς καὶ τῆς κλίμακος ἐνοποιηθὲν παραπλήσιον σαμβύκη”. (The construction was appropriate-

ly called a “sambuca,” for when it is raised the shape of the ship and ladder together is just like the musical instrument).

Landels (1966) gives a discussion of both the sambuca as war tool and as a musical instrument, quoting parts of the original Greek text.

Landels (1966) suggests that the comparison of the musical instrument and the war engine may have come into existence as a “Service’s joke.” He compared the use of sambuca to the term “Mae West” as used for the life-jacket by the Royal Air Force. In other words, the resemblance was not as exact as suggested by Polybius. In fact, Landels (1966) includes illustrations of several possible instrumental variations that look more or less like the siege engine.

Sailing vessel. The **sambuq** سَمْبُوق or **sanbuq** زَنْبُوق is a specialized dhow (Figure 1E) now in use all around the coast of the Arabian Sea from Western India to East Africa, also on Lake Nyanza (Agius 2002:85 *et seq.*, OED 2011). These ships are characterized by having one or more triangular lanteen sails, which originated during the early Roman Empire in the Mediterranean Sea (Campbell 1995). The design is a triangular sail set on a long support mounted at an angle to the mast, and running from fore to aft.

The first record we have of the sambuco in English was Nicholas Lichefield’s translation of de Castanheda’s *Historia* in 1582 (de Castanheda 1582 (10)26, (63)129). The original book in Portuguese had appeared in 1551, where he wrote of the “**zamboucos (que sam nauios peque-nos)**...” [sambuks (which are small ships)] (de Castanheda 1833 (10)34). Although the OED (2011) affirms the Portuguese **zambuco** and Italian **sambuco** came from Arabic **sanbūq**, its authors consider the ultimate origin of sambuk “uncertain.” In fact, it was Lichefield who introduced the variant spelling sanbuco because the original Portuguese had only **sambuco**.

These ships are now often called dhows in English, in Arabic دَوَّاب, but possibly from Marathi धव (Yajima 1977, OED 2011). The specialized variant of dhow for coastal sea-going is still being called “sambuk” or “**sanbuk**” (Burton 1854:210, Doumenge 2005:95, Burningham 2007:100, 103, 106). Spelling of the word in English varies, with transcriptions ranging from cambuco, jambook, sambook, sambouk, sambouka, sambuchi, sambuco, sambuk, sanbuk, sanbūq, sanbuka, sembuk, sunbuk, zambuco, zambuk, zanbuko, zanquqos, to zambuquo (Yule & Burnell 1903:778). No explanation has been found for the application of **sanbuq** زَنْبُوق to these vessels because the same Arabic word is applied to lilies, particularly *Lilium*; unless it was simply a transcription error or misunderstanding of words. Given that Avicenna spelled the name **salbuq**, and that Lichefield wrote both zambuco and zanbuko, confusion seems likely.

Liquor (Figure 1F). Archaeological records indicate that wine was made ca. 6000 BCE in Georgia, 5400-5000 BCE in Persia, and 4460-4000 BCE in Armenia and Greece (Cavaliere *et al.* 2003, McGovern 2003, Miller 2008, Owen 2011, Stevenson 2011, Valamoti 2007). Mead was made even before wine in some places, being known in China at ca. 7000 BCE (McGovern *et al.* 2004), and in western Europe by the Bell-Beaker culture by ca. 2400-1800 BCE (Bradley 2007).

There is a long-standing European tradition of making wine from elder berries and elder flowers (Zohary & Hopf 1993:201). Mrs Beeton (quoted in Prendergast & Dennis 1997:281) said that “It is one of the best old wines.” Grieve (1931) gives more space to the genus than any other plant in her book. The OED, for example, has a record of elder-berry “surrop” being used in Northamptonshire, England, in 1625, although surely that was not the beginning of its history. Particularly in regions outside that of the wine grape (*Vitis vinifera* L.), people had an ancient practice of making wine or some other alcoholic beverage of whatever fruits were available. Among other drinks, the French liqueur St-Germain is made with elder flowers, as is Hallands Fläder, a Swedish **akvavit**. In Beerse, Belgium, a variety of gin called **Beers Vierke** is made from the elder berries. And, while plums or apricots are preferred to make the Hungarian brandy called **Pálinka**, people there use elder berries also.

The Italian liqueur resembling anisette was called sambuca in English by the middle 1960s (OED 2011). The first advertisements, mentioning sambuca from Civitavecchia, seem to have come from Simon *et al.* (1965). Some note that “Sambuca is made with star anise and white elder flowers” (LifeinItaly 2011). At least the Opal Nera label of Black Sambuca contains “star anise, elder flower and lemon peel. Black color is partly derived from the skin of elderberries” (Clutton 2003:329).

There are two versions of the origin of sambuca as a drink. One says that:

“L’originale ricetta del liquore Sambuca proveniente dagli antichi ricettari Certosini prevede l’uso di alcool, acqua di sorgente, zuccheri ad alta solubilità, diverse combinazioni di anice e distillato di fiori di Sambuco (*Sambucus nigra*).” (The original recipe for Sambuca liqueur from the ancient Carthusian recipe involves the use of alcohol, spring water, high solubility sugar, and several combinations of anise and distilled flowers of elder [*Sambucus nigra*] (Wales & Sanger 2011).

That history is also attested by the Nardi family’s Ai Monasteri Company in Rome (Ai Monasteri 2011).

The Carthusians (also called Order of St. Bruno) who are claimed to have invented the drink are a Roman Catholic religious order named for Saint Bruno of Cologne (ca. 1030

- 1101), whose history was first written by Guibert of Nogent (ca.1055 - 1124). Just when these monks concocted sambuca does not seem to be recorded, but the Nardi family's business was begun by 1892 and was based on already "ancient recipes" gathered from numerous monastic abbeys by their physician ancestor Angelo Nardi. In fact, there was a monastery in Calabria Province, Italy, in the 1100s called Sambuca (Herzog 1860:296), and Calabria is the area where St. Bruno established the monastery where he lived much of his life (Carr 1991, Di Fazio *et al.* 2009, Hendriks 1889:4-7). So, the claim of Carthusian origin is possible but not proven.

