

MAPPING THE LANGUAGE OF SPICES

A CORPUS-BASED, PHILOLOGICAL STUDY ON THE WORDS OF THE SPICE DOMAIN

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Doctor of Philosophy

The Hong Kong Polytechnic University

— INITIAL SUBMISSION FOR EXAMINATION PURPOSE —

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↓ Hong Kong

The Hong Kong Polytechnic University
Department of Chinese and Bilingual Studies

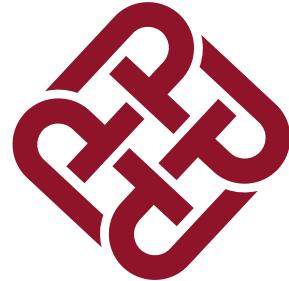
MAPPING THE LANGUAGE OF SPICES



A CORPUS-BASED, PHILOLOGICAL STUDY ON THE WORDS OF THE SPICE DOMAIN

by

GÁBOR PARTI



*A thesis submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy*

— INITIAL SUBMISSION FOR EXAMINATION PURPOSE —

August, 2022

Certificate of originality

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Abstract

The majority of existing literature on spices is found in the areas of gastronomy, botany, and history. This study investigates spices on a linguistic level and aims to be a comprehensive linguistic account on the items of the spice trade. Some of these dried plant matter were highly desired at certain points in history, due to their attractive aroma and medicinal value, thus they were ideal products of trade early on. Cultural contact and exchange, and the introduction of new cultural items begets situations of language contact and linguistic acculturation, and so in the case of spices, we not only have a set of items that traveled around the world, but also a set of names. This domain is very rich in loanwords and *Wanderwörter*, but also supplies us with a myriad of cases where spice names are conventional innovations. To make it more interesting, the thesis compares English, Chinese, and Arabic, languages that represent major powers in the spice trade at different times. The thesis has two main parts. Part one identifies the spices under scope with a brief discussion on their botany and history, followed by a presentation of the geographic and linguistic diffusion of spices and their names. Basically, we track and explain word origins and subsequent spread by tracing the materials and the propagation of the accompanying *Wanderwort*. This part relies on philological literature, and tools from historical linguistics, such as etymological research. Part two examines the language of spices, the terminology and nomenclature related to the spice domain from linguistic-cognitive perspectives. On one hand, it is a systematic investigation on how humans name spices: what are the mechanism and motivations behind the naming principles, and how this relates to the salient sensory features of the products (strong gustatory, olfactory, or visual stimuli). On the other hand, it looks at to what degree spice terminology is used in daily language; which is proposed to be a gauge of a spice's embeddedness in a culture. This part relies on corpora and corpus linguistic tools. Conclusions are made on the connections between the physical properties of the spices, their patterns of diffusion, and the prototypical spices and their effect of naming principles. Besides being a novel and original approach to research and categorize spices from a linguistic point of view, this study offers new insights to our knowledge about (wandering) loanwords, and the effect of the highly sensory nature of spices in the naming process when adopted by a community. It is also intended to be a useful working database for future research, and aims to dispel some of the chaos and confusion surrounding spice names.

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Glossary

Ayurveda	traditional Indian medicine 35
cultigen	a cultivated plant species with no known wild ancestor 103
cultivar	a plant variety that has arisen or persists only in cultivation 77
materia medica	an encyclopedic treatise of medicinal materials obtained from plants, animals, and minerals 20
phytonym	a plant name (non-taxonomic) 21
Wanderwort	a word borrowed from one language to another across a broad geographical area often as a result of trade or adoption of newly introduced items or cultural practices ¹ 18

¹Merriam-Webster, n.d.

Acronyms

AHD	American Heritage Dictionary of the English Language 19
BCGM	Bencao Gangmu 27
CAD	Chicago Assyrian Dictionary 49
CEC	Cambridge English-Chinese (Traditional) Dictionary 21
CTP	Chinese Text Project 27
EI2	Encyclopaedia of Islam, Second Edition 70
EJ	Encyclopaedia Judaica 67
FAOSTAT	UN Food and Agriculture Organization Corporate Statistical Database 60
FoC	Flora of China 20
HW	Hans-Wehr: A Dictionary of Modern Written Arabic 69
KJV	King James Version of the Bible 18
LSJ	Liddel-Scott-Jones: A Greek-English Lexicon 47
MC	Middle Chinese 27
NFCM	Nanfang Caomu Zhuang 50
NRSV	New Revised Standard Version of the Bible 18
NS	Nişanyan Sözlük 49
OC	Old Chinese 72
OED	Oxford English Dictionary 11
PIE	Proto-Indo-European 24
POWO	Plants of The World Online 5
SEAlang	Southeast Asian Languages Library 45
TCM	Traditional Chinese Medicine 14
TLFi	Trésor de la Langue Française informatisé 65
TPGJ	Taiping Guangji 27
WFO	World Flora Online 57
YYZZ	Youyang Zazu 27

Symbols and Notation

*	reconstructed form
<	developed from
>	developed into
<?	uncertain development
†	obsolete
a.	<i>ante</i> , attested before the year
ca.	<i>circa</i> , around the year/century
<i>fragrance</i>	italic: lexical item, a word or phrase
[fragrance]	square brackets: gloss, literal meaning
‘fragrance’	single quotation marks: meaning, sense
FRAGRANCE	small capitals: a concept

The Spices

AFTER outlining the background and methods for this study, I will now introduce the data that this project is build on: the spices and their names. Every section in this chapter introduces a spice, on some occasions two or more closely related items. The set of spices will be presented alphabetically, and all sections are adhering to the following structure:

(o) A *Spice profile box*, a name card-like environment for the spice under discussion with short, factual information, linked to a botanical database. This box also identifies the spice by listing its vernacular names in multiple languages. This is intended to be a convenience for the reader, a reference point of sorts one can return to anytime.

(1) A brief description about the nature, characteristics, and importance of the spice. This is intended as an introduction to the spice and its uses, and it includes the physical description of the material, its role as medicine, culinary seasoning, perfume, or dye, and its cultural significance, either locally or globally.

(2) A subsection on the botany, origins, cultivation, and identity of the spice, where the latter is included only if deemed necessary because of the situation is unclear or confusing. Under the heading “botany” I only discuss basic information regarding geographic distribution, native and introduced habitats, and conditions of growth that factor into a plant’s “spreadability”, which is tightly knit to its value as a crop. Agronomy and harvesting will also be mentioned where it commits to interesting notions about scarcity and demand.

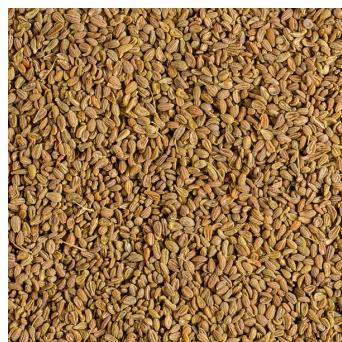
(3) A subsection on the history of the spice follows, focusing on the first mentions, whether it is evoked in religious scriptures, described in pharmacopeias, documented in historiography, or praised in poetry. Besides this, key steps and events on the spices’ journey and spread will be introduced, especially where an item’s history is not widely known, or there are a lot of misconceptions. Materials whose cultural history, itinerary, and names have already been researched and written about will be only discussed concisely, directing the reader to existing scholarly publications.

(4) Lastly, I will examine the spice terminology in a subsection on the names of the spices under scrutiny, focusing on word origins and etymological analysis on one hand, and collecting and explaining synonyms on the other. This step will be conducted in three languages, English, Arabic, and Chinese, and will cover historic and closely related or alternative names. An alphabetic directory of spices treated in this dissertation follows:

1. allspice (<i>Pimenta dioica</i>)	5	13. fennel (<i>Foeniculum vulgare</i>)	88
2. anise (<i>Pimpinella anisum</i>)	16	14. fenugreek (<i>Trigonella foenum-graecum</i>)	91
3. asafoetida (<i>Ferula assa-foetida</i> et al.)	22	15. ginger (<i>Zingiber officinale</i>)	93
4. caraway (<i>Carum carvi</i>)	37	16. long pepper (<i>Piper longum</i>)	96
5. cardamom (<i>Elettaria cardamomum</i>)	41	17. mace (<i>Myristica fragrans</i>)	99
6. cassia (<i>Cinnamomum cassia</i> et al.)	57	18. nutmeg (<i>Myristica fragrans</i>)	99
7. chile (<i>Capsicum annuum</i> et al.)	53	19. pepper (<i>Piper nigrum</i>)	30
8. cinnamon (<i>Cinnamomum verum</i>)	57	20. saffron (<i>Crocus sativus</i>)	102
9. clove (<i>Syzygium aromaticum</i>)	75	21. Sichuan pepper (<i>Zanthoxylum spp.</i>)	109
10. coriander (<i>Coriandrum sativum</i>)	77	22. star anise (<i>Illicium verum</i>)	112
11. cumin (<i>Cuminum cyminum</i>)	83	23. turmeric (<i>Curcuma longa</i>)	115
12. dill (<i>Anethum graveolens</i>)	86	24. vanilla (<i>Vanilla planifolia</i>)	118



(a) allspice



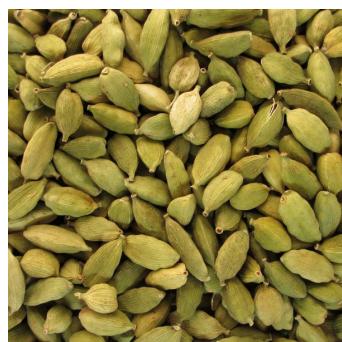
(b) anise



(c) asafoetida*



(d) caraway



(e) cardamom



(f) cassia



(g) chile



(h) cinnamon



(i) cloves



(j) coriander



(k) cumin



(l) dill

Figure 1.1 Photographs of the spices in this dissertation (I). Credit: Aromatiques; *Glorian.



Figure 1.2 Photographs of the spices in this dissertation (II). Credit: Aromatiques.

1.1 Allspice

1. ALLSPICE

POWO

English: allspice; pimento; Jamaica pepper. Arabic: فلفل إفرنجي *fulful ifranjī* [European pepper]; nan. Chinese: 多香果 *duōxiāngguǒ* [many-spice-fruit]. Hungarian: szegfűbors [clove-pepper]; *jamaicaibors* [Jamaican-pepper]; *amomummag* [amomum-seed].

Plant species:	<i>Pimenta dioica</i> (L.) Merr. (syn. <i>P. officinalis</i> Lindl.)
Family:	Myrtaceae
Plant part used:	unripe fruit; leaf
Region of origin:	S. Mexico to C. America; Caribbean
Cultivated in:	Jamaica, Mexico
Color:	dark brown



(a) berries



(b) powder



(c) leaves

Figure 1.3 Allspice berries, powder, and leaves from *Pimenta dioica*.

Note 1.1.1. Introducing the *Spice profile box*. As it can be seen above in *Spice profile 1* presenting allspice, this business-card-like environment gives a quick reference of the spice under scrutiny in a concise way. This is intended to be a convenience for the reader to return and glance back at brief, factual information about a particular item whenever necessary. The box also contains a clickable link to the related plant species in a botanical database, *Plants of The World Online* (POWO), where more information can be found, such as the plants' biodiversity, distribution, botanical synonyms, as well as images of specimens.

Allspice, also known as pimento and Jamaica pepper, refers to the dried unripe fruits of a tropical evergreen tree growing in the Caribbean: the *Pimenta dioica*. The dried berries are dark brown, hard to the touch, and 4–6 mm in diameter (thus larger than black pepper). Their signature crown is by a small ring of the calyx (van Wyk, 2014, p. 210). It is one of the few spices that do not come from the East; chili, vanilla, and allspice are the traditional three when one is listing spice products native to

the Americas (disregarding cacao which is not considered a spice today). It is also the only spice that is exclusively cultivated on the western hemisphere (Duke, 2002, p. 21). The term *allspice* is a coinage playing on the notion that the flavors and aroma of allspice is similar to that of clove, cinnamon, nutmeg, and black pepper (Mabberley, 2017, p. 717) — the most popular spices in Europe at the time when Europeans got in contact with this New World spice. People who only saw ground allspice but not whole, often tend to think that is in fact a spice mixture, after its name and rich flavor profile. Usually ground to powder, allspice is one of the key ingredients of Caribbean cuisine, especially jerk style dry-rub meat preparation. It is also used in European sausage making, pickling, baking, and flavoring liqueurs, it an overall “handy spice”.¹ It also found its way into some Middle Eastern spice blends.

Note 1.1.2. Allspice is sometimes called pimento, which is also the name of a cultivar of *Capsicum annuum*, famous from the Southern United States appetizer pimento-cheese. It is therefore important not to confuse allspice with the heart-shaped mild cherry peppers that North Americans also call pimiento or pimento.

1.1.1 The Botany, Origin, and Cultivation of Allspice

The allspice tree is a small mid-canopy tree or shrub with smooth, bay-like leaves and tiny white flowers. The berries turn dark purple if left to ripe, and the leaves and the bark are also aromatic (Riffle, 1998, p. 279). Belonging to the myrtle family (*Myrtaceae*), allspice is related to other aromatic trees, such as clove, eucalyptus, and the bay rum tree. Its binomial name is made up of *pimenta*, the Portuguese (or corrupted Spanish) equivalent of ‘pepper’, and *dioica* ‘of two houses’ (Greek *di-* from *dyo* ‘two’ and *oikos* ‘house’), indicating that the male and female flowers are found on different plants (Peter, 2012, vol. 2, p. 166).

Allspice is indigenous to the regions ranging from Southern Mexico to Central America and the Greater Antilles of the Caribbean, especially Jamaica (Czarra, 2009, p. 146). Where naturalized, it spreads by birds carrying the seeds. Allspice has been since introduced to a few neighboring places, such as Colombia, Venezuela, and Florida (POWO, 2022, p. 146). In 1885 it was introduced from Jamaica to Hawaii and Kauai, and it even reached Tonga.

Allspice is cultivated as a crop in a few countries, notably in Jamaica, Mexico, and to a lesser extent in Honduras and Grenada. The primary producer and the source of the highest quality being Jamaica. Saplings are grown from seeds, then soon transplanted when still small. The trees need well-drained soil and humid conditions (van Wyk, 2014, p. 210). It is one of the only spices that no one managed to grow in the East, transplantation efforts were quickly abandoned, and its commercial cultivation is confined to the Americas (Duke, 2002, p. 21). Harvesting happens similarly to how black pepper is harvested; the still green, unripe fruits are picked by hand, and then dried under the sun.