The second version comes from the Molinari company that claims sambuca was first used as the name of an anise-based liquor created in Civitavecchia about 130 years ago (Molinari Italia 2011). Supposedly, Luigi Manzi, produced sambuca in Civitavecchia in 1851, and said that he had chosen that name in memory of the **sambuchelli** (anis sellers), of his native Ischia, a volcanic island in the Tyrrhenian Sea at the northern end of the Gulf of Naples. That the name sambuca is older than 130 years in the region is suggested by it being an Italian family name, plus the variant for the Catena di Sambuchello (Sambuchello range) which is in a forest preserve in the Bosco di Troina in the Parco dei Nebrodi, Sicily (Azienda Speciale Silvo Pastorale del Comune di Troina 2010). There is also a town called Sambuca di Sicilia in Sicily, province of Agrigento, and a town called Sambuca Pistoiese in Tuscany, province of Pistoia. In the Piemonte region, province of Cuneo, there is another town called Sambuco. In both 1166 and 1168, there was a Castello del Sambuco mentioned in the records of the Abbazia di Passignano. That locality remains today as the Sambuca Val di Pesa hamlet in the town of Tavarnelle Val di Pesa, Florence province. There is also a Passo Sambuca or Passo della Sambuca that connects the valle del Senio with the Mugello region in the val di Sieve and a Poggio Sambuchello (Sambuchello hill) in the Florence province.

The etymology of these place names is debated. At least the modern city Sambuca di Sicilia, formerly Sambuca Zabut (Gilbert 1997:60-61), was an Arab city established near 830 CE. Italian writer Sciascia (1961) interpreted the name Sambuca as being from Arabic **as-Sabuqah**, remote place, a dubious meaning I could not confirm. However, the town was supposedly originally named Zabut, for emir Zabut Al-Arab (ذابت العرب) (Livi-Bacci 1997:902). While Livi-Bacci does not explain the ancient combination of "Zabut" with "Sambuca," it is said that "Zabut" was added in 1863 to the old "Sambuca" in honor of the original founder Zabut Al-Arab (Wales & Sanger 2011).

If you believe the Molinari manufacturers of the beverage, the name for the liquor has no relationship to the plants (Hansen 2012), but to the Arabic word **sammūt (zammūt) صمت**, which means "silence" or "keep quiet." Is there a double meaning there?

Conclusion

The records of the names and their varied meanings suggest that several are derived from Aramaic שבבא originally loaned into the Middle East before it was recorded in the Book of Daniel of the Tanakh about 586-538 BCE. That this Aramaic term was derived earlier from Sanskrit **sambhūka** is not supported by closer linguistic examination. Among supporters of the flute translation for sambuca from the Latin **tibia -ae** [the shin-bone, tibia; a pipe, flute (originally made of a hollow bone)], Wharton (1889:177) went so far as to derive **sambucina** from combined Latin and Greek words. No linguistic support has been found for this theory, and the fact that both sambuca and tibia appear in the same old Latin documents mitigates against the idea. In fact, there is more historical support that sambuca may have come from the Lydian language, but that requires linguistic study which is difficult because it became extinct in ca. 1st century BCE.

The siege engine was described by Polybius (ca. 200 - 118 BCE), who called it the **σαμβύκη** or sambuca. The use of the same name and the fact that both were "ladder-like" suggests that the war device was named because of resemblance to the musical instrument. The fact that Polybius compared this engine with the musical instrument suggests that he knew both, and that the illustration from Smith (Figure 1D) may correctly depict at least its shape. About the same time, we have records connecting the word *sambucus* with plants. While there is no hard evidence to connect the plant with the musical instrument, the fact that by the time of Lucilius (ca. 160s - 103/2 BCE) and Pliny (23 - 79 CE) the term *sambucus* was used for the plants given that name today. That the same base word was used for the musical instrument and the plants at such early dates is circumstantial evidence that there had always been a connection between the two.

Just what association the שבבא originally had, if any, with the plants now called *sambucus* is speculation. However, over time the word *sambucus* began to be applied to plants. It is possible that it was originally from the Eurasian shrubs and trees that the instruments were constructed, as many have proposed. That interpretation, though, is based on the soft wood and hollow stems of the plants and not on more tangible evidence. Unless there is archaeological evidence located of the instrument made of the wood, we will probably never know for sure.

It was not until the middle 1500s when Arabic **sambuq** and Portuguese **zambouco** were recorded as a name of a sailing vessel. The connection between the name of the ship and other uses of similar words is tenuous. While **sambuq** is similar to sambuca, in English, the words are not the same in Arabic, زنبق vs. سميق. There are local variations of Arabic pronunciation and even letters that are confused, such as "g" (غ, **ghayn**) and "q" (ق, **qaaf**) (Austin & Felger 2008:569), and that may be the case with these. It is uncertain whether **sanbuq** and sambuca are variants

of an ancient loan-word in Arabic meaning “hollow,” an applicable description of the craft, but certainly not unique. Still, the shapes of the instrument, engine, and sailing ship are compelling (Figures 1C-E). Equally likely is that the ship was named for the physical similarity to the foreign instrument sambuca but that the word **sanbuq** was confused because this Arabic word for lily sounded similar. The most recent application of sambuca was for the liquor, first recorded about 1851. Although at least one modern manufacturer claims that none of the plant is used in the drink and that the name came from a completely different source, no linguistic or independent records have been found to support that view. Given the historical use of *sambucus* for making beverages, including elder-berry wine, the company’s claim is suspect.

Other manufacturers claim that the beverage originated in ancient monasteries and that *sambucus* flowers or fruits were and continue being used in the drink. With the existence of the **sambuchelli** in Italy and the place names there based on the word *sambuca*, it seems likely that there was once a connection with *sambucus* and an alcoholic drink.

A connection between the musical instrument, the plant, and the war engine appears firm. Distinct reasons caused people to associate these three to call them sambuca or *sambucus*. The relationship with the ship and liquor are more circumstantial, but persuasive. It is probable that all five totally distinct entities that were given these names came from a single original source – the musical instrument sambuca introduced from the Orient into the Middle East by or before the Fifth century BCE.

Acknowledgments

I thank Dorothea Bedigian for help understanding and transcribing the Armenian names and for helpful comments on a draft manuscript. Eckart Eich (Freie Universität, Berlin), Sal and Karen Al-Ashkar (Arizona-Sonora Desert Museum, Tucson), Ihsan Al-Shehbaz (Missouri Botanical Garden), and Valeria Volin (Storrs, CT) also kindly reviewed a draft of the manuscript and provided useful comments on German, Arabic, and Italian.

Literature Cited

- Academia de la Llingua Asturiana. 1995. Llingua asturiana = La lengua asturiana = La langue asturienne. *Collecha Asoleyada*; 9. 1997 reprint. Academia Llingua Asturiana, Uviéu, Spain.
- Aegineta, P. 1553. *Pauli Aeginetae Medici Opera*. J. Winter, transl. per Vuendelinum Rihelium, Argentorati, Venice, Italy.
- Agius, D.A. 2002. *In the Wake of the Dhow: the Arabian Gulf and Oman*. Garnet Publishing Ltd., Reading, U.K.
- Ai Monasteri. 2011. *La Nostra Storia*. www.monasteri.it/en/order/products.doc. (Accessed April 2012).
- Aldrovandi, U. 1600. *Liber Decimusquartus qui est de Pulveratricibus Domesticis. Ornithologiae tomus alter - 1600*. Transcribed by F. Civardi, translated by E. Corti, reviewed by R. Ricciardi. www.summagallicana.it/Aldrogallus/inglese/243%20ingl.htm. (Accessed April 2, 2012).
- Alonso, D. 1946. El sauco entre Galicia y Asturias (nombre y superstición). *Revista de Dialectología y Tradiciones Populares* 2:3-32.
- Alvar, M. 1957. Derivados de sabucus en la toponimia peninsular. *Revista de filología española* 41:21-45.
- Anderson, H.C. 1845. *The Little Elder-Tree Mother*. http://hca.gilead.org.il/li_elder.html. (Accessed April 2012).
- Atzei, A.D., S. Orioni, & R. Sotgiu. 1991. Contributo alla conoscenza degli usi etnobotanici nella Gallura (Sardegna). *Bollettino della Società Sarda di Scienze Naturali* 28:137-177.
- Austin, D.F. 2004. *Florida Ethnobotany*. CRC Press, Boca Raton, Florida.
- Austin, D.F. & R.S. Felger. 2008. Sichuan peppers and the etymology of *Fagara* (Rutaceae). *Economic Botany* 62(4):567-573.
- Azienda Speciale Silvo Pastorale frl Commune di Troina. 2010. www.silvopastoraletroina.it/home/index.php. (Accessed April 2012).
- Bacchetta, G., R. Guarino, C. Pontecorvo, & P. Soddu. 2007. A survey of the botanical place names of the Iglesiente area (South West Sardinia). *Botanica Lithuanica* 13(3):139-157.
- Ball, A. 1997. *Catholic Traditions in the Garden*. Our Sunday Visitor Publishing, Huntington, Indiana.
- Bauhin, C. 1623. *Pinax Theatri botanici Caspari Bauhini ... sive index in Theophrasti, Dioscoridis, Plinii et botanicorum qui à seculo scripserunt opera: plantarum circiter sex millium ab ipsis exhibitarum nomina cum earundem synonymiis & differentiis methodicè secundum earum & genera & species proponens. Opus XL. annorum hactenus non editum summoperè expetitum & ad auctores intelligendos plurimum faciens ... Ludovici Regis, Basileae, Switzerland*.
- Bedevian, A.K. 1936. *Illustrated Polyglottic Dictionary of Plant Names in Latin, Arabic, Armenian, English, French, German, Italian, and Turkish Languages Including Economic, Medicinal, Poisonous and Ornamental plants, and Common Weeds*. Argus & Papiian Presses, Cairo.