The flavor of allspice mainly comes from the component eugenol, which is dominant both in the fruit and the leaves, but other compounds also add to the complexity of its aroma. Eugenol — also

¹The Icelandic name is *altrahanda*, literally ‘of all hands’, meaning ‘for various purposes’; showing its multifaceted uses.

called clove oil, for it constitutes 80-90% of the essential oil from clove buds (Barnes et al., 2007, p. 166) — is widely used as a flavoring agent by the food industry and in pharmacology, and is also found in cinnamon, nutmeg, and bay leaves. It has antiseptic, antibacterial, anesthetic, and analgesic properties (Ulanowska & Olas, 2021). The leaves of a related plant called the West Indian Bay Tree (*Pimenta racemosa*) is used to produce bay rum, a popular essential oil used by the perfume industry for its spicy notes.

1.1.2 The History of Allspice

There is not much we know about allspice before the arrival of the Europeans, except that the Aztecs used it to spice up their chocolate drink (Farrell, 1985, p. 27), although Dalby (2000, pp. 145, 177) doubts this was the case that early on. According to Duke (2002, p. 21), the Maya used allspice for embalming. We know that it reached Europe as a consequence of Christopher Columbus's voyages. Spanish colonizers must have encountered allspice in the West Indies sometime after Columbus and his crew explored the islands of Hispaniola, Cuba, and Jamaica, and the year 1494 is reported (Opara & Chohan, 2021, p. 12). Columbus himself did not find it. In fact, he did not recognize any spice he was so keen on finding — pepper, cloves, nutmeg, cinnamon — but kept himself and his patrons in the delusion that he will. In his first letter to Ferdinand and Isabella he writes: “On this island there are many spices and great mines of gold and other metals. [...] I believe that I have found rhubarb and cinnamon.” (Columbus, 1893, pp. 10–18) — in reality, he had none.²

He was adamant that the islands he *discovered* were full of spices and brought up excuse after excuse (out of season, etc.) after every voyage he returned with no spice (Dalby, 2000, p. 149). He also believed that he was in India or Cathay, on one of the outlying islands. Between apologies, Columbus also promised more gold, silver, cotton, mastic, and slaves. As Dalby (2000, p. 150) reports, what he recorded in his private journal is a bit more honest and realistic version of events: “I think that many trees and plants grow here which will be highly valued in Spain for dyes and medicinal spices. But I am sorry to say that I do not recognize them.” Columbus repeatedly regrets his ignorance in botany in his journal (see also Columbus, 1893/2010, p. 57).

Interestingly, authors love to claim that Columbus brought back allspice (together with vanilla and chili): “He returned with allspice from the West Indies, chilies from Mexico and vanilla from Central America.” (Craze, 1997, p. 17), and “Columbus brought it back to Europe thinking it was pepper.” (Czarra, 2009, p. 146), or “Though he did not find the Spice Islands, Columbus brought allspice, vanilla and red peppers from the West Indies back to his Spanish supporters.” (Parthasarathy et al., 2008, p. 1). This is not true, he most likely never even saw allspice, but it was reported him that it is there and can be cultivated, along with cinnamon, and mulberry for silk production (Colón, 1571/1959, p. 151). Columbus returned from his first voyage of 1492–93 with some gold nuggets and jewelry, pearls, a hammock, tobacco, the turkey, and a few poor captured Taínos, but no spices were presented to the Spanish monarchs Ferdinand and Isabella. He did bring back pineapple and cassava

²Columbus's first letter of his first voyage, sent on March 4, 1493 from Lisbon to the Spanish court (and its translation) is also available online at King's College London. Transcription: <http://www.ems.kcl.ac.uk/content/etext/eo21.html>, translation: <http://www.ems.kcl.ac.uk/content/etext/eo22.html>

(J. Turner, 2004, p. 11).

Diego Álvarez Chanca, the court appointed physician who accompanied Columbus on his second expedition in 1493 is often credited with bringing home both chili, and allspice (McCormick, n.d.), but in his 1494 letter describing the flora and fauna, he only mentions *agi*, also *axi* — modern Spanish *ají* from Taíno — (see Corominas, 1987, p. 34), and that the natives use it to season their food, with what we now know as *Capsicum annuum*: the chili pepper (Chanca, 1494/2003, p. 31).

In the following century the Spanish tried to turn Mexico into a spice plantation by transplanting eastern spices, an effort that mostly failed. Only after this did the colonizers start to pay proper attention to native spices (Machuca et al., 2020, p. 6).

Francisco Hernández de Toledo, King Philip II's court physician and naturalist spent 7 years in New Spain between 1571–1577, studying its species and conducting interviews with the natives. He was the first to formally describe allspice. He called it *Pipere Tavasci* 'Tabasco pepper' (today *Pimienta de Tabasco*, after the region of Tabasco, famous today for a brand of hot sauce. Hernández also recorded the Nahuatl name of allspice: *xocoxochitl* 'sour flower'.³ Hernández likens the flowers to pomegranates, and the aroma to that of orange blossoms, describing it to be very pleasant and attractive, with a sharp taste of the fruit. (Hernández, 1615, p. 2). In Machuca et al. (2020)'s translation:

“Xocoxochitl meaning sour flower, is a large tree, with leaves like those of the oranges, red flowers like a pomegranate, but with an aroma like the orange blossom, and in such a smooth and pleasant way, that even the leaves of the tree add to its attraction: the fruit is round, and hangs in clusters, which at first appear green, and then beige, and finally towards black: it is sharp and scathing to taste, and good-smelling”

According to Machuca et al. (2020), although allspice was known by the Spanish from early on “there are few historical records of its production and trade”, and only in the 18th century started they to consider American products to have economic potential.

Allspice berries are around 30% larger than peppercorns, and since their color and shape resembles black pepper, and it gave a spicy taste to food, it is no wonder that the Spanish called them *pimiento* 'pepper'. The Portuguese version is *pimento*, and later the botanical name *Pimenta* was given to the genus of plants related to allspice (Farrell, 1985, p. 26). I disagree with the often repeated trope that the Spanish explorers mistook allspice berries for pepper and called them *pimiento* “by mistake”⁴, these people knew exactly what they were looking for, and that what they have found is not the mighty black pepper; but for them it was a kind of pepper. The crew showed samples of pepper and cinnamon to presumably confused Native Americans hoping for directions, and as Columbus wrote in his journal on the 4th of November, 1492, they indicated by sign language that there is a lot of it around (Duke, 2002, p. 21; Columbus, 1493/2010, p. 67). The Europeans, however, soon recognized the value of allspice, even if it was not the expensive black pepper, but still more pungent and exotic than some cheap Old World substitutes, the juniper and myrtle berries (which are very similar to allspice in appearance and usage) (Dalby, 2000, p. 150).

³cf. S. Wood, 2000–2022, s.v. *xococ*, *xochitl*.

⁴Britannica, n.d., allspice.

In short, allspice was introduced to Europe by the Spaniards in the 16th century, its import was first recorded in 1601, according to Britannica (n.d.) and Farrell (1985, p. 26). After 1655, when Jamaica became a British colony for nearly three centuries, the Brits developed a taste for allspice and started to use it to season meat dishes, sauces, and pickles (Green, 2006, p. 74). They were also responsible for its spread to some extent which is illustrated by the names of allspice in some languages, e.g. Polish *ziele angielskie* ‘English herb’.

1.1.3 The Names of Allspice

Allspice is a fascinating case, because it gives us examples for a plethora of names that showcase us many of the motivations, mechanisms, and solutions people choose when naming spices. As I mentioned before, some people are puzzled if allspice is a spice blend or not. The names in some languages often just add to the confusion, for example French *quatre-épices* (lit. ‘four spices’) can have the sense ‘allspice’, but also ‘a kind of spice mix’ made up of four different spices.⁵

English

#	Species	Name	Source
1	<i>Pimenta dioica</i>	allspice	van Wyk (2014)
2	<i>Pimenta dioica</i>	clove pepper	Duke (2002)
3	<i>Pimenta dioica</i>	Jamaica pepper	van Wyk (2014)
4	<i>Pimenta dioica</i>	myrtle pepper	Peter (2012)
5	<i>Pimenta dioica</i>	newspice	Peter (2012)
6	<i>Pimenta dioica</i>	pimento	van Wyk (2014)
7	<i>Pimenta dioica</i>	pimento berry	OUP (n.d.)
8	<i>Pimenta dioica</i>	pimiento	OUP (n.d.)

Table 1.1 Various names for allspice in English.

Etymology 1. English *allspice*, from *all + spice*; after the flavour profile that resembles the combined aroma of cloves, nutmeg, cinnamon, and black pepper, 1621^a

^aOUP (n.d., s.v. allspice)

Note 1.1.3. Introducing the *Etymology box*. This environment, as seen above in *Etymology 1*, offers a quick look at a words’ origins and development.

Since its introduction to the spice cabinet, allspice has been known by many names from which allspice currently *allspice* seems to be prevailing. *Allspice* was formed by compounding *all* and *spice*, for its flavor was perceived to be a combination of four characteristic spices that the Europeans knew and

⁵TLFi, 2012, s.v. *quatre-épices*.

sought after: black pepper, cinnamon, cloves, and nutmeg.⁶ It was first recorded in 1621: “Ambergreese, nutmegs, and all spice.”⁷, and probably inspired the French *toute-épice* ‘all-spice’, attested in 1762.⁸

Sadly, the original word for allspice was lost with the demise of the native Taíno people of the Caribbean, nevertheless we got Taíno⁹ words such as barbecue, *cassava*, *guava*, *hammock*, and *tobacco* (Rafinesque, 1836, p. 229). As we concluded before, it is assumed that it was the Spanish who first got in contact with the allspice berry, and that they simply called it *pimienta* ‘pepper’.

Etymology 2. English *pimento* ‘allspice; sweet pepper’, ca. 1660 < partly Portuguese *pimenta* ‘allspice; sweet pepper; black pepper’ < and partly Spanish *pimiento* ‘hot and sweet pepper; formerly also black pepper; pepper plant of both kinds’, earlier *pimienta* ‘black pepper; peppercorn; ground pepper’ 13th c., 1495 < Medieval Latin *pigmenta* ‘plant juice; food seasoning; condiment; spices; perfumes’, plural of *pigmentum* < Latin *pigmentum* ‘colour, paint; ointment; drug; spiced wine’, from *pingō* ‘to paint’ + *-mentum* ‘instrument’^a

^aOUP (n.d., s.v. *pimento*); OUP (n.d., s.v. *pimento*); OUP (n.d., s.v. *pimiento*); Gómez de Silva (1985, p. 415) and Corominas (1987, p. 495); C. T. Lewis and Short (1879, s.v. *pigmentum*)

pimento

For a long time *pimento* (and to a much lesser extent *pimiento*) — the words for ‘pepper’ in Portuguese and Spanish, respectively — was commonly used in English to refer to allspice. This is still the case in Jamaican English for example, where the term *allspice* is not used. In North American English however, *pimento* now rather refers to a small, round variety of chili pepper (*Capsicum annuum*), commonly known as cherry pepper explained in note 1.1.2.

The corruption and mix-up between the English words *pimento* and *pimiento* and their origins is as confusing as it gets. For the sake of a clear understanding, let us first consider the modern names for allspice in Spanish: *pimienta de Jamaica*, and Portuguese: *pimenta-da-jamaica*. In both cases, *pim(i)enta*, with a final *-a*, means ‘pepper’, referring to peppercorns of the usual black and white pepper (*Piper nigrum*). In Spanish and Portuguese, the words endings of *-o* and *-a* mark the grammatical gender, the significance of which dissipates in English. It is important to remember however, that the Spanish form *pimienta* emerged first from a Latin neuter plural suffix in the 13th century. Thus, perhaps a century or so later when the word *pimienta* was already embedded in Spanish, speakers perceived the word as a feminine noun, and a vacuum of a masculine counterpart emerged. This allowed for a practical differentiation by gender between the peppers of the Old Word and the New World. Corominas (1987, p. 459) explains that *pimiento* derived from *pimienta*, and it was first applied in the Americas for the red fruits of the chili.

Gómez de Silva (1985, p. 415) makes the most compact distinction: “*pimienta* ‘(black) pepper; allspice’, *pimiento* ‘(hot and sweet) pepper’”. In contemporary Spanish, *pimiento* (the masculine

⁶OUP, n.d., allspice; Britannica, n.d.

⁷OUP, n.d., allspice.

⁸TLFi, 2012, *toute-épice*.

⁹Taíno is a now extinct Arawakan language.

form) refers to the fruits and plants of the *Capsicum* family, e.g. the numerous spicy chilies and mild bell peppers of red, green, and yellow, while *pimienta* (the feminine form) refers to the small round fruits of black and white pepper and its powdered forms. The distinction seems consistent, belonging to this latter group see for example *pimienta dulce* ‘sweet pepper’, and *pimienta gorda* ‘fat pepper’ both of which refers to allspice, not to be confused with *pimiento dulce*, which refers to sweet paprika powder.¹⁰

Pimento in English is a partly Portuguese, partly Spanish borrowing, while *pimiento* comes from Spanish. In fact, it is explained in the *Oxford English Dictionary* (OED) that in the ‘allspice’ sense of the word, *pimento*, from Portuguese *pimenta (daJamaica)*, went through an alteration influenced by the Spanish word form, which is not attested in the ‘allspice’ sense. Ergo, Spanish *pimiento* maybe did not refer to allspice in Spanish at the time when the borrowing happened. And if so, *pimento* is a borrowing from Portuguese *pimenta* meaning ‘pepper’ and, as *pimenta daJamaica*, ‘allspice’, influenced by Spanish *pimiento* ‘chili, sweet pepper’, also in the sense of the pepper plants of both kinds (chili and black). Spanish *pimiento* formerly had the sense of ‘black pepper, peppercorns, and ground pepper’ (before 1495), with an earlier form *pimienta* (13th century), now usually in sense ground pepper and peppercorns¹¹. The Portuguese connection is only discussed by the OED, other dictionaries do not mention it. A direct Spanish borrowing is also plausible if we consider that it was the Spanish who most likely brought it back first, they probably called it *pimiento-a*, and they were responsible for its subsequent diffusion in Europe. English spellings varied greatly of this this Romance word, using forms such as *piemente* in the late 1600s.