- Beith, M. 1995. *Healing Threads: Traditional medicines of the Highlands and Islands*. Polygon, Edinburgh, U.K.
- Benfey, T. 1998. *A Sanskrit-English Dictionary: With references to the best edition of Sanskrit author and etymologies and comparisons of cognate words chiefly in Greek, Latin, Gothic, and Anglo-Saxon*. Asian Educational Services, New Delhi, India.
- Blažek, V. 2002. The “Beech”—argument: State-of-the-Art. *Historische Sprachforschung* 115:190-217.
- Böhtlingk, O. & R. Roth. 1855. *Grosses Petersburger Wörterbuch*. St. Petersburg, Russia. www.sanskrit-lexicon.uni-koeln.de/scans/PWGSscan/disp2/index.php. (Accessed March 2012).
- Bolli, R. 1994. Revision of the genus *Sambucus*. *Dissertationes Botanicae* 223. J. Cramer, Berlin.
- Bosworth, J. & T.N. Toller. 1898. *An Anglo-Saxon Dictionary, Based on the Manuscript Collections of the Late Joseph Bosworth*. Edited and enlarged by T. Northcote Toller. Clarendon Press, Oxford, U.K.
- Boyle, W.R.A. 1863. *The inspiration of the Book of Daniel; and Other portions of holy scripture*. Rivingtons, Waterloo Place, London.
- Bradley, R. 2007. *The prehistory of Britain and Ireland*. Cambridge University Press, New York, New York.
- Brasavola, A.M. 1537. *Examen Omnium Simplicium Medicamentorum: Addita sunt in super Aristotelis problemata*. Sub scuto Coloniensi, apud Ioannem et Franciscum Frellaeos, fratres, Lugduni, France.
- Braun, J. 2002. *Music in Ancient Israel/Palestine: Archaeological, written, and comparative sources Bible in its world*. Wm. B. Eerdmans Publishing, Grand Rapids, Michigan.
- Brockett, J.T. 1829. *A Glossary of North Country Words, in Use: With their etymology, and affinity to other languages; and occasional notices of local customs and popular superstitions*. Emerson Charnley, Bigg-Market; and Baldwin and Cradock, London.
- Brunfels, O. 1543. *Onomasticon Seu Lexicon Medicinae Simplicis: iuxta Dioscoridis historiam*. Ioannes Schottus, Argentorati, France.
- Burningham, N. 2007. Baghla, Ghanja and Kotia: Distinguishing the Baghla from the Suri Ghanja and the Indian Kotia. *International Journal of Nautical Archaeology* 36(1):91-111.
- Burns, R. 2008. Rain and dust. *Studia Mythologica Slavica* 11:217-236.
- Burrow, T.A. 1984. *Dravidian Etymological Dictionary*. 2nd ed. Clarendon Press, Oxford, U.K.
- Burrow, T. & M.B. Emeneau. 1961. *A Dravidian Etymological Dictionary*. Clarendon Press, Oxford, U.K.
- Burton, R. F. 1854. Journey to Medina, with route from Yambu. *Journal of the Royal Geographic Society of London* 24:208-225.
- Савушкина И.Г., Леонов В.В. 2008. Перспективные Представители Семейства Caprifoliaceae A.L. Jussieu Для Озеленения В Условиях Предгорного Крыма. Биология, химия Том 22(61)3:130-139. http://science.crimea.edu/zapiski/2009/biology_chemistry/uch_22_3b/019_savushkina.pdf [Savushkina I. G. and V. V. Leonov. 2009. Prospective members of the family Caprifoliaceae A.L. Jussieu to gardening in the foothill of Crimea. *Biology, Chemistry* 22(61)3:130-139.]
- Cameron, J. 1900. *The Gaelic names of plants (Scottish, Irish and Manx)*. J. Mackay, Glasgow, U.K.
- Campbell, I.C. 1995. The lanteen sail in world history. *Journal of World History* 6(1):2-23.
- Campbell, L. 1990. Indo-European and Uralic tree names. *Diachronica* 7(2):149-180.
- Carr, D.W. 1991. Ecstasy in the wilderness: Pier Francesco Mola's "The Vision of Saint Bruno." *The J. Paul Getty Museum Journal* 19:99-126.
- Carpenter, S., M. Rigaud, M. Barile, T.J. Priest, L. Perez, & J.B. Ferguson. 1998. *An Interlinear Transliteration and English Translation of Portions of the Ebers Papyrus Possibly Having to do with Diabetes Mellitus*. Bard College, Annandale-on-Hudson, New York.
- Cavalieri, D., P.E. McGovern, D.L. Hartl, R. Mortimer, & M. Polsinelli. 2003. Evidence for *S. cerevisiae* fermentation in ancient wine. *Journal of Molecular Evolution* 57 (Supplement 1): S226-S232.
- Cawley, K. 2011. *Latin Dictionary and Grammar Aid*. University of Notre Dame. <http://archives.nd.edu/latgramm.htm>. (Accessed April 2012).
- Ceulemans, A.-E. 2002. Instruments real and imaginary: Aaron's interpretation of Isidore and an illustrated copy of the 'Toscanello.' *Early Music History* 21:1-35.
- Champier, S. 1533. *Hortus Gallicus, Pro Gallis in Gallia scriptus, ueruentamen non minus Italis, Germanis, & His-*