The origin of these words is the classical Latin *pigmentum* ‘a material for coloring, a color, paint, pigment’, with a transferred meaning ‘the juice of plants’ in post-classical Latin.¹² The word *pigmentum* is made up of *pingō* ‘to paint’ and *-mentum*, a suffix denoting an ‘instrument, medium’, well recognizable from Romance languages and English (i.e. excitement). According to Corominas (1987, p. 459), Catalan *pimienta* is attested in the 13th century and it comes from the plural (*pigmenta*) of Latin *pigmentum* ‘coloring, paint’, which already meant ‘drug, ingredient’, and later, ‘condiment’ in Medieval Latin. Derived from this, in 1495 *pimiento* was applied to the the plants bearing the pungent red fruits of the Americas. *Pigmentum* also entered English as *pigment* ‘paint, dye, ingredient in an ointment, drug’. According to the OED, Medieval Latin *pigmentum* also referred to spiced drinks (9th century), perfumes, and hence spice in general. Old French cognates support this, *pigment* had the sense of ‘balm, fragrant spice’ in the 12th century, Anglo-Norman *pigment/piment* meant ‘spice, spice wine’¹³, and Middle English *pihmentum* (12th century, later *piment*) had a sense of “a spiced drink, a remedy or concoction containing spices”¹⁴ “a sweetened, spiced wine used for refreshment and in medical recipes; a medicinal potion”.¹⁵ *Piment* in French were later applied for chili, especially the cultivar of cayenne pepper. (The OED points to the sense ‘cayenne pepper’ in a “10th century French

¹⁰Española, 2014, *pimiento*, -a.

¹¹oup, n.d., *pimento*.

¹²C. T. Lewis and Short, 1879, *pigmentum*.

¹³oup, n.d., *pigment*.

¹⁴Harper, n.d.-b, *pigment*.

¹⁵R. E. Lewis et al., 1952–2001, *piment*.

source”, which must be an error.)

Jamaica pepper

Allspice is also known as *Jamaica pepper*, for it mainly grows on the island and the historical reasons described above. Many languages calqued *pimienta de Jamaica* from Spanish, or another transmitting language (e.g. Italian *pepe della Giamaica*). *Jamaica pepper* was first recorded in 1661: “A kind of Pepper, that tastes like Cloves, and very Aromatick (known by the name of Iamaica-Pepper)”.¹⁶

myrtle pepper

The name *myrtle pepper* echoes the similarities of the allspice tree with European myrtle (*Myrtus communis*), especially after the resemblance of their purple berries. Beyond the physical resemblance, myrtle berries are also edible, and are also dried to add to pepper mills as a spice. Furthermore, the European myrtle has aromatic leaves and wood as well, and it is used to grill and smoke meat in Southern Europe since Roman times, especially on Sardinia and Corsica; the same way the Caribbean people use allspice wood and leaves. The myrtle berry appears in Roman and Greek mythology as well (van Wyk, 2014, p. 186).

clove pepper

The name *clove pepper* has “chemical reasons”, namely that this name arises from the aroma of allspice that reminded people of clove. This is due to its eugenol content we discussed above. *Szegfűbors* lit. ‘clove-pepper’ is the most common name for allspice in Hungarian still, and it is used in sausage making.

newspice

One of the most interesting spice names we can come across in my opinion is *newspice*. The term is now archaic in English, but the idea still exists in a few European languages, such as Serbian and Macedonian *најгвирц* *najgvirc* from German (*Neugewürz*), Czech and Slovak (*nové koření/korenie*), and Turkish *yenibahar* and Romanian *ienibahar* from Ottoman Turkish يېنى باھار *yeñibahar*; all the above literally meaning ‘new spice’.

The reason behind these names is that during the 17-18th centuries, allspice “suddenly” arrived to Central and Eastern Europe as a new (and possibly marketed as a trendy) spice. This happened a century after the red hot paprika took the world by storm (by 16th century it reached Hungary from the Ottoman Empire), and while the chili did not conquer northern Europe, allspice — to an extent — did. We could philosophize why the chili did not deserve the name ‘new spice’ when it first arrived, or why the Europeans — except on the south — were reluctant to assimilate it into their cuisines. Was the pungent chili too harsh for a Northern palate to consider? Is it the sophisticated chemical complexity of allspice that made it fashionable in Victorian England? All these questions are leading us to deep waters regarding the human palate and cultural attitudes toward spices and spiciness, as well as environmental and genetic factors deciding the heat of preference explored by interesting papers such as Spence (2018) and Törnwall et al. (2012).

We know that in the beginning allspice was overlooked by Europeans, and this is possibly the reason why allspice’s original name did not survive unlike the Nahuatl word *chilli*. Allspice was later sold and used in beverages and cookery, but its rising star never came close to that of chili. In Asia, where chilies were adopted early on and, eagerly transplanted, they transformed and revolutionized cuisine forever. It is unimaginable to think of Indian, Indonesian, or Chinese dishes without chilies today. Inversely, allspice is mostly unknown in East Asia, and the reasons behind it are just as botanical

¹⁶OUP, n.d., Jamaica.

as historical: In the 16-17th century nobody knew how to grow allspice, while chili can be grown everywhere effortlessly. In addition, Europeans did not sail to Asia to sell spices, they went to take them.

As the 20th century came around, allspice — the only spice still exclusively imported from the Western hemisphere — quietly became one of the many, and its fervor faded a little. America was not new anymore, and the name *new spice* as well became obsolete. An English textbook for students of Italian narrates a letter from 1680 about this *Nuova Spezie* and the author's opinion on it:

“I Am much obliged to you for the Drug you sent me inclosed in your last letter, about which I cannot tell you any thing but that it is called the New Spice, and it comes as it is said, or as it is guessed, from the West-Indies, and not from the East-Indies; and it is but six months that I had knowledge of it from Count Laurence Magalotti, who showed it me under the abovesaid name of New Spice. How many different tastes are found in it by several honest folks ! that of the clove is the principal ; that of the nutmeg is the second in rank ; the cinnamon comes as it were the third in order ; next the citron ; then the smell of the musk and of the amber, and the most sweet taste of sugar. The truth is, in my opinion, that it is a pretty Drug. I am in Florence, and with for an occasion to do you service ; so command me with all freedom, and be certain that I will count it as good luck to have any power to serve you. I affectionately kiss your hands. Florence, 26th March 1680.” (Baretti, 1755, p. 5)

And so, we have established a few categories when it comes to the names of allspice: (1) names that are made up of *spice* as a headword and a modifying word, (2) names that use *pepper* as a headword with a modifier, and (3) names that are taken from Portuguese and Spanish. See table 1.1 for a concise overview.

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Pimenta dioica</i>	بهار حلو	<i>bahār ḥulw</i>	sweet spice	Wiktionary (n.d.)
2	<i>Pimenta dioica</i>	فلفل البساتين	<i>fulful al-basātīn</i>	pepper of the gardens	Almaany (n.d.)
3	<i>Pimenta dioica</i>	فلفل إفرنجي	<i>fulful ifranjī</i>	European pepper	Baalbaki (1995)
4	<i>Pimenta dioica</i>	فلفل تابل	<i>fulful tābil</i>	spice pepper	Almaany (n.d.)
5	<i>Pimenta dioica</i>	فلفل حلو	<i>fulful hulw</i>	sweet pepper	Baalbaki (1995)

Table 1.2 Various names for allspice in Arabic.

Etymology 3. Arabic *fulful ifranjī* ‘allspice’ [European pepper], literally ‘Frankish pepper’, named so because it was transmitted by Europeans, 1700?^a

^aBaalbaki (1995)

filfil ifranji Arabic, similarly to English, boasts with a diverse set of names when it comes to allspice. First and foremost, it is known as *filfil ifranjī* ‘European pepper’. *Ifranjī* literally translates to ‘Frankish’, but it became the epithet of white Europeans, similarly to the term *farang*¹⁷ in Southeast Asia. The rationale behind this name is evident: it was Europeans who introduced this spice to the Middle East and North Africa in the centuries following its debut.

Allspice’s Middle Eastern history is the topic I have found the least amount of information on, considering every other spice in this chapter. As it is an ingredient that have arrived long after the classical times, it is not discussed in the literature I have consulted, and modern articles only deal with it for its pharmaceutical and health benefits, not with its journey. The challenge to find further Arabic synonyms is also increased, because both English names *allspice* and *pimento* are ambiguous. I have found examples of wrongly glossed entries in both Arabic, and Chinese dictionaries. Be that as it may, I have managed to collect a few other Arabic names for allspice from contemporary dictionaries, these can be seen in table 1.2.

Further common vernacular names are *fifil hulw* lit. ‘sweet pepper’, and *bahār hulw* lit. ‘sweet spice’, where *bahār* ‘spice’, is a loanword from Persian. Persian *بَهار*, *bahār* means spring (the season), it was borrowed into Arabic with a sense of blossoms and foliage, alluding to the leaves and flowers of plants as the source of many spices.¹⁸ In the ‘spice, seasoning, condiment’ sense, the word spread regionally via Ottoman Turkish (loaned from Arabic). Similarly to the case of English, the word for spice was associated with the allspice berries, and consequently resulted in the already mentioned Turkish *yenibahar* [newspice] ‘allspice’, and *μπαχάρι* *bachári* ‘allspice’. Thus, just like English, Arabic propagates allspice names by using the words for ‘spice’ and ‘pepper’ with modifiers indicating qualities of taste, or who carried the spice.

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Pimenta dioica</i>	多香果	<i>duōxiāngguǒ</i>	many-spice-fruit	Kleeman and Yu (2010)
2	<i>Pimenta dioica</i>	全香子	<i>quánxiāngzǐ</i>	all-spice-seed	
3	<i>Pimenta dioica</i>	甜胡椒	<i>tiánhújiāo</i>	sweet-barbarian-pepper	Lau (n.d.)
4	<i>Pimenta dioica</i>	牙買加胡椒	<i>yámǎijiā hújiāo</i>	Jamaica-barbarian-pepper	MDBG (n.d.)
5	<i>Pimenta dioica</i>	眾香子	<i>zhòngxiāngzǐ</i>	many-spice-seed	MDBG (n.d.)

Table 1.3 Various names for allspice in Chinese.

duoxiangguo In Chinese, allspice goes by the name 多香果 *duōxiāngguǒ* [many-spice-fruit], supposedly a Chinese rendering of *allspice*. However, in China allspice is practically non-existent; it is not used in dishes, does not feature in *Traditional Chinese Medicine* (TCM) databases, and generally unknown besides Western specialty grocery shops. A search in Baidu Index yields no results as well. All the

¹⁷A word of Persian origin, applied for the Franks during the crusades (from Old French *franc*), and later by extension to any white merchant used from Persia to Thailand.

¹⁸Dozy, 1881, p. 121.

names except 甜胡椒 *tián hújiāo* ‘sweet (black) pepper’ shown in table 1.3 are relatively modern semantic translations of presumably English sources. Just like in Arabic, it obviously does not show up in pre-modern corpora, and scarcely present in the modern corpus.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>allspice</i>		no	OUP (n.d.)
2	English	<i>Jamaica pepper</i>		no	OUP (n.d.)
3	English	<i>pimento</i>		yes	OUP (n.d.)
4	English	<i>pimento berry</i>		no	OUP (n.d.)
5	English	<i>pimiento</i>		yes	OUP (n.d.)
1	Arabic	<i>fulful al-basātīn</i>	pepper of the gardens	no	Almaany (n.d.)
2	Arabic	<i>fulful ifranjī</i>	European pepper	no	Baalbaki (1995)
3	Arabic	<i>fulful tābil</i>	spice pepper	no	Almaany (n.d.)
4	Arabic	<i>fulful ḥulw</i>	sweet pepper	no	Baalbaki (1995)
1	Chinese	<i>duōxiāngguǒ</i>	many-spice-fruit	yes	Kleeman and Yu (2010)
2	Chinese	<i>tiánhújiāo</i>	sweet-barbarian-pepper	no	Lau (n.d.)
3	Chinese	<i>yámǎijiā hújiāo</i>	Jamaica-barbarian-pepper	yes	MDBG (n.d.)
4	Chinese	<i>zhòngxiāngzǐ</i>	many-spice-seed	yes	MDBG (n.d.)

Table 1.4 Conventionalized names for allspice in English, Arabic, and Chinese, found in dictionaries.

1.2 Anise

2. ANISE

POWO

English: anise; aniseed. Arabic: أنيسون *anīsūn*. Chinese: 茴芹 *huíqín* [anise-celery]. Hungarian: *ánizs*.

Plant species:	<i>Pimpinella anisum</i> L.
Family:	<i>Apiaceae/Umbelliferae</i>
Plant part used:	fruit; oil
Region of origin:	E. Mediterranean; W. Asia
Cultivated in:	Turkey, Egypt, Spain, Russia, Italy, etc.
Color:	light brown

Anise (*Pimpinella anisum*) is a herbaceous plant, native to the Eastern Mediterranean and the Levant. It yields downy schizocarps,¹⁹ fruits which people call seeds. Hence the popular contracted form of the name, *aniseed*. The seed-like fruits are grayish-green to light brown in color, and around 3–6 mm long (van Wyk, 2014, p. 212). Commercially available anise is usually sold whole, with a bit of stalk attached. Anise has visible *vittae* (oil ducts) embedded in the fruit wall (Peter, 2012, vol. 2, p. 139), which is a feature similarly found on the fruits of related umbelliferous aromatic plants, such as fennel, cumin, caraway, carom/ajwain, and dill seeds. Anise is sought after for its characteristic, liquorice-like sweet aroma and flavor, used in gastronomy, confectionery, and liqueur making – especially around the Mediterranean. Anise and its essential oil is traditionally used as a flavoring for food, candy, and alcoholic drinks, however star anise oil from China has gradually replaced anise oil in the industry thanks to it being a much cheaper substitute (van Wyk, 2014, p. 212).



Figure 1.4 Anise

Note 1.2.1. It is important to make the distinction between anise (*Pimpinella anisum*) and star anise (*Illicium verum*) from the beginning. These are two unrelated spices with distant origins. The similarities in name are due to their similarity in flavor, thanks to the organic compound anethole.

The taste, smell, and even the appearance of anise resembles other — related and unrelated — spices, such as fennel, dill, liquorice, and star anise. This leads to a certain degree of confusion around the names which these plants and their products are known today in various languages. We

¹⁹Schizocarp refers to a dry compound fruit which splits into two or more one-seeded carpels (mericarps) without dehiscing

will introduce this problem in more detail in ?? in ??.

1.2.1 The Botany, Origin, and Cultivation of Anise

Anise is an annual herb from the family *Apiaceae/Umbelliferae*. Growing less than a meter tall, it brings small white flowers in umbels, the shape of an umbrella which is typical for this family of parsley, celery, and carrot. This family also contains many other aromatic flowering plants, such as asafoetida, coriander, cumin, caraway, dill, and fennel.