- pa nis, qua Gallis ne cessarius.* In aedibus Melchioris et Gasparis Trechsel fratrum, Lugduni, France.
- Chantraine, P. 1968. *Dictionnaire Étymologique de la Langue Grecque; Histoire des mots.* Centre National de la Recherche Scientifique, Paris.
- Cioranescu, A. 2001. *Dicționarul etimologic al limbii române.* Editura Saeculum I.O., București, Romania.
- Clutton, D.W. 2003. Liqueurs & specialty products. Pp. 309-334 in *Fermented Beverage Production.* Edited by A.G.H. Lea & J.R. Piggott. Kluwer Academic/Plenum Publishers, New York, New York.
- Colgan, N. 1911. Part 4. Gaelic plant and animal names, and associated folk-lore. *Proceedings of the Royal Irish Academy.* Section C: Archaeology, Celtic Studies, History, Linguistics, Literature 31(4):1-30.
- Corriente, F. 1997. *A Dictionary of Andalusí Arabic.* Handbuch der Orientalistik 29. E.J. Brill, Leiden, Netherlands.
- Coverdale, M. 1535. *Bible.* Merten de Keyser, Antwerp, Belgium.
- Črepinšek, Z. & C. Zrnec. 2005. Petinpetdeset let fenoloskih opazovanj v Sloveniji, 1951-2005. *Acta agriculturæ Slovenica* 85:283-297.
- Daniel. 1382. iii. 5 in The Wycliffite Bible (early version). http://wesley.nnu.edu/fileadmin/imported_site/biblical_studies/wycliffe/Dan.txt. (Accessed April 2012)
- Davies, H. 1813. *Welsh Botany: A systematic catalogue of the native plants of the Isle of Anglesey.* 2 Volumes. Printed for the author by W. Marchant, London.
- de Castanheda, F.L. 1582 *The First Booke of the Historie of the Discoverie and Conquest of the East Indias.* Translated by Nicholas Lichefield. 1st edition. Volume 1. Thomas East, London.
- de Castanheda, F.L. 1833. *Historia do Descobrimento e Conquista da India pelos Portugueses, Volume 1.* Typographia Rollandiana, Lisboa, Portugal.
- de Cleene, M. & M.C. Lejeune. 2002. *Compendium of Symbolic and Ritual Plants in Europe.* Man & Culture Publishers, Ghent, Belgium.
- de Nebrija, A. 1520. *Dictionarium Aelii Antonii Nebrissensis ... in domo Ioannis Varele Salmanticensis,* Antwerpae, Belgium.
- Derenbourg, H. & J. Morris, Jr. 1887. The Greek words in the Book of Daniel. *Hebraica* 4(1):7-13.
- Desprez, P.C.S. & R. Williams 1865. Daniel; or, the Apocalypse of the Old Testament. Williams and Norgate, London.
- Di Fazio, S., L. Laudari & G. Modica. 2009. Heritage itineraries and tourism valorisation of the foresty landscape in the Serra san Bruno district (Calabria, Italy). In: G. Giametta, ed. *Technology and management to ensure sustainable agriculture, agro-systems, forestry and safety.* XXXIII CIOSTA-CIGR V Conference 2009, Reggio Calabria, Italy.
- Diccionario de la Lengua Española. 2011. *Real Academia Española.* <http://buscon.rae.es/>
- Dickinson, W. 1880. A glossary of words and phrases pertaining to the dialect of Cumberland. *English Dialect Society* 7(1), no. 20, 24. London.
- Dicts.info. 2003-2011. *English to Icelandic Dictionary.* www.dicts.info/.
- Dioscorides. 1829. De materia medica libri quinque, volumes 25 & 26 of *Medicorum Graecorum Opera Quae Exstant.* Edited by K.P.J. Sprengel. In officina Car. Cnoblochii, Lipsae, Germany.
- Dixon-Kennedy, M. 1998. *Encyclopedia of Russian and Slavic Myth and Legend.* ABC-CLIO, Oxford, U.K.
- Dobelis, I.N. 1986. *Magic and Medicine of Plants.* Reader's Digest Association, Pleasantville, New York.
- Dodoens, R. 1563. *Crüjde boeck ...* Jan vander Loe, Antwerpen, Belgium.
- Dorsten, T. 1540. *Botanicon, continente Herbarum, aliorumque simplicium, quorum usus in medicinis est...* *Biblioteca digital Dioscórides.* Volume 746 of Diapositivas (Biblioteca Histórica UCM). Christianus Egenolphus, Francofurti, Germany.
- Drury, S. 1985. Herbal remedies for livestock in seventeenth and eighteenth century England: Some examples. *Folklore* 96(2):243-247.
- Ellis, P.B. 1997. The Fabrication of 'Celtic' Astrology. *The Astrological Journal* 39(4).
- Estienne, R. 1543. *Dictionarium latinogallicum...* R. Estienne, Paris.
- Farmer, H.G. 2004. Chapter 58. Music (continued). Pp. 1144-1178 in *A History of Muslim Philosophy. With short accounts of other Disciplines and the Modern Renaissance in the Muslim Lands.* Edited by M.M. Sharif. www.muslimphilosophy.com/hmp/index.html.

- Fernald, M.L. 1950. *Gray's Manual of Botany*, ed. 8. American Book Co., New York, New York.
- Fuchs, L. 1542. *De historia stirpium commentarii insignes*. In officina Isingriniana, Basileae, Switzerland.
- Galpin, F.W. 1906-1907. The sackbut, its evolution and history. *Proceedings of the Musical Association*, 33rd session: 1-25.
- Gesenius, W. 1836. *A Hebrew and English Lexicon of the Old Testament: Including the Biblical Chaldee*. Edward Robinson, translator. Crocker and Brewster, Boston.
- Gilbert, S.M. 1997. Mysteries of the hyphen. Poetry, pasta and identify policies. Pp. 49-61 in *Beyond the Godfather: Italian American Writers on the Real Italian American Experience*. Edited by A.K. Ciongoli & J. Parini. University Presses of New England, Hanover, New Hampshire.
- Gliwa, B. 2008. Litauisch šėivamedis, šėivą trinti, Lettisch saiva, Finnisch käävi. *Baltu filologija* XVII(1/2): 41-59.
- Gliwa, B. & M. Stančikaitė. 2008. Dėl šėivamedžio (*Sambucus* spp.) statuso Lietuvoje [On the elder-berry (*Sambucus* spp.) status in Lithuania]. *Dendrologia Lithuaniae* 8.
- Gotfredsen, G. 2011. Liber Herbarum II. www.liberherbarum.com/XPn0093Sn0263.htm. (Accessed April 2012).
- Grieve, M. 1931. *A Modern Herbal*. Dover, New York.
- Grimm, J. 1833. *Teutonic Mythology, Volume 2*. Stallybrass, J.S., translator of Deutsche Mythologie. 2004 reprint of 1966 edition. Courier Dover Publications, Mineola, New York.
- Grimm, J. & W. Grimm. 1812. *Frau Holle*. www.pitt.edu/~dash/grimm024a.html. (Accessed April 2012).
- Grzywacz, Z. 2010. *Traditional Kazakh Medicine in Change*. Turkic Studies 2. Section of Turkic, Mongolian and Korean Studies, Adam Mickiewicz University, Poznań, Poland.
- Gulick, C.B. 1928. *The Deipnosophistae of Athenaeus. 1927-1941*. published in Vol. II of the Loeb Classical Library. Harvard University Press, Cambridge, Massachusetts.
- Hansen, V. 2012. Sambuca. In *Blackbook Cooking*. <http://www.blackbookcooking.com/sambucca>. (Accessed May, 2012).
- Hebrew Bible. www.fourmilab.ch/etexts/www/hebrew/Bible/. (Accessed April 2012).
- Hendriks, L. 1889. *The London Charterhouse: Its monks and its martyrs, with a short account of the English Carthusians after the dissolution*. K. Paul, Trench & co., London.
- Herzog, J.K. 1860. *The Protestant Theological and Ecclesiastical Encyclopedia*, Volume 2. Translated by J.H.A. Bomberger. Lindsay & Blakiston, Philadelphia, Pennsylvania.
- Hippocrates & J. Ilberg. 1894. *Hippocrates Opera quae feruntur omnia*, Volume 1. B.G. Tevbnner, Lipsiae, Germany.
- Hoffmann, A.H. 1830. *Fundgruben für Geschichte deutscher Sprache und Literatur*, Volume 1. Grass, Barth und Comf., Breslau, Germany.
- Hordern, J.H. 2003. Gnesippus and the rivals of Aristophanes. *The Classical Quarterly*, n.s. 53(2):608-613.
- Hubschmid, J. 1963 Wörter mit s-/z-, ts- im Romanischen, baskischen und in anderen Sprachen. *Revue de Linguistique Romane* 27:380-381.
- Hyllested, A. 2011. *The mysterious elder: Common traits in Indo-European names for Sambucus nigra and Viburnum opulus*. Abstracts, IE Conference, UCLA Program in Indo-European Studies. www.humnet.ucla.edu/pies/pdfs/IEC/IEC22/hyllested_a_2010f.pdf.
- Janick, J. 2003. Herbs: The connection between horticulture and medicine. *HortTechnology* 13(2):229-238.
- Kelly, J. 1866. *Manx Dictionary*. Edited by A. Cregeen, J.I. Mosley, W. Gill, & J.T. Clarke. Printed for the Manx Society, Douglas.
- Köhler, F.E. 1897. *Köhler's Medizinal-Pflanzen in naturgetreuen Abbildungen mit kurz erläuterndem Texte : Atlas zur Pharmacopoea germanica*. Fr. Eugen Köhler, Gera-Untermhaus, Germany.
- Kohn, R.L. & R. Moore. 2007. *A portable God: The origin of Judaism and Christianity*. Rowman & Littlefield, Lanham, Maryland.
- Krishna Murthy, K. 1987. *Glimpses of Art, Architecture, and Buddhist Literature in Ancient India*. Abhinav Publications, New Delhi.
- Kültür, Ş. 2007. Medicinal plants used in Kirklareli Province (Turkey). *Journal of Ethnopharmacology* 111:341-364.
- Lafont, A.M. 1984. *Herbal Folklore*. Badger Books, Bideford, U.K.
- Lancelot, C. 1810. *The primitives of the Greek tongue*. T. Nugent, translator. F. Wingrave, London.
- Landels, J.G. 1966. Ship-shape and sambuca-fashion. *Journal of Hellenic Studies* 86:69-77.

- Le Gonidec, J.F.M.M.A. 1821. *Dictionnaire celto-breton ou breton-français*. François Trémeau et Cie, Angoulême, France.
- LifeinItaly.com. 2011. Sambuca. www.lifeinitaly.com/wines/liquors-best.asp. (Accessed April 2012)
- Lindsay, W.M. 1894. *The Latin language: An historical account of Latin sounds, stems and flexions*. Clarendon Press, Oxford, U.K.
- Lindsay, W.M. 1911. *Isidori Hispalensis episcopi etymologiarum sive originum*. Clarendon Press, Oxford, U.K.
- Linguist List 2011. *The Linguist List*. International Linguistics Community Online. <http://linguistlist.org/forms/langs/find-a-language-or-family.cfm>. (Accessed April 2012).
- Linnaeus, C. 1753. *Species Plantarum*, Facsimile edition with introduction by W.T. Stearn, 1957 edition. Ray Society, London.
- Livi-Bacci, M. 1997. Review: Schneider, J.C. and P.T. Schneider. 1996. Festival of the Poor: Fertility decline and the ideology of class in Sicily, 1860-1980. *Population and Development Review* 23(4):902-905.
- Logos Group. 2008. *The dictionary*. www.logosdictionary.org/pls/dictionary/new_dictionary.index_p. (Accessed April 2012).
- Lucas, A.T. 1963. The sacred trees of Island. *Journal of the Cork Archaeological and Historical Society*. 67(207 & 208):16-54.
- Lucciano, M. 2008. *Socrate paradigme ethique pour les penseurs latins*. Camenulae no. 2. www.paris-sorbonne.fr/IMG/pdf/Lucciano.pdf
- Lysaght, P. 1974-76. Irish Banshee traditions: A preliminary survey. *Béaloides* 42/44:94-119.
- Malten, T., P. Scharf, M.D. Hyman, & J. Funderburk. 2009. *Cologne Digital Sanskrit Dictionaries*. Universität zu Köln, Institute für Indologie und Tamilistik. www.sanskrit-lexicon.uni-koeln.de/. (Accessed April 2012).
- Marisa, I., R. Motto, & S. Mazzoleni. 2010. Ethnobotanical and phytomedicinal knowledge in a long-history protected area, the Abruzzo, Lazio and Molise National Park (Italian Apennines). *Journal of Ethnopharmacology* 127:379-395.
- Martsoo, S. n.d. Ravimitest 18. ja 19. sajandi eestikeelses kalendrikirjanduses [Medicine in the 18th and 19th Estonian almanacs]. *Mäetagused* 36:7-34. www.folklore.ee/Tagused/nr36/martsoo.pdf. (Accessed April 2012).
- McGovern, P.E. 2003. *Ancient Wine: The search for the origins of viticulture*. Princeton University Press, Princeton, New Jersey.
- McGovern, P.E., J. Zhang, J. Tang, Z. Zhang, G.R. Hall, R.A. Moreau, A. Nuñez, E.D. Butrym, M.P. Richards, C.S. Wwant, G. Cheng, Z. Zhao, & C. Wang. 2004. Fermented beverages of pre- and proto-historic China. *Proceedings of the National Academy of Sciences* 101(51):17593-17598.
- Melchiori, G.B. 1817. *Vocabolario Bresciano-Italiano*. Dalla Tipografia Franzoni e socio, Brescia, Italy.
- Miller, N.F. 2008. Sweeter than wine? The use of the grape in early western Asia. *Antiquity* 82:937-946.
- Miraldi, E., S. Ferri, & V. Mostaghimi. 2001. Botanical drugs and preparations in the traditional medicine of West Azerbaijan (Iran). *Journal of Ethnopharmacology* 75:77-97.
- Mitchell, T.C. 1992. The music of the old testament reconsidered. *Palestine Exploration Quarterly* 124:124-143.
- Mitchell, T.C. & R. Joyce. 1965. The musical instruments in Nebuchadnezzar's orchestra. Pp. 19-27 in *Notes on Some Problems in the Book of Daniel*. Edited by D.J. Wiseman. The Tyndale Press, London.
- Moerman, D.E. 1998. *Native American Ethnobotany*. Timber Press, Inc., Portland, Oregon.
- Molinari Italia. 2011. Sambuca. www.molinari.it/english/la-sambuca.html. (Accessed July 19, 2011).
- Monier-Williams 2008. *Monier Williams Sanskrit-English Dictionary*. www.sanskrit-lexicon.uni-koeln.de/monier/. (Accessed March 29, 2012).
- Mossberg, B. & L. Stenberg. 1994. *Gyldendals Store Nordiske Flora*. Gyldendal Norsk Forlag, Oslo.
- Nedelcheva, A. & Y. Dogan. 2011. Usage of plants for weather and climate forecasting in Bulgarian folk traditions. *Indian Journal of Traditional Knowledge* 19(1):91-95.
- Ó Giolláin, D. 1984. The leipreachán and fairies, dwarfs and the household familiar: a comparative study. *Béaloides* 52:75-150.
- Ó Giolláin, D. 1997. The fairy belief and official religion in Ireland. Pp. 199-214 in *The Good People: New folklore essays*. Edited by P. Narváez. University of Kentucky Press, Lexington, Kentucky.
- OED 2011. *Oxford English Dictionary*. Oxford University Press, Oxford, U.K.