Anise originates in the Eastern Mediterranean region, growing from South East Turkey through Syria to the coasts of Lebanon, Israel, Palestine, and Egypt, including Cyprus, and in some sources also Greece. It has been cultivated since 2000 BC (Mabberley, 2017, p. 718). Anise today is naturalized in most of Europe and Central Asia, and it is cultivated as a crop in various regions around the globe, including, Southern Europe, Southern Russia, Turkey, the Middle East and North Africa, Pakistan, India, China, Chile, Mexico and the United States (Farrell, 1985, p. 32). It requires good soil, lots of sun and warmth, and also arduous to transplant. During harvest at summer's end when the fruits begin to ripen, the plant parts above ground are cut and the “seeds” are dried (van Wyk, 2014, p. 212).

1.2.2 The History of Anise

Anise has a long history around the Mediterranean, and its popularity is still concentrated there. It was used both as medicine and a culinary spice, as I mentioned above. The ancient Greeks took it as a breath freshener, and the Romans used it in their cooking (Farrell, 1985).

Pliny wrote a section of remedies with anise in his *Natural History*, where he explains that it was recommended by Pythagoras to take with wine against scorpion stings, but it is also a great ingredient—both green and dried—in sauces and breads. And of course, it sweetens the morning breath with a little honey and smyrnion²⁰ (Pliny the Elder, 77/1855, 20:72).

Medieval European herbals tell of carminative effect: “The seed wasteth and consumeth winde, and is good against belchings and upbraidings of the stomach, alaieth gripings of the belly, provoketh urine gently, maketh abundance of milke, and stirreth up bodily lust: it staith the laske (diarrhea), and also the white flux (leukorrhea) in women.” (Gerarde, 1597, 880). Based on modern research, anise oil and anethole is antibacterial, antifungal, antioxidant, carminative, and expectorant (Peter, 2012, vol. 2, p. 144).

The Brits and Arabs use it since the Middle Ages. According to Wilson (2005), the tradition of the wedding cake grew out of the customary spiced cakes at the end of feasts during Roman times, which served as digestive. In modern Europe, its use is prevalent in confectionery (such as aniseed balls), but especially liqueurs. From the many Mediterranean alcoholic beverages flavored with anise, we can mention anisette and absinthe (made with *Artemisia absinthium*), from France, sambuca from Italy, and ouzo and mastika from Greece. In the Eastern Mediterranean, it can be found in Turkish raki, and the many araks of the Levant.

²⁰*Smyrnium olusatrum*, an edible pot herb commonly known as *alexanders*

1.2.3 The Names of Anise

Anise is a typical **Wanderwort**: emerging from moderately obscure origins, it is now ubiquitous to the languages of Europe and its sphere of influence where it is culturally significant.

English

#	Species	Name	Source
1	<i>Pimpinella anisum</i>	anise	van Wyk (2014)
2	<i>Pimpinella anisum</i>	aniseed	van Wyk (2014)
3	<i>Pimpinella anisum</i>	sweet cumin	Peter (2012)

Table 1.5 Various names for anise in English.

Etymology 4. English *anise*, ca. 1325 < French *anis* ‘anise’, 1236 < Latin *anīsum* ‘anise’, (dill is *anēthum*) < Ancient Greek ἄνισον *ánison* ‘anise; dill’, and other Greek dialectal variants, e.g.: *ánēthon*; included both plants, only later distinguished (probably of substrate origin) <? Egyptian (Ancient) *jnst* ‘a medicinal, edible plant (probably anise)’^a

^aOUP (n.d., anise) and AHD (2022, anise); TLFi (2012, s.v. *anis*); C. T. Lewis and Short (1879); Liddell and Scott (1843/1940); Erman and Grapow (1926, p. 99) and Hemmerdinger (1968, p. 240)

To English, it arrived in the 14th century via French *anis*, which descended from Latin *anīsum*. The Latin word is a borrowing from Ancient Greek ἄνισον *ánison*, which is attested in different forms in various Greek dialects of the time, sometimes with -nn- and theta instead of sigma (e.g. ἀνῆθον *anēthon*). We can often read that this word originally referred to dill, but it seems that the Greeks did not distinguish between the two, and the terms included both plants.²¹ Hence the scientific name of dill: *Anethum graveolens*. According to Beekes and van Beek (2010, pp. 103, 107), *ánison* is anise, while *anēthon* is dill, but he points out that they probably have the same etymon. The Romans borrowed both words, and the distinction was made explicit in *anīsum* vs. *anēthum*. The modern scientific names bear the Latin names: *Pimpinella anisum* (anise), where meaning of *pimpinella* is uncertain, and *Anethum graveolens* (dill), where *graveolens* means ‘strong scented’ (Gledhill, 2008, pp. 184, 303). The confusion of the Greek words had an effect on English much later as well, in Matthew 23:23 of the *King James Version of the Bible* (KJV)²² talks of anise, while newer, more accurate translations, such as the *New Revised Standard Version of the Bible* (NRSV)²³ mention dill. In fact, one of the first attestations in English comes from Wycliffe’s Bible in 1382, between mint and cumin: “That tithen mente, anete [anese], and comyn.”²⁴ Beyond Greek, the etymology of this word is uncertain, Beekes and van Beek

²¹OUP, n.d., anise.

²²Source: <https://www.biblegateway.com/passage/?search=Matthew+23%3A23&version=KJV>

²³Source: <https://www.biblegateway.com/passage/?search=Matthew+23%3A23&version=NRSVUE>

²⁴OUP, n.d., anise.

([2010](#), pp. 103, 107) suspects a pre-Greek, substrate origin demonstrated by the phonological variations. Although the *Wb* in an early Egyptian glossary makes a connection with the Egyptian word rendered as *jnst*²⁵ ‘an edible plant for medicinal use’ in the literature of the Middle Kingdom, the assumption is marked with question marks in the original handwritten glossary (Hemmerdinger, [1968](#), p. 240; Erman & Grapow, [1926](#), p. 99). The *American Heritage Dictionary of the English Language* (AHD) remarks that the Greek word is “perhaps from or akin” to Egyptian *inšt*—using a different transliteration—which is a kind of plant used in the preparation of refreshing drinks, possibly anise.²⁶

The idea is not far-fetched, anise, dill and other herbs are native to the region and were “almost surely grown” for their medicinal properties (Redford, [2001](#), vol. 2, p. 3). We know that spices and herbs were used to flavour Ancient Egyptian cooking, Egyptologists have identified indigenous ingredients (dill, fenugreek, parsley, thyme, nigella, fennel, marjoram, mint), those imported and transplanted from neighboring Palestine (dill, cumin, coriander, caraway) and those obtained through distant trade (cinnamon and peppercorns from Asia) by the wealthy, later during the New Kingdom times (Redford, [2001](#), vol. 1, pp. 394, 540).

Anise is also known as *aniseed*, which is a contraction from *anise* and *seed*, a usage form that emerged in the late 14th century.

Sweet cumin is another conventional name for anise, which shows the primacy of the word *cumin* in English, when it comes to similar aromatic plants and their seeds. Cf. *wild cumin*, *Armenian cumin*, *mountain cumin* (caraway); *royal cumin*²⁷ (bishop’s weed), and the always ambiguous *black cumin*

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Pimpinella anisum</i>	أنيسون	<i>anīsūn</i>	phonetic	Wehr (1976)
2	<i>Pimpinella anisum</i>	كمون حلو	<i>kammūn hulw</i>	sweet cumin	Wehr (1976)
3	<i>Pimpinella anisum</i>	يأنسون	<i>yānisūn</i>	phonetic	Wehr (1976)
4	<i>Pimpinella anisum</i>	حبة حلوة	<i>habba hulwa</i>	sweet grain, seed	Wehr (1976)

Table 1.6 Various names for anise in Arabic.

Etymology 5. Arabic *anīsūn* ‘anise’, (later assimilated as *yānisūn*), a. 791 < Ancient Greek ἄνισον *ánison* ‘anise; dill’, and other Greek dialectal variants, e.g.: *ánethon*; included both plants, only later distinguished (probably of substrate origin) <? Egyptian (Ancient) *jnst* ‘a medicinal, edible plant (probably anise)’, ca. 2030-1650 BC^a

^aWehr ([1976](#)); Liddell and Scott ([1843/1940](#)); Erman and Grapow ([1926](#), p. 99) and Hemmerdinger ([1968](#), p. 240)

²⁵Transliterated as *inš.t* in Erman and Grapow ([1926](#), p. 99), conventional Egyptological pronunciation: /inset/

²⁶AHD, [2022](#), anise.

²⁷Parallel to Indo-Persian *shāh-jūrā* [king-cumin] ‘caraway’

In Arabic, similarly to English, the name of anise is a loanword from Greek. It is known by many spelling variations: *anīsūn*, *ānīsūn*, *ansūn*, *yānsūn*, and *yansūn*. In general, the *a-* forms were the initial loanword taken directly from Greek, then a *y-* form emerged that assimilates better in Arabic phonology. In addition, synonyms for anise are *kammūn hubw*, lit. ‘sweet cumin’, and *hubba hubwa* ‘sweet grain, sweet seed’.

Anise in Persian, is بادیان رویی *bādyān rūmī*²⁸, literally ‘Roman anise’, where *bādyān* is an archaic word for either fennel or anise, the etymon of French *badiane* that begot English *badian* ‘star anise’. A possible connection between Persian *bādyān* and Mandarin Chinese 八角 *bajiao* ‘star anise’ have been proposed before, but in my opinion this is merely wishful thinking.

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Pimpinella anisum</i>	茴芹	<i>huíqín</i>	hui-celery	Kleeman and Yu (2010)
2	<i>Pimpinella anisum</i>	茴香	<i>huíxiāng</i>	hui-spice	Kleeman and Yu (2010)
3	<i>Pimpinella anisum</i>	西洋茴香	<i>xīyáng huíxiāng</i>	western-ocean-hui-spice	Wikipedia (n.d.)
4	<i>Pimpinella anisum</i>	洋茴香	<i>yáng huíxiāng</i>	ocean-hui-spice	CUP (2022)
5	<i>Pimpinella anisum</i>	歐洲大茴香	<i>ōuzhōu dàhuíxiāng</i>	European-big-hui-spice	Wikipedia (n.d.)

Table 1.7 Various names for anise in Chinese.

Etymology 6. Mandarin Chinese 茴芹 *huíqín* ‘anise’ [hui-celery], from *hui* ‘anise/fennel’ + *qín* ‘celery’ (茴 *huí* could be interpreted as ‘Muslim spice’, see 茴香 *huíxiāng* ‘fennel’), 1841^a

^aS.-Y. Hu (2005) and Kleeman and Yu (2010)

The gathering of names for anise is a bit difficult in Chinese for two reasons. Firstly, anise as a spice is relatively unknown in China except for Xinjiang, and therefore names are hard to find in sources. Since other spices with a similar flavour profile, such as the native star anise and the naturalized fennel are readily available, so anise was never imported into China. Consequently, we cannot find anise in reference works on Chinese food plants nor in Chinese *materia medica* (see S.-Y. Hu, 2005; S.-y. Hu, 1980/1999). It does however appear in the *Flora of China* (FoC)²⁹ Secondly, identifications is problematic and confusing due to the mixing of terms *anise*, *aniseed*, *star anise*, *star aniseed*, etc. in English, and Chinese dictionaries, and in some databases as well. Dictionaries that do not give botanical names are of little help to clarify doubts, but some conclusions can be derived with care. Most dictionary entries in Chinese that translate *anise* to *aniseed* should in fact say *star anise*, as they are all words referring to the Asian spice, except for one: 茴芹 *huiqin*.

²⁸Hayyim, 1934–1936, Vol. 1, p. 197.

²⁹Source: http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=200015767

Anise in Chinese is 茴芹 *huiqin* ‘anise-celery’, which appears to be a relatively modern, scientific coinage, and the only phytonym that appears in any publication (the FoC). It is used in the strict sense of *Pimpinella anisum* and cannot be misunderstood for star anise (*Illicium verum*). It does not appear in historical corpora, and it is not included in the 7th edition of the *Xiandai Hanyu Cidian* [A Dictionary of Modern Chinese] (Chinese Academy of Social Sciences, 2016), but it appears in the *Cambridge English-Chinese (Traditional) Dictionary (CEC)*³⁰, which gives us *huiqin*, along with 洋茴香 *yanghuixiang* ‘Western anise’. 茴香 *huixiang* really refers to fennel, and the only reason it appears in Kleeman and Yu (2010) is the confusion between the materials, and their names. The nomenclature and the reasons behind its confusion will be explored in more detail in ???. A few other names are mentioned on the Chinese Wikipedia page of the plant, these all refer to the European origins of this spice, or referring to “Western Ocean”, the Indian Ocean used to denote foreign, western products that have arrived over sea.³¹.

A Latin-Chinese dictionary from a presbyterian missionary from 1841 lists *huiqin* as *thymus* ‘thyme’,³² which is rather confusing considering that 10 years earlier, the same author rendered it ‘oregano’ in his Portuguese-Chinese dictionary.³³ From this, we can speculate that more of the various spice herbs that the Portuguese and other Europeans brought to Macao were first denoted with *huiqin*.

Summary

Table 1.8 shows the names of anise that can be found in dictionaries.

#	Language	Term	Gloss	Loan	Source
1	English	<i>anise</i>		yes	OUP (n.d.)
2	English	<i>aniseed</i>		no	OUP (n.d.)
3	English	<i>sweet cumin</i>		no	OUP (n.d.)
1	Arabic	<i>anīsūn</i>	phonetic	yes	Wehr (1976)
2	Arabic	<i>kammūn ḥulw</i>	sweet cumin	no	Wehr (1976)
3	Arabic	<i>yānisūn</i>	phonetic	yes	Wehr (1976)
4	Arabic	<i>ḥabba ḥulwa</i>	sweet grain, seed	no	Wehr (1976)
1	Chinese	<i>huíqín</i>	hui-celery	no	Kleeman and Yu (2010)
2	Chinese	<i>huíxiāng</i>	hui-spice	no	Kleeman and Yu (2010)

Table 1.8 Conventionalized names for anise in English, Arabic, and Chinese, found in dictionaries.

³⁰Source: <https://dictionary.cambridge.org/dictionary/english-chinese-traditional/anise> and <https://dictionary.cambridge.org/dictionary/english-chinese-traditional/aniseed>.

³¹Source: <https://zh.wikipedia.org/wiki/%E8%8C%B4%E8%8A%B9>

³²Gonçalves, 1841, p. 715.

³³Gonçalves, 1831, p. 585.

1.3 Asafoetida

3. ASAFOETIDA

POWO

English: *asafoetida*; *hing*; *devil's dung*. Arabic: حلبيت *hiltit*. Chinese: 阿魏 *āwèi*. Hungarian: *ördöggyökér* [devil's root]; *aszatgyanta* [asat resin]; *bűzös aszat* [stinking asat].