- Owen, J. 2011. Earliest known winery found in Armenian cave. *National Geographic News*. <http://news.nationalgeographic.com/news/2011/01/110111-oldest-wine-press-making-winery-armenia-science-ucla/>. (Accessed April 2012).
- Paliga, S. 2003. *Influențe romane și preromane în limbile slave de sud*. http://egg.mnir.ro/pdf/Paliga_InflRomane.pdf. (Accessed April 2012).
- Péché, V. 2002. Tibicinae, fidicinae, citharistriae, psaltriaae : femmes musiciennes de la comédie romaine. *Revue belge de philologie et d'histoire* 80(80-1):133-157.
- Pictet, A. 1859. *Les Origines Indo-Européennes, Ou, Les Aryas Primitifs: Essai de paléontologie linguistique. Volume 1*. J. Cherbuliez, Paris.
- Pieroni, A., C.L. Quave, S. Nebel, & M. Heinrich. 2002. Ethnopharmacy of the ethnic Albanians (Arbrëshë) of northern Basilicata, Italy. *Fitoterapia* 73:217-241.
- Pliny the Elder, J. Camers, S. Gelen, & J.B. Herold. 1554. *C. Plinii Secundi Historiae Mundi Libri XXXVII*. Per Hier. Frobenium, et Nic. Episcopium, Basileae, Switzerland.
- Ploetz, K.L. 2000. *An Ethnobotanical Study of Wild Herb Use in Bulgaria*. MS thesis, Michigan Technological University.
- Pop, O. 2004. The importance of ethnobotanical survey and medicinal plant collection monitoring for biodiversity conservation in Piatra Craiului National Park (Romania). *Medicinal Plant Conservation* 9/10:62-67.
- Postolache, G., A. Teleuță, A. Miron, & V. Covali. 2006. Conservarea diversității vegetației din lunca prutului. *Mediul Ambient* 5(29):26-30.
- Prendergast, H.D.V. & F. Dennis 1997. Superior merits of a troublesome weed -- elder in the 1990s. *British Wildlife* 8:281-286.
- Priscianese, F. 1540. *De Primi Principii Della Lingua Romana*. Bartolomeo Zanetti da Brescia, Venizia, Italy.
- Quattrocchi, U. 1999. *CRC World Dictionary of Plant Names. Common Names, Scientific Names, Eponyms, Synonyms, and Etymology*. CRC Press LLC, Boca Raton, Florida.
- Quave, C.L. & A. Pieroni. 2001. Ritual healing in Arbrëshë Albanian and Italian communities of Lucania, Southern Italy. *Journal of Folklore Research* 42(1):57-97.
- Riess, E. 1895. On ancient superstition. *Transactions of the American Philological Association* 26:40-55.
- Rigat, M., M.A. Bonet, S. Garcia, T. Garnatje, & J. Vallès. 2007. Studies on pharmaceutical ethnobotany in the high river Ter valley (Pyrennes, Catalonia, Iberian Peninsula). *Journal of Ethnopharmacology* 113:267-277.
- Ruel, J. 1537. *De Natura Stirpium Libri Tres ... In Officina Frobeniana [per Hieronymum Frobenium et Nicolaum Episcopium]*. Basileae, Switzerland.
- Ruel, J. 1552. *Pedanii Dioscoridis Anazarbei, De Medicinali Materia Libri Sex*. Apud Balthazarem Arnolletum, Lugduni, France.
- Sambucus nigra*. 2012. In *Wikipedia*. http://commons.wikimedia.org/wiki/Sambucus_nigra. (Accessed May 9, 2012).
- Sanders, L.J. 2002. From Thebes to Toronto and the 21st century: an incredible journey. *Diabetes Spectrum* 15(1):56-60.
- Schaechter, M. 1987. Yiddish botanical terminology: a mirror of changing geographic, social, and cultural conditions. *International Journal of the Sociology of Language* 67:57-82.
- Schlesinger, K. 1910. *Instruments of the Modern Orchestra & Early Records of the Precursors of the Violin Family*. William Reeves, London.
- Sciascia, L. 1961. *Pirandello e la Sicilia*. Caltanissetta, Rome.
- Serapion, Averroës, A.B.M. ibn Z. Rāzī, Galenius, O. Brunfels, G. Geldenhauer, & G. Ulricher. 1531. *Serapionis Arabis De simplicibus medicinis opus praeclarum & ingens*. Excudebat Georgivs Ulricher, Argentorati, France.
- Sharkey, O. 1985. *Old Days, Old Ways*. O'Brien Press, Dublin.
- Simon, A.L., H. Johnson, & J. Jeffs. 1965. *Wine and Food* 125-128. Simpkin Marshall, Boston, Massachusetts.
- Sinclair, A.T. 1908. Gypsy and Oriental musical instruments. *Journal of American Folklore* 21(81):205-221.
- Smith, W. 1875. *A Dictionary of Greek and Roman Antiquities*, John Murray, London.
- Southern, M. & A.G. Vaughn. 1997. Where have all the nasals gone? mC > CC in northern Semitic. *Journal of Semitic Studies* 62(2):263-282.
- Stevenson, W. 2011. The identity of late Barbarians: Goths and wine. Pp. 358-369 in *The Barbarians of Ancient*