Plant species:	<i>Ferula foetida</i> (Bunge) Regel; <i>Ferula assa-foetida L.</i> ; et al.
Family:	<i>Apiaceae/Umbelliferae</i>
Plant part used:	gum-resin (latex)
Region of origin:	Iran; W. and C. Asia
Cultivated in:	Iran; Afghanistan
Color:	from pale yellow to brown



(a) gum-resin



(b) powder, colored with turmeric



(c) plant

Figure 1.5 Asafoetida in various forms, and one of its principal sources *Ferula assa-foetida* in the Kyzylkum Desert. Credit: Glorian; Aromatique; Public Domain

Asafoetida is the dried, golden brown oleoresin that forms after cutting the stems of various ferula plants of Central Asia. The material itself is a waxy gum-resin, and it is sold either in gum or powdered form. Asafoetida is an extremely pungent, strong-smelling substance; it is described having a “garlic-like” and “sulphurous odor” that is sometimes too strong in itself and must be diluted with other materials (van Wyk, 2014, p. 138). Asafoetida is a drug and spice, and was used for centuries in both Asia and Europe (Leung & Chen, 2019). It is still an integral part of Indian cuisine as an ingredient, while in Europe and East Asia it was mainly utilized as medicine.

Regarding the characteristics and uses of the plant asafoetida, there are parallels with the now extinct giant ferula plant, which is believed to be the source of the lost silphium or laserpitium of antiquity. Silphium was a drug used in ointments of traditional Greek medicine, and a coveted ingredient in Roman cuisine. It was and introduced from Libya in North Africa, and was once a commercially crucial product featured on Roman coins. We now believe that over-harvesting led to its demise (Dalby, 2000; Langenheim, 2003; Leung & Chen, 2019; van Wyk, 2014).

1.3.1 The Botany, Origin, and Cultivation of Asafoetida

Asafoetida is obtained from species of the genus *Ferula* in the *Apiaceae* family, such as *Ferula assa-foetida*, *F. foetida*, and *F. narthex* (Mabberley, 2017). These plants are “robust perennial herbs” that can grow to 2 m high, and as umbelliferous plants surmounted by large yellow flowers (van Wyk, 2014, p. 138). The plants cope well in mountainous and dry, desert-like conditions of Iran (from Yazd to Lar), up to Southern Uzbekistan (Kyzylkum Desert), and the Qandahar region of Afghanistan where they grow wild (Leung & Chen, 2019). Asafoetida is wild-harvested the same way it has been for thousands of years. The plant is cut before flowering, at the base of the stalk just above the root, and left exposed. The exudate is then collected once it solidifies, and this process is repeated again and again for up to three months, until no more liquid can be tapped (van Wyk, 2014, p. 138).

1.3.2 The History of Asafoetida

A fantastic chapter on the history of asafoetida already exists “The Itinerary of Hing/Awei/Asafetida across Eurasia, 400–1800” by Leung and Chen (2019)

1.3.3 The Names of Asafoetida

English

Etymology 7. English *asafoetida*, a. 1398 < Medieval Latin *asafoetida* [stinking asa] <[?] from Persian *āzā* ‘mastic’, in a Lanized form, *asa* + Latin *foetid* ‘ill-smelling, stinking’, (feminine of *fœtidus*)^a

^aOUP (n.d., s.v. asafoetida); Laufer (1919, p. 353); Steingass (1892, p. 42)

Asafoetida (also spelled *asafetida*) is a term directly from Medieval Latin that found its way into the English lexicon via the early modern European medicinal and botanical literature. Often seen with archaic spellings, such as “*assafetida*”, the name is made up of the Latinized version of Persian ازا/*āza/āzā* ‘mastic’³⁴³⁵, and Latin *foetida*, feminine of *foetidus* ‘stinking, ill-smelling, fetid’³⁶.

The first detailed discussion about asafoetida’s name comes from (Laufer, 1919, pp. 353–362)’s *Sino-Iranica*, where he vehemently opposes the theories of Persian origin regarding *aza*, stating that its purported meaning, ‘mastic’ is “a product entirely different from what we understand by asafoetida”, and prefers the inferred theory first proposed by Garcia da Orta (1563/1913, p. 41) that *asa* — “mutilated by the druggists of the middle ages” — somehow derives from the *laser* or Pliny’s *laserpitium* (a synonym for silphium, an important spice, medicine, and aphrodisiac used in antiquity just mentioned above). None of the two explanations are supported with documentary evidence,

³⁴Mastic, also known as *tears of Chios* is, a resin exuded from the trees *Pistacia lentiscus*. The dried, yellowish and translucent brittle pieces of resin resemble teardrops, and turn white when chewed, behaving like nature’s (initially bitter) chewing gum. It is traditionally produced on the island of Chios, Greece.

³⁵Steingass, 1892, p. 42, https://dsal.uchicago.edu/cgi-bin/app/steingass_query.py?page=42.

³⁶OUP, n.d., asafoetida.

and he is right in that “in no oriental language is there a word of the type *asa* or *aza* [...]”. I am not sure why did Laufer immediately dismiss the connection between mastic and asafoetida; both are obtained from the dried oleo-resin of Western and Central Asian plants, and even his own descriptions of mastic and its uses are very similar to that of asafoetida (Laufer, 1919, p. 252). His reports from a 1610 Chinese source, using the transcribed Arabic name *mastaki* say that it is produced in Turkestan, used “as *jiao*” (Sichuan pepper), and that its odor is very strong, and beneficial for digestion. Laufer, an expert in East Asian languages expects *aza* to come up in other oriental languages, but it seems to me that the problem of *aza* starts with Latin and therefore should be searched within the medieval European scientific literature. If *aza*, a Persian term for a dried resinous substance (i.e. mastic) loaned by scribes of Latin existed, why does *asa foetida*, literally ‘stinking mastic’ for a foul smelling dried resinous gum sound so impossible? In fact, one of the Arabic names for asafoetida literally translates to ‘the mastic of the giant ferula’; but here ‘mastic’ is likely to simply mean ‘gum’.

Asafoetida was first attested in Middle English, indicating its arrival in Europe. Sometime before 1398, we can read: “Some stynkyng þinges beþ ydoon in medycyne, as..brymston and asa fetida.”³⁷. This illustrious entrance of asafoetida immediately points out its stench, and to be paired here with brimstone — once a synonym for sulfur, now a term chiefly used in a Biblical context in the description of hell (cf. “fire and brimstone”) — is an apt premonition for the nickname *devil’s dung*. It is also worth noting that in English, the word first referred to the material, with the plant producing asafoetida sense only secondary; this is understandable, because no European have seen the ferula plants until the 17th century, and the origins of the drug were obscure.

Etymology 8. English *hing* ‘asafoetida’, 1599 < Hindi हिंग *hīṅg* ‘asafoetida’ < Sanskrit हिङ्गु *hiṅgu* ‘asafoetida’; cf. cognates Sogdian ’ynkw < Proto-Iranian* **aṅgu-jatu-* ‘resin-gum’; cf. Tokharian B, Khotanese^a

^aOUP (n.d., s.v. *hing*); OUP (n.d., s.v. *hing*); Gharib (1995, p. 87); Adams (2013, p. 7)

India was always a big importer and consumer of asafoetida, and also played a role in exporting it to other part of the world. Bombay served as the key port in the 19th century, where the stinking gum would change hands (sometimes after a bit of manipulation and adulteration). Contrary to China and Europe, Indians also developed an affinity to use it in their cooking. Thus, when the British came in contact with asafoetida in India, they adopted the local name: *hing*³⁸. *Hing* comes from Hindi हिंग *hīṅg*, through Sauraseni Prakrit *hiṅgu* from Sanskrit हिङ्गु *hiṅgu*³⁹. The Sanskrit term is believed to have derived from an Iranian source reconstructed as Proto-Iranian **aṅgu-jatu-* where *jatu*⁴⁰ is ‘gum’ (Modern Persian زد *zad* ‘gum’) and other derivates are Tocharian B *ankwas(t)*, Khotanese *amguṣḍā*, and Sogdian **angužat* (Adams, 2013, p. 7; Gharib, 1995, p. 87; R. L. Turner, 1962–1966, p. 281), also various Classical Persian forms, both inherited, e.g. انجان *angudān*, آنگوزه *ānghuzah* and borrowed,

³⁷OUP, n.d., asafoetida.

³⁸see Yule et al., 1903, p. 418,

³⁹AHD, 2022, *hing*.

⁴⁰Proto-Indo-European (PIE) **gʷʰétu* ‘resin, gum’

e.g. انجاد *anguzad* from Parthian (Tremblay, 2005, p. 438).

In English, *hing* is first attested in Hakluyt's *Principle Navigations* (new ed.): "One hundred and fourescore boates laden with Salt, Opium, Hinge, Lead, Carpets [etc.]."⁴¹, and soon identified as a substance identical to asafoetida, as an example from 1662 shows: "The Hingh, which our Drugsters and Apothecaries call Assa foetida, comes for the most part from Persia."⁴²

Among its many vernacular names in European languages, such as *devil's dung* in English, there is often a hint to the devil, possibly due to the connection between the smell of sulfur and hell in the Biblical tradition ("fire and brimstone"). The name *devil's dung* in its various glosses is popular among European languages (e.g. German *Teufelsdreck* lit. 'devil's filth', Finnish *pirunpihka* lit. 'devil's resin', or Turkish *şeytanboku* lit. 'Satan's shit', which shows the strong aversion this material induces in European people, and why it never gained popularity in cookery. Other vernacular names in English include *devil's dung*, *asant*, *stinking gum* (cf. George, 2012). On the far opposite, the phrase "food of the gods" on Wikipedia actually links to asafoetida, because in an Indian context asafoetida was and is a desirable ingredient. Garcia da Orta, a Portuguese Jewish herbalist and ethnobotanist pioneer who spent much time on Goa wrote in the 16th century:

"Well, you must know that the thing most used throughout India, and in all parts of it, is that Assa-fetida, as well for medicine as in cookery. A great quantity is used, for every Gentio who is able to get the means of buying it will buy it to flavour his food." (Garcia da Orta, 1563/1913, p. 44)

But as a European, he also notes on the next page: "The nastiest smell in the world for me is Assa-fetida".

#	Species	Name	Source
1	<i>Ferula assa-foetida</i> et al.	devil's dung	van Wyk (2014)
2	<i>Ferula assa-foetida</i> et al.	hing	van Wyk (2014)
3	<i>Ferula assa-foetida</i> et al.	stinking gum	Peter (2012)
4	<i>Ferula spp.</i>	asafoetida	van Wyk (2014)

Table 1.9 Various names for asafoetida in English.

Arabic

Etymology 9. Arabic حلتیت *hiltīt* 'asafoetida resin'; cf. cognates Hebrew חַלְתִּית *hiltit* < Aramaic חַלְתִּיתא/סָלָה *heltītā* 'id.'^a

^aFraenkel (1886, p. 140); Löw (1881, p. 36) and Löw (1924, vol. 3, p. 452-455)

⁴¹Hakluyt, 1589, <http://www.perseus.tufts.edu/hopper/searchresults?target=en&inContent=true&q=hinge&doc=Perseus%3Atext%3A1999.03.0070>.

⁴²OUP, n.d., hing, <https://www.oed.com/view/Entry/87092>.

Arabic terms now make a difference between the material and the plant; asafoetida as a spice/medicine hiltit is called حلتیت *hiltīt*, while the plant is called انجدان *anjudān*. The word *hiltīt* comes from Aramaic ↗*חַלְתִּתָּה* *hiltītā*, and also exists in a Hebrew cognate as חַלְתִּת *hiltīt* (Fraenkel, 1886, p. 140; Löw, 1881, p. 36; Löw, 1924, Vol. 3, p. 452–455). It is first attested in Sibawayhi's (ca. 760–796, a Persian native) *al-Kitab* [The Book], which is the earliest work on Arabic grammar and linguistics. *Hiltīt* appears in the first Arabic dictionary, the *Kitāb Al-‘Ayn* [The Source] compiled by al-Farāhīdī (ca. 786), simply sending the reader to *al-anjudhān* 'asafoetida', which could mean that this word was more widely known than *hiltīt* at the time. *Anjudān* is first mentioned in its earlier form *anjudhān* in the *Kitab Al-‘ayn*, which also tells us that the source (*uṣūl*) of *anjudān* is a plant called *maḥrūt*, which also appears in the poetry of Imru' l-Qays, the most eloquent poet of pre-Islamic Arabia⁴³. Arabic *anjudān* is a loanword from Persian, likely borrowed before the 6th century and it comes from the same Proto-Iranian **angu-žatu-* as Sanskrit, and later English *hing*.

Etymology 10. Arabic *anjudān* انجدان < Persian *angudān* انجدان < Proto-Iranian* **angu-žatu-* 'resin-gum'; cf. Tokharian B, Khotanese^a

^aLane (1863, pp. 79–80); Steingass (1892, pp. 114, 106); Adams (2013, p. 7)

#	Species	Name	Tr.	Gloss	Source
1	<i>Ferula spp.</i>	أبو كبير	<i>abū kabīr</i>	big father	Wehr (1976)
2	<i>Ferula spp.</i>	أنجدان	<i>anjudān</i>	phonetic	Baalbaki (1995)
3	<i>Ferula spp.</i>	صمع الأجدان	<i>samgh al-anjudān</i>	gum of anjudan	Baalbaki (1995)
4	<i>Ferula spp.</i>	صمع راتيناجي	<i>samgh rātīnājī</i>	rātīnājī gum	Baalbaki (1995)
5	<i>Ferula spp.</i>	حلتیت	<i>hiltīt</i>	phonetic	Wehr (1976)

Table 1.10 Various names for asafoetida in Arabic.

Chinese

Etymology 11. Mandarin Chinese 阿魏 *āwèi* MC MC /PəŋuiH/ 'asafoetida' < Tokharian B *ankwaṣ* (t) 'asafoetida' < Sogdian **angužat* 'asafoetida' < Proto-Iranian* **angu-žatu-* 'resin-gum'^a

^aLeung and Chen (2019); Laufer (1919, p. 353); Tremblay (2005, p. 438)

As for Chinese, 阿魏 *āwèi* is the term that gained much prevalence in the 7th century (Leung & Chen, 2019). It seems likely that it was Kuchean traders from around the Tarim basin who first brought asafoetida to Chang'an, the Tang capital on the eastern terminus of the Silk Road. The consensus now among both Sinologists and experts on the languages of the Silk Road is that *āwèi* is a loan from Tocharian B *ankwaṣ*(t), originating from the same Proto-Iranian etymon as two of the above Arabic

⁴³see Ibn Manzūr, 1290/1979, p. 819.

and English examples (Laufer, 1919, p. 353; Baxter & Sagart, 2014, p. 121).

Etymology 12. Mandarin Chinese 興蕖/興渠/興瞿 *xīngqú* MC /hiŋ giʌ/ ‘asafoetida’, phonetic transcription < Sanskrit हिङ्गु *hingga* ‘asafoetida’ < Proto-Iranian* **angu-jatu-* ‘resin-gum’; cf. Tokharian B, Khotanese^a

^aLeung and Chen (2019); Laufer (1919, p. 353); Adams (2013, p. 7)

But, there was an earlier name for asafoetida in Chinese: 興蕖/瞿/渠 *xīngqu*, doublet of 形虞 *xīngyu*. These are direct transcriptions of the Sanskrit *hingga* we mentioned above, and were attested in 5th-century Buddhist sutras (Leung & Chen, 2019). It is also worth mentioning that in this case, the Chinese monks most likely had no idea what exactly *xīngqu* is, just that it some plant resin, and as such, it exemplifies a rare case when the word precedes the thing it refers to. In the *Bencao Gangmu* (BCGM), besides the names above, other synonyms can also be found. These are 阿虞 *ayü*, from the transcription of Persian *anguzā(d)*, and 哈昔尼 *haxini*, the transcription of Ghazni, a city in Afghanistan where asafoetida was exported from. In the *Taiping Guangji* (TPGJ) (citing the *Youyang Zazu* (YYZZ)), it is said that *awei* comes from the country of 伽闍那 Middle Chinese (MC) /gazana/, which is likely a rendering of Ghazna, a variant of Ghazni.⁴⁴

From all the names, the most successful was unquestionably *awei*, it enjoyed popularity for centuries, and further propagated into Sinoxenic words of Japanese 阿魏 *agi*, Korean 阿魏 *아위* *awi*, and Vietnamese *ngui* (Leung & Chen, 2019).

I highly recommend both Laufer (1919)’s *Sino-Iranica*, and Leung and Chen (2019)’s “The Itinerary of Hing/Awei/Asafetida across Eurasia, 400–1800” for those who are interested in asafoetida’s journey and its names.

Say something about
Middle Chinese
phonology and
Zhengzhang,
Baxter-Sagart?

#	Species	Name	Tr.	Gloss	Source
1	<i>Ferula spp.</i>	阿虞	<i>ayü</i>		Leung and Chen (2019)
2	<i>Ferula spp.</i>	哈昔尼	<i>hāxīnī</i>		Leung and Chen (2019)
3	<i>Ferula spp.</i>	黑黎提提	<i>hēilitītī</i>		Rossabi (2013)
4	<i>Ferula spp.</i>	形虞	<i>xīngyú</i>		Leung and Chen (2019)
5	<i>Ferula spp.</i>	興蕖/興渠/興瞿	<i>xīngqú</i>		Leung and Chen (2019)
6	<i>Ferula spp.</i>	阿魏	<i>āwèi</i>		Leung and Chen (2019)

Table 1.11 Various names for asafoetida in Chinese.

Summary

And so, what we see here is that all three languages under scrutiny — English, Arabic, and Chinese — have at least one word that goes back to the same Proto-Iranian etymon, from the geographic source

⁴⁴Chinese Text Project (CTP) — <https://ctext.org/taiping-guangji/414/awei?searchu=%E9%98%BF%E9%AD%8F&searchmode=showall#result>

of the material it signifies and from the native region of the plant it is harvested from. This is not a surprise, rather evidence showing that the words do follow the material, even with twists and turns, and that tracing their journey correlates with the trade routes thus marking the contact zones where information about the material was transmitted.

#	Language	Term	Gloss	Loan	Source
1	English	<i>devil's dung</i>		no	OUP (n.d.)
2	English	<i>hing</i>		yes	OUP (n.d.)
3	English	<i>asafoetida</i>		yes	OUP (n.d.)
1	Arabic	<i>abū kabīr</i>	big father	no	Wehr (1976)
2	Arabic	<i>anjudān</i>	phonetic	yes	Baalbaki (1995)
3	Arabic	<i>samgh al-anjudān</i>	gum of anjudan	no	Baalbaki (1995)
4	Arabic	<i>samgh rātīnājī</i>	rātīnājī gum	no	Baalbaki (1995)
5	Arabic	<i>ḥiltīt</i>	phonetic	yes	Wehr (1976)
1	Chinese	<i>āwèi</i>		yes	MDBG (n.d.)

Table 1.12 Conventionalized names for asafoetida in English, Arabic, and Chinese, found in dictionaries.

Etymological stages of names for asafoetida

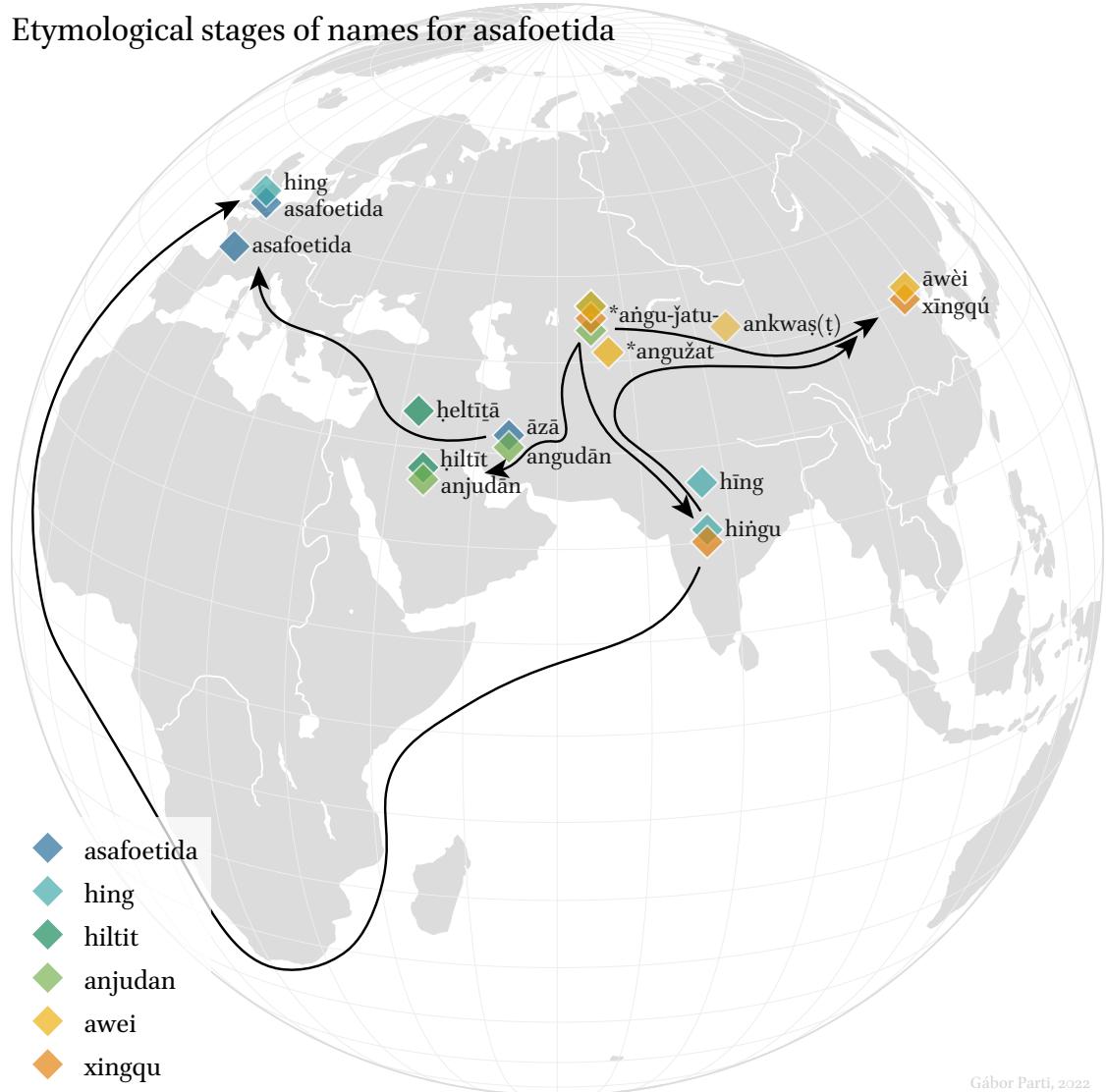


Figure 1.6 Etymological stages in the progression of prototypical names of asafoetida.

1.4 Black Pepper

4. PEPPER

POWO

English: *pepper; black pepper.* **Arabic:** فلفل *filfil, fulful.* **Chinese:** 胡椒 *hújiāo* [barbarian-pepper]; 黑胡椒 *hēihújiāo* [black-barbarian-pepper]. **Hungarian:** *bors; fekete bors* [black pepper].

Plant species:	<i>Piper nigrum</i> L.
Family:	<i>Piperaceae</i>
Plant part used:	fruit
Region of origin:	Malabar coast (South India)
Cultivated in:	Vietnam; Brazil; Indonesia; India; Sri Lanka; etc.
Color:	black; white; green

Etymology 13. Arabic فلفل *filfil, fulful* ‘pepper’ < Persian پلپل *pilpil* ‘id.’; cf. cognates Old Armenian պղպել *p̥pet*, Old Georgian პილპილი *pilpili* <[?] Middle Indo-Aryan* ‘long pepper’ < Sanskrit पिप्पलि *pippali* ‘long pepper *Piper longum* (plant and berry); a berry’^a

^aLane (1863, p. 2434); Sultan Qaboos University (1985)

Etymology 14. Mandarin Chinese 胡椒 *hújiāo* ‘black pepper’ [barbarian-pepper], from 胡 *hú* ‘Western barbarians, steppe nomads’ + 椒 *jiāo* ‘pepper, spice’ (*jiāo* was the prototype spice in China, originally referring to the local “Sichuan pepper” which is now called 花椒 *huājiāo* [flower-pepper]), [Northern and Southern] 420-445^a

^aSchuessler (2007)

Black pepper is the dried fruit (drupe)⁴⁵ of the species *Piper nigrum*. Pepper fruits are often called peppercorns, and they come in black, white, green, and even red. However, black pepper, white pepper, green and “true” red peppercorns are not different varieties, they are the fruits of the same plant. Their difference merely lies in the harvesting and drying process. All of them have a unique, pungent taste and a fresh, spicy aroma that they release when being crushed or ground.

Black pepper is the most important, most popular, and most consumed spice in the world (Maberley, 2017, p. 721). Valued for its pungency and flavor, pepper has been used since ancient times in traditional medicine and gastronomy from East to West, and it is the most influential spice that shaped human history. It is found and used virtually everywhere around the globe (Hill, 2004, p. 253), and most of us are familiar with the biting sensation it causes on the tongue and in the nose. Black pepper

⁴⁵Botanical term: A drupe refers to a type of fleshy fruit with thin skin and a single, central pit containing the seed, also known as a “stone-fruit” (e.g.: plum, cherry, peach, nutmeg, olive, mango). It is a term used to denote the contrast to a botanical “berry”, which contains many seeds (e.g.: blueberry, grape).

was one of the first aromatic substances used medicinally in India, and one of the first products of global commerce to be traded, alongside long pepper, and ginger. It was transplanted to other tropical regions of Asia early on, and cultivated extensively. Black pepper's early diffusion is remarkably interesting, it is the prototype spice for many of us. Also referred to simply as *pepper* from here on, it was among the first oriental spices to reach the Occident (Peter, 2012, vol. 1, p. 86). Pepper was known to the ancient Egyptians, Greeks, and Romans in the West, and have changed medieval Europe. It was even used as currency in small amounts. Today it accounts for more than a third of all spices traded in the world, making it the most traded spice as well (Ravindran, 2017). Its importance is well demonstrated by the many books and monographs about its history (see Shaffer, 2013; Wernick, 2014), agronomy (see Nair, 2020; Ravindran, 2000), and appeal (see Barth, 2019; De Kerros, 2016).

Interestingly, black pepper is the only spice to be traded on the stock market as a commodity, the International Pepper Exchange was established in 1997 in Kochi, India. One result of this is cargo containers of black pepper sitting in warehouses waiting to change hands, leading to a loss in nutritional value and flavour and thus an unnecessary underwhelming experience for future consumers (Madagascar Spices Company, 2022). Spice merchants often urge serious customers to buy directly from the producer cutting the middlemen, citing the above inconvenience of product waiting in transit and retail.

Uses

Black pepper had and has various uses in multiple areas. Nowadays, we mainly consider its importance in the culinary arts — from seasoning food in the kitchen to the dining table — but it is extensively used in the food industry as well for flavouring and preserving processed foods (Peter, 2012, vol. 1, p. 86). Often called the “king of spices”, black pepper is so ubiquitous and well known in cooking that it is essentially pointless to list cuisines and dishes that feature it. It is present in practically all savoury dishes, sauces, marinades, and pickles. It is used whole, crushed, or ground, and its role in Western gastronomy is well marked by the fact that virtually all restaurant table host a pair of salt and pepper mills or shakers. On the other hand, white pepper is a key ingredient in French and Chinese cuisine, where it is much more popular than black pepper, while green pepper is popular in Thai and South Indian cooking. But besides just a seasoning, pepper also has roles in perfumery and beauty care, not to mention its use as a home remedy (Ravindran, 2000, p. 467). In fact, as it is true for most spices, pepper in the past was considered primarily a medicine. Black pepper is well known in the traditional herbal systems, whether Ancient Greek, Ayurvedic, or Traditional Chinese Medicine, as well as contemporary pharmacology and phytotherapy (a modern name for chemistry-assisted herbalism). Reviews and updates on the research of *Piper nigrum*, its active components, and their effects on human physiology are being published at a steady pace (see Butt et al., 2013; Haq et al., 2021; Meghwal & Goswami, 2013; Srinivasan, 2007). Recent scientific research shows that piperine displays numerous pharmacological effects, such as antimicrobial and antioxidant (Haq et al., 2021). It is therefore not surprising that health benefits of black pepper have been recorded in pharmacopoeias since ancient times, and that it has been used for the treating of various illnesses: ranging from

stomach pains and digestive problems to fever, cold, and even food poisoning (Quattrocchi, 2014, p. 2952).