- Europe: *Realities and interactions*. Edited by L. Bonfante. Cambridge University Press, New York, New York.
- Stokes, W. 1897. A Celtic leechbook. *Zeitschrift für Celtische Philologie* 1(1):17–25.
- Strabo. 1924. *The Geography of Strabo*. Edited and translated by H.L. Jones. Harvard University Press, Cambridge, Massachusetts.
- Tagarelli, G., A. Tagarelli, & A. Piro. 2010. Folk medicine used to heal malaria in Calabria (southern Italy). *Journal of Ethnobiology and Ethnomedicine* 6:27.
- Thayer, B. 2010. *Lacus Curtius: Into the Roman world*. <http://penelope.uchicago.edu/Thayer/E/Roman/home.html>. (Accessed April 12, 2012).
- Theophrastus. 1916. *Enquiry Into Plants and Minor Works on Odoûrs and Weather Signs*. Translated by A. Hort. Volumes 70 & 79 of Loeb classical library. William Heinemann, London.
- Teirlinck, I. 1892. *Plantlore, Een Eerste Hoofdstuk: De plant, een levend, beziel, handelend wezen. Volume 8 of Uitgaven van het Taalverbond*. Vuylsteke, Gent, Belgium.
- Tillyard, H.H.W. 1907. Instrumental music in the Roman Age. *Journal of Hellenic Studies* 27:160-169.
- Torrentinus, H., A. de Villa Dei, & Kempo. 1509. *Commentaria Clarissima in Secundam Partem Doctrinalis Alexandri*. Anshelm, Phorcae, Germany.
- Totelin, L.M.V. 2009. *Hippocratic Recipes: Oral and written transmission of pharmacological knowledge in fifth- and fourth-century Greece*. Volume 34 of Studies in ancient medicine. Brill, Leiden, Netherlands.
- Trachtenberg, J. 2004. *Jewish Magic and Superstition: A study in folk religion*, Translated by M. Idel. Reprint of 1939 edition. University of Pennsylvania Press, Philadelphia, Pennsylvania.
- Tylor, E.B. 1874. *Primitive Culture: Researches into the development of mythology, philosophy, religion, language, art and customs*, Volume 2. H. Holt and Co., New York, New York.
- Valamoti, S.M., M. Mangafa, Ch. Koukouli-Chrysanthaki, & D. Malamidou. 2007. Grape-pressings from northern Greece: the earliest wine in the Aegean? *Antiquity* 81: 54-61.
- van Schulenburg, W. 1886. Das Spreewaldhaus. Pp. 123-144 in *Zeitschrift für Ethnologie* Vol. 18. Edited by A. Bastian, R. Hartmann, R. Virchow, & A. Voss. Verlag von A. Asher & Co., Berlin.
- Vercoullie, J. 1925. *Beknopt Etymologisch Woordenboek der Nederlandsche Taal*. 'S-Gravenhage, Martinus Nijhoff, Amsterdam.
- Vickery, R. 1995. *A Dictionary of Plant-Lore*. Oxford University Press, Oxford, U.K.
- Wales, J. & L. Sanger. 2011. *Wikipedia*. <http://it.wikipedia.org/wiki/>. (Accessed April 12, 2012).
- Waller, P.J., G. Bernes, S.M. Thamsborg, A. Sukura, S.H. Richter, K. Ingebrigtsen, & J. Höglund. 2001. Plants as de-worming agents of livestock in the Nordic Countries: historical perspective, popular beliefs and prospects for the future. *Acta Veterinaria Scandinavica* 42:31-44.
- Webster. 2011. *Webster's Online Dictionary with Multilingual Thesaurus Translation*. www.websters-online-dictionary.org/. (Accessed April 12, 2012).
- Weeks, A., ed. 2007. Paracelsus (Theophrastus Bombastus von Hohenheim, 1493-1541): *Essential theoretical writings*, Volume 5. Aries book series. Brill, Leiden, Netherlands.
- Whitaker, W. 1993-2007. *Words*. Latin to English. <http://lysy2.archives.nd.edu/cgi-bin/WORDS.EXE>. (Accessed April 12, 2012).
- Williams, C.F.A. 1897-1898. *Proceedings of the Musical Association*, 24th Session. Pp. 125-144.
- Wilson, W. 1868. *The Writings of Clement of Alexandria*. T&T Clark, Edinburgh, U.K.
- Witczak, K.T. 1992. Indo-European *ǵ2kʷéwā 'elder, *Sambucus nigra* L.' and its Baltic descendants. *Linguistica Baltica* 1:201-211.
- Wulstan, D. 1973. The sounding of the shofar. *The Galpin Society Journal* 26:29-46.
- Yajima, H. 1977. Maritime activities of the Arab Gulf people and the Indian Ocean world in the eleventh and twelfth centuries. *Journal of Asian and African Studies* 14:195-208.
- Yates, J. 1875. Sambuca. p. 1007 in *A Dictionary of Greek and Roman Antiquities*. Edited by W. Smith. John Murray, London.
- Yule, H. & A.C. Burnell. 1903. *Hobson-Jobson: A glossary of colloquial Anglo-Indian words and phrases, and of kindred terms, etymological, historical, geographical and discursive*. W. Crooke, ed. J. Murray, London.
- Zohary, D., & M. Hopf. 1993. *Domestication of Plants in the Old World*, 2nd. ed. Clarendon Press, Oxford, U.K.