Note 1.4.1. Throughout this dissertation — unless stated otherwise — the term *pepper* alone always denotes the pepper(s) of *Piper nigrum*, of the genus *Piper*, from the pepper family (*Piperaceae*) or, originating in India (i.e. black pepper, white pepper, etc.). This is to make an arbitrary distinction with the various kinds of hot chile, or chili peppers of the genus *Capsicum* in the nightshade family (*Solanaceae*), native to the Americas. A partial objective of this dissertation is to untangle the messy nomenclature around these plant and spice names, which is evident if we take into account all the different items we can refer to with the words *pepper* in English, *jiāo* in Chinese, and *filfil* in Arabic; a situation true to many other languages as well.

False peppers

There are other aromatic, spice yielding plants (other kinds of peppers, if you like) in the *Piperaceae* family, constituting to different species, such as cubebs, tailed peppers, or Java peppers (*Piper cubeba*), (Indian) long peppers (*P. longum*; *P. retrofactum*), “piper chilies” (*P. chaba*), Ashanti/Benin pepper (*P. guineense*), etc., and they will be referred to using these common names throughout. Cubeb, and long pepper especially, were more common in ancient times but virtually disappeared from the global spice trade in the modern age. Other, less common spices unrelated to the *Piper* genus, such as pink peppercorns from South America (*Schinus molle*; *S. terebinthifolia*), Sichuan peppers from East Asia (*Zanthoxylum spp.*), and alligator peppers (*Aframomum danielli*) from Africa are sometimes referred to as “false peppers”. These will always be referred to with their usual full vernacular names to avoid confusion.

Do other peppers at the end of this

1.4.1 The Botany of Black Pepper

Pepper is native to the Malabar region in South India where the Western Ghats, a mountain range parallel to the coastline, traps the monsoon rains. This results in the most humid region in India, making it one of the plant biodiversity hot-spots on Earth (Ravindran, 2000, p. 1). Often called the “king of spices”, pepper originates here in the evergreen tropical forests of Kerala, which is the origin and centre of plant diversity for the “queen of spices” as well: cardamom (Ravindran, 2000, p. 1). Wild populations of pepper and closely related species grow in the moist, shady forests, up to 1200 m above sea level (Ravindran, 2017). Pepper is cultivated for thousands of years in these areas, and once South India was the only place that produced it. Due to the human desire for this valuable spice, the crop was slowly transplanted from here to other tropical zones, mainly in the Asia-Pacific: Sri Lanka, Malaysia, Indonesia; but also to the West as far as Madagascar and Brazil. Today it is cultivated in 26 countries (Ravindran, 2000). The top five producers in 2020 were Vietnam, Brazil, Indonesia, India, and Sri

Lanka.⁴⁶ Pepper grows on a perennial vine, blooming a cluster of small flowers on hanging spikes that bring young, round fruits that are first green, turning to bright red as they ripen; resembling berries. Pepper plants in their native habitats spread on the forest floor, or climb over rocks, shrubs, and trees. Pepper prefers the hot tropics with high humidity, and optimal temperatures of around 20-30°C. Open cultivation is possible in places where rainfall is well distributed (e.g.: Thailand, Vietnam, Malaysia), whereas in India shade is required because of the 6 months of drought between monsoon seasons (Ravindran, 2017). Wild pepper species are dioecious⁴⁷, having male and female individuals, while the domesticated pepper populations became monoecious:⁴⁸ one plant is both male and female. This is probably due to thousands of years of selective multiplication and it leads to greater quantities in production: bisexual flowers mean high fruit yields (Ravindran, 2000, p. 38). Pepper lianes are propagated from cuttings, and being climbers, they are usually grown around trees for live support, or with the use artificial poles (van Wyk, 2014, p. 216).

When it comes to harvesting, the techniques are different depending on the intended end product. In the case of black pepper, the near-ripe (still green) fruits are hand-picked and sun-dried in the course of several days up to two weeks. Oxidation leads to the darkening of the pericarp⁴⁹ (the outside skin and flesh of the fruit) to a hue ranging from deep brown to jet black, while also attaining the signature wrinkles and dimples (Hill, 2004, p. 254). The drying process can be sped up by boiling the pepper fruits in hot water for a short time. Chemical changes induced by the heat hasten the subsequent oxidation process, which causes the outer layer to gradually shrivel and blacken while getting dried (van Wyk, 2014, p. 216). White pepper is obtained by letting moisture and micro-organism dissolve the cellular tissue of the fully ripe red fruits, basically letting them rot in a technique called retting⁵⁰. The fruits' decomposed skin and flesh are easily removed by hand or machine after soaking and gentle washing, and the remaining pale seed is then dried on the sun, or bleached (van Wyk, 2014, p. 216). Green peppercorns are a result of traditional pickling, or in modern times rapid freeze-drying of the unripe fruits as a way to prevent fermentation. This process results in a product with a light weight and seemingly higher price. Occasionally the ripe, red fruits are sold as well to be used fresh, but the "true" red peppercorns – as Hill (2004) calls them – are rare and mostly found in producing areas: they lose their vigour within days of harvest and so must be used fresh unless preserved in vinegar or brine. As it is a hallmark of spices, the two varieties that are dried (black pepper and white pepper) are much more known worldwide, their dry quality allows them to be transported on longer journeys. If we think of white pepper as de facto decorticated black pepper, we would rightly guess that the flavour of white pepper is weaker than black pepper, as the outer peel of black pepper contains much of the spicy compounds responsible for the heat. Green peppercorns have an even milder taste and a much shorter shelf-life. Indigenous to the Malabar coast, a well known and popular variant is the Malabar

⁴⁶In order of production quantity, from highest to lowest. All production data is from FAOSTAT (Food and agriculture data of the Statistics Division, Food and Agriculture Organization of the United Nations): <https://www.fao.org/faostat/en/#home>; license: CC BY-NC-SA 3.0 IGO.

⁴⁷Bot.: the male and female reproductive organs are found in separate individuals.

⁴⁸Bot.: having both the male and female reproductive organs in the same individual; hermaphrodite.

⁴⁹Bot.: In fruit anatomy, pericarp is the collective name for the outer layers around the seed of a fleshy fruit or drupe: the endocarp (innermost covering of the seed; the pit), the mesocarp (flesh), and the exocarp (skin).

⁵⁰

pepper or Malabar black, a commodity sought-after by traders since Roman times (De Romanis, 2020). Another famous name on the market is the Tellicherry black, which according to spice traders is not a regional designation, but rather a requirement of size. If a peppercorn is larger than 4.25 mm pinhead, it is classified as Tellicherry (Eirinberg, 2021). Other famous and/or protected pepper variants with Geographical Indication (GI) certificates are Kampot pepper from Cambodia, the Muntok white and Sarawak white from Indonesia and Malaysia respectively, and the Penja pepper from Cameroon. A relatively recent publication by pepper grower and merchant De Kerros (2016) accompanied by remarkable photographs aims to present all the dozens of pepper varieties around the world that are available to those with an adventurous taste. Pepper owes its punch to the alkaloid piperine, while the wrinkly pericarp supplies the complex spicy aroma and flavour thanks to a high number of chemical compounds in the form of volatile oils (Ravindran, 2000, p. 467). The most powerful one of which is rotundone, a highly potent compound also found in Shiraz wines (C. Wood et al., 2008). For more on details on the botany, chemistry, cultivation, agronomy, and other aspects of black pepper, please refer to Nair (2011), Parthasarathy et al. (2008), and Ravindran (2000).

1.4.2 The History of Black Pepper

The history of pepper accompanies the history of mankind from the earliest times of contact and exchange between civilizations. The story of pepper is global and must travel to Ancient Egypt to begin. According to a popular anecdote in books and articles about pepper, peppercorns were used in the embalming process of mummies (Ravindran, 2000), and they were found in the nostrils of Ramses II (J. Turner, 2004, p. 168). I have read this on many occasions, and I have spent way too much time to find out if this is true or not. In short, there is no definitive answer, but that the alleged peppercorns were only “seen” through X-ray, and that the original reports are dubious at best, as reported by Bucaille (1990, p. 206). Ramses II died in 1213 BC, and even if these specific are problematic, it is said that peppercorns and cinnamon were imported “from Southeast Asia and the East Indies” and thus available to wealthy citizens of Egypt as early as New Kingdom era (16th c. BC–11th c. BC) (Salima, 2001/2005, p. 394).

Pāṇini, the famous Sanskrit grammarian (ca. 4–6th c. BC) recorded the use of pepper in spiced wine, and pepper appears in early Indian medical texts of Suśruta as well (Ravindran, 2000). In the 4th century, Theophrastus recorded and described both black pepper and long pepper, and by the 1st century AD its source was accurately described by Pliny the Elder; stating that black pepper is from south, long pepper is from north India. Rome conquered Egypt in 30 BC, and with that the pepper trade as well, which was a key enterprise in Rome’s later financial success. From here onwards, the history of pepper within the Indo-Roman trade is well studied and documented, for further details please see De Romanis (2020), Miller (1969), and Sidebotham (2011).

During the late Middle Ages, pepper also brought great riches to Europe, the former wealth of Venice was due to its trade. After the crusades, European sea powers tried to get ahold on the monopoly of the spice trade, and Vasco de Gama’s landing near Calicut in 1498 in the Venetian, Portuguese, Spanish, Dutch, and English vied with each other for centuries up to the modern era. Pepper reached

Southeast Asia probably during the t The story of pepper is very well explored in the Age of Exploration as well, there is no need for me to delve into it deeper. I recommend Dalby (2000), Shaffer (2013), and J. Turner (2004) for those interested.

1.4.3 The Names of Black Pepper

English

Etymology 15. English *pepper* <? West Germanic* **pirpor* ‘id.’ < Latin *piper* ‘black pepper, long pepper’ < Ancient Greek πέπερι *péperi* ‘id.’ < Middle Indo-Aryan* पिप्परी *pippari* ‘long pepper’ < Sanskrit पिप्पलि *pippali* ‘long pepper *Piper longum* (plant and berry); a berry’^a

^aBosworth and Toller (1898/2014), R. E. Lewis et al. (1952–2001), and OUP (n.d.); Harper (n.d.-b); C. T. Lewis and Short (1879); Liddell and Scott (1843/1940); Sheth (1923–1928, p. 599); Monier-Williams (1899, p. 626)

The word *pepper* arrived to modern English via Middle English *peper* and Old English *pirpor*, *piper*, from an early, Proto-West Germanic borrowing of Latin *piper*.⁵¹ The Latin word comes from Greek πέπερι *péperi*, a word “of oriental origin”⁵² or “Indic origin”.⁵³ The source is most probably from a Middle Indo-Aryan language, akin to Prakrit *pippari*⁵⁴, probably via Pahlavi (Middle Persian)⁵⁵, ultimately from Sanskrit *pippali* or *pippali*.⁵⁶

As for the meaning, we know that in Latin the word *piper* was used for both black pepper and long pepper, and this is true for the Greek word as well. As long pepper gradually disappeared and was completely replaced by black pepper in the Middle Ages, so varied the that sense of the word. The original word’s meaning however was exclusively long pepper, *pippali* did not refer to black pepper. In Monier-Williams (1899), *pippali* is ‘long pepper’, while *pippali* refers to ‘a berry; *Piper longum* (both plant and berry)’. The Sanskrit word for ‘black pepper’ was मरिच *marica*⁵⁷, attested in the *Suśrutasamhitā*, the foundational text of *Ayurveda*. Hindi-Urdu میرچ/چور mirch is the most obvious descendant of the Sanskrit word, and it is similar in meanings to the word *pepper* in English today: by itself it rather refers to chili, while with a distinguishing word, it refers to black pepper (i.e. *kālī mirc* [black pepper]). The use of both black and long pepper in India can be dated to ancient times, as Ayurvedic texts compiled in Sanskrit, such as the *Suśrutasamhitā* testify. Together with ginger (*śringavera* in Sanskrit), these three spices are a base combination in traditional Indian medicine, the name for which is त्रिकटु *trikatū* ‘three spices’.

The ancestors of English speakers adopted the word during the Anglo-Saxon period, before they arrived to England, and so its cognates are found in other West Germanic languages as well.⁵⁸

⁵¹OUP, n.d., pepper.

⁵²Hoad, 2003, pepper.

⁵³AHD, 2022, pepper.

⁵⁴Sheth, 1923–1928, p. 599.

⁵⁵Harper, n.d.-b, pepper.

⁵⁶Monier-Williams, 1899, 628.

⁵⁷Monier-Williams, 1899, p. 790.

⁵⁸Cresswell, 2021, pepper.

According to Mabberley (2017, p. 695), the following common names refer to the species *Piper nigrum*: pepper, black pepper, Madagascar pepper, and white pepper. Except the green peppercorns mentioned above, other spices, such as the Sichuan peppers from China, pink peppercorns from Brazil, and Guinea peppers (*Aframomum melegueta*) from tropical West Africa are different, often botanically unrelated species. Only connected by their names and similar uses, looks, or flavour profiles.

The confusion of the two kinds of pepper – most notably of black pepper and chile pepper in English – is also present in Chinese, as well Arabic. Whether in culinary or medicinal spice terminology, or just in vernacular names in daily conversation, the curse of “one word for all peppers” is present in many languages.

Jiao ‘pepper’ in Chinese

In Chinese, the word for ‘pepper’ is *jiao*. And just like in English, *jiao* now can refer to all the three major sources of pepper. So which pepper is it? Who is the O.G. of peppers?. It would be safe to assume that *jiao* originally referred to indigenous Chinese peppers of various *Zanthoxylum* species, or Sichuan peppers as we today call them. We can find instances of Classical Chinese texts featuring the pepper plant, *jiao* and its branches appear in a poem from the *Book of Poetry*:

椒聊之實、蕃衍盈升。
彼其之子、碩大無朋。
椒聊且、遠條且。

The clusters of the pepper plant,
Large and luxuriant, would fill a pint.
That hero there
Is large and peerless.
O the pepper plant!
How its shoots extend!

Translated by James Legge,
from the *Shijing*,
c. 8–11th century BC.

1.5 Caraway

5. CARAWAY

POWO

English: caraway. Arabic: كراویا *karāwiyā*. Chinese: 葛縷子 *gělǚzi*. Hungarian: *fűszerekömény* [spice-cumin].

Plant species:	<i>Carum carvi</i> L.
Family:	<i>Apiaceae/Umbelliferae</i>
Plant part used:	fruit
Region of origin:	Mediterranean; Eurasia
Cultivated in:	Denmark, Lebanon, The Netherlands, Poland
Color:	dark brown



(a) a



(b) b

Figure 1.7 Caraway *Carum carvi*.

#	Species	Name	Source
1	<i>Carum carvi</i>	Armenian cumin	OUP (n.d.)
2	<i>Carum carvi</i>	caraway	van Wyk (2014)
3	<i>Carum carvi</i>	caraway-seed	OUP (n.d.)
4	<i>Carum carvi</i>	meridian fennel	Wikipedia (n.d.)
5	<i>Carum carvi</i>	mountain cumin	OUP (n.d.)
6	<i>Carum carvi</i>	Persian cumin	Wikipedia (n.d.)
7	<i>Carum carvi</i>	royal cumin	OUP (n.d.)

Table 1.13 Various names for caraway in English.

1.5.1 The Botany, Origin, and Cultivation of Caraway

1.5.2 The History of Caraway

1.5.3 The Names of Caraway

English

Etymology 16. English *caraway* ‘caraway’, ca. 1440 < Medieval Latin *carui* ‘caraway’, or some allied Romanic form, ca. 1080; cf. cognates French *carvi*, Italian *carvi*, Spanish *carvi*; Old Spanish *alcaravea*, *alcarahueya*, Portuguese *alcaravia*, *alcorovia* < Arabic كَرَّاْوِيَّة karāwiyā ‘caraway’, (loaned to some European languages with *al-* definite article, via Andalusian Arabic) < Aramaic כַּרְוָיָא karwāyā ‘caraway’ < Ancient Greek καρώ karó ‘caraway’, a form of the word *káron*, derived from *káre* ‘head’; -ó form seems Pre-Greek (these forms could not immediately give the Arabic, hence possibly via *καρψία *karpsiā a typical plant derivation form of καρώ karó, κάρον káron); cf. cognates Latin *carum*, *careum*^a

^aOUP (n.d., s.v. *caraway*); AHD (2022, s.v. *caraway*); Corriente (2008, p. 74) and TLFi (2012, *carvi*); Löw (1881, p. 207) and Löw (1924, pp. 437–438); Beekes and van Beek (2010, p. 653) and Sokoloff (2002, p. 599)

caraway English *caraway* comes from a Romance language, such as French *carvi* (attested in 1256)⁵⁹ or the equivalent Medieval Latin *carui* (ca. 1080), whence the scientific name.⁶⁰ The Romance languages borrowed this word from Arabic كراويا *karāwiyā*, sometimes with the definite article *al-*.⁶¹ (Many Arabic loanwords in Spanish contain the definite article, and many of these borrowings go back to the times of Muslim Spain in al-Andalus, otherwise known as *La Convivencia*; e.g., *almohada* ‘pillow’, *alcatraz* ‘cormoran’, *alcohol* ‘alcohol’, *álgebra* ‘algebra’, etc.)

The Arabic term has Semitic cognates in Aramaic, which is thought to be a loanword from Ancient Greek καρό *karō*, (also etymon of *carrot*), which shows sign of being pre-Greek.⁶². According to Sokoloff (2002), the development of the Greek word follows typical plant name derivation patterns.

⁵⁹Tl/Fi, 2012, carvi.

⁶⁰QUP, n.d., caraway; TLEFi, 2012, caryx.

⁶¹Corriente, 2008.

⁶²Beekes and van Beek, 2010.

The spice ajowan/ajwain *Trachyspermum ammi* also has a synonym from this etymon: *carom*.

Further English vernacular names use *cumin* as the prototype word, and modify it with distinguishing words that indicate the general direction and places where caraway was arriving from: the mountainous regions of Armenia and Persia. *Royal cumin*—attested in 1614—seems to be a semantic translation of Hindustani شاہ جیرا/جیرا shāhjīrā, a Persianate term that is modeled from the Farsi words *shāh* ‘king’ (origin of the word *check* in the “checkmate” of chess) and *jīrā* ‘cumin’, but its use is restricted to South Asia and not Iran. However, in the first record of it in “A short Table expounding all the hard words in this book”, it refers to bishop’s weed, bullwort, or *ammi* (ameos) (*Ammi majus*), which another umbelliferous herb with similar seeds (Markham, 1614).

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Carum carvi</i>	کراویا	<i>karāwiyā</i>	phonetic	Wehr (1976)

Table 1.14 Various names for caraway in Arabic.

The Arabic word for caraway is کراویا *karāwiyā*, the etymology of which was discussed under Etymology 16, just above. Caraway was known to the Arabs early on, it appears in the *Kitāb al-Ḥāwī fī l-Tibb*, the monumental 10th-century medical encyclopedia of al-Razi.

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Carum carvi</i>	葛縷子	<i>gēlūzǐ</i>		Kleeman and Yu (2010)
2	<i>Carum carvi</i>	頁蒿	<i>yèhāo</i>	leaf-wormwood	MDBG (n.d.)
3	<i>Carum carvi</i>	藏茴香	<i>zànghuíxiāng</i>	Tibetan-hui-spice	MDBG (n.d.)

Table 1.15 Various names for caraway in Chinese.

In Chinese, the modern word for caraway is 葛縷子 *geluzi*, but this does not appear in historical documents or corpora. We know from Laufer (1919) and Schafer (1985) that caraway was not distinguished from cumin, and the same words were used for both. In any case, the first record of this word is from a 1822 Japanese book on Western medicinal products, where it appears to be the rendering of the Latin name *carui*, probably informed by English *caraway* (in modern Japanese caraway is キヤラウェイ *kyarawei* and 姫茴香 [princess-fennel-spice]). The kanjis in the 1822 book are annotated with a katakana reading of カリュイ *karyui*. I can not say for certain that Chinese loaned the Japanese term, but until I come across 19th-century attested forms in Chinese publications, I will assume so.

Etymology 17. Mandarin Chinese 葛縷子 *gělǚzi* ‘caraway’ [bean-hemp-seed?], phono-semantic matching; see *shilo* ‘cumin and caraway’ < Japanese 葛縷子 *karyuushi* ‘caraway’, probably a transcription of Latin *Carui*, or English *caraway + zi* (also キヤラウエイ *kyarawei* and 姫茴香 [princess-fennel-spice]), 1822 <[?] from English *caraway* ‘caraway’, ca. 1440 or from Medieval Latin *carui* ‘caraway’, or some allied Romanic form; cf. cognates French *carvi*, Italian *carvi*, Spanish *carvi* (whence Scots *carvy*, *kervie*), Old Spanish *alcaravea*, *alcarahueya*, Portuguese *alcaravia*, *alcorovia* < Arabic کاراوى *karāwiyā* ‘caraway’, (loaned to some European languages with *al-* definite article; via Andalusian Arabic) < Aramaic ܟܼܾܻܰ/ܟܼܾܻܰ *karwāyā* ‘caraway’ < Ancient Greek καρώ *karō* ‘caraway’, a form of the word *káron*, derived from *káre* ‘head’; -ó form seems Pre-Greek (these forms could not immediately give the Arabic, hence possibly via *καρυῖα **karuīa* a typical plant derivation form of καρώ *karō*, κάρον *káron*); cf. cognates Latin *carum*, *careum*^a

^aKleeman and Yu (2010, p. 100); OUP (n.d., s.v. *caraway*); AHD (2022, s.v. *caraway*); Corriente (2008, p. 74); Löw (1881, p. 207) and Löw (1924, pp. 437–438); Beekes and van Beek (2010, p. 653) and Sokoloff (2002, p. 599)

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>Armenian cumin</i>		no	OUP (n.d.)
2	English	<i>caraway</i>		yes	OUP (n.d.)
3	English	<i>caraway-seed</i>		no	OUP (n.d.)
4	English	<i>mountain cumin</i>		no	OUP (n.d.)
5	English	<i>royal cumin</i>		no	OUP (n.d.)
1	Arabic	<i>karāwiyyā</i>	phonetic	yes	Wehr (1976)
1	Chinese	<i>gělǚzi</i>		yes	Kleeman and Yu (2010)
2	Chinese	<i>yèhāo</i>	leaf-wormwood	no	MDBG (n.d.)
3	Chinese	<i>zànghuíxiāng</i>	Tibetan-hui-spice	no	MDBG (n.d.)

Table 1.16 Conventionalized names for caraway in English, Arabic, and Chinese, found in dictionaries.

1.6 Cardamom

6. CARDAMOM

POWO

English: *cardamom*. Arabic: حَلْ hāl. Chinese: 豆蔻/豆蔻 dòukòu [bean-cardamom]. Hungarian: *kardamom*.

Plant species:	<i>Elettaria cardamomum</i> (L.) Maton (syn. <i>Amomum cardamomum</i> L.)
Family:	Zingiberaceae
Plant part used:	fruit (seed pods, capsules)
Region of origin:	India
Cultivated in:	Guatemala; India; Sri Lanka; Tanzania; Papua New Guinea
Color:	green seed pods, brown seeds

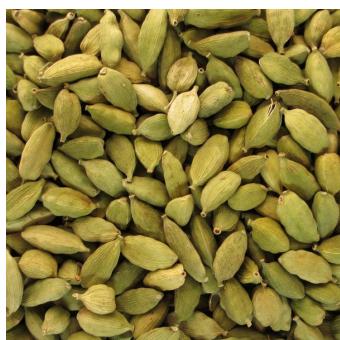


Figure 1.8 Cardamom fruits cured, and powdered (*Elettaria cardamomum*). Credit: Aromatiques.

Cardamoms are the dried, ripe fruits of the cardamom plant *Elettaria cardamomum*. These fruits are sometimes called seeds, but they are in fact the seed pods, “three-valved capsules” (van Wyk, 2014, p. 132), containing several brown-colored small seeds, as it can be seen in figure 1.8. The cardamom of commerce is widely used in Asia as medicine and spice, and is valued for its unique, minty and eucalyptus-like flavor. It is most prevalent in Indian cooking, but also known from the Arabic coffee tradition where it is sometimes added to the beverage. Indian restaurants often place a bowl of cardamoms at the entrance, so customers can take one as a masticatory on their way out, and chew on the refreshing capsules as they were nature’s breath mints. Native to the same region as the mighty black pepper in India, cardamom is sometimes referred to as the “queen of spices” (Ravindran & Madhusoodanan, 2002, p. 1). Cardamom was imported to Europe since the Roman era, and it is still used in meat dishes, sausages, Swedish meatballs, Danish pastries, ice-cream and liqueurs (Mabberley, 2017, p. 326). It is the third most expensive spice of our times, after saffron and vanilla (Business Insider, 2021).

Although *cardamom* usually refers to the fruits of *E. cardamom* from India — also sometimes known as green cardamom and true cardamom — there are numerous other cardamoms, similarly segmented capsule-like fruits used as spices and medicine in South, Southeast, and East Asia, and

even in Africa. Many of these belong to the *Amomum* genus of the ginger family (*Zingiberaceae*), such as the black cardamom from the Himalayas (*Amomum subulatum*), and the round cardamom from Java (*Amomum compactum*). See them in detail below in section 1.6.3.

1.6.1 The Botany, Origins, and Cultivation of Cardamom

The cardamom plant is a tall perennial herb from the ginger family (*Zingiberaceae*) with pink white flowers that grow at the base of the stem in clusters (van Wyk, 2014, p. 132). *Elettaria cardamomum* is indigenous to the Western Ghats region in South India, the same area that gave us black pepper and the center of its production and biodiversity (Ravindran & Madhusoodanan, 2002, p. 1). Together with black pepper and ginger, it has been wild-harvested since time immemorial, and formed the livelihood of many from the beginnings of the ancient spice trade around the 3rd century BC, until today (van Wyk, 2014, p. 132). Cardamom can only grow in a tropical climate, thriving in higher altitudes in the shade of trees, similarly to black pepper (which is a climbing vine) and thus modern cultivation does not differ much from traditional wild harvesting (van Wyk, 2014, p. 132). Cardamom is hand picked when ripe or near-ripe one by one — explaining its relatively high price — and then dried. It generally comes in light green, but one can also find them in white, which is a result of an extra step of steaming or bleaching before the drying process (van Wyk, 2014, p. 132). From the 1920s, Guatemala gradually became a major cardamom exporter, surpassing India in production. It is also grown in Tanzania and Papua New Guinea on a small scale.

1.6.2 The History of Cardamom

It is difficult to trace the history of cardamoms with certainty because of the confusion in nomenclature (Cumo, 2013). However, the cardamom described in 4th century BC in Indian Ayurvedic literature is probably the green or true cardamom of today, called *elā*⁶³ in Sanskrit. Cardamom was also described by Theophrastus in the 4th century BC. He reports that *kardamomon* and *amomon* (cardamom and black cardamom) come from Media, or according to some, from India — just like spikenard and most other spices (Theophrastus, 1916, p. 249). Pliny connects amomum to North India, which is quite a punctual source for black cardamom. Cardamom was known to Dioscorides and Hippocrates, who have both written on its health benefits, e.g. aiding digestion. In Modern Greek, there is an informal way of saying ‘to strengthen, get strong’: *καρδαμών*⁶⁴ deriving from the name of the spice.

Medieval Arab doctors wrote about cardamom in similar ways, and the geographer al-Idrīsī described ca. 1150 that it is brought to the port of Aden from Sindh, India and China, whereas in China, black cardamoms were important in the economy of the Song period (960–1279) (Prance & Nesbitt, 2005, pp. 158–159). Green cardamom reached China from Southeast Asia, in Hong Kong it is consumed primarily by the Indians and the Portuguese. It is cultivated in Guangdong, Guangxi, and Yunnan, rather used in medicine than cooking (S.-Y. Hu, 2005, pp. 325–326). For more on cardamom’s history, see Dalby (2000, pp. 102–106).

⁶³Monier-Williams, 1899, p. 232.

⁶⁴https://www.greek-language.gr/greekLang/modern_greek/tools/lexica/triantafyllides/search.html?lq=%CE%BA%CE%81%CE%B4%CE%B1%CE%BC%CF%8E%CE%BD%CF%89&dq=

1.6.3 A Crowd of Cardamoms: Identity and Confusion with Other Spices



Figure 1.9 False cardamoms: (a) Black cardamom from the Himalayas (*Amomum subulatum*), (b) Chinese black cardamom or *tsao-ko* from Yunnan, China (*Amomum tsao-ko*), and (c) round cardamom from Java (*Amomum compactum*). Credit: Aromatiques, NAI.

When it comes to cardamoms most of us are only familiar with one or two kinds, however, there is a multitude of plant species that are harvested for their fruit known by their common names as some kind of cardamom. All of these belong to *Zingiberaceae*. True cardamom — commercially the most important species — belongs to the genus *Elettaria*, a name derived from the Tamil root *elettari*, meaning cardamom seeds (Ravindran & Madhusoodanan, 2002, p. 1). Besides the genus *Elettaria*, “false” cardamoms are found in two other genera: *Amomum* and *Aframomum*. Following van Wyk (2014, pp. 290–308)’s checklist, these are listed in table 1.17.

<i>Amomum aromaticum</i>	Bengal cardamom; Nepal card.; large card.	Bangl.; Nepal
<i>Amomum compactum</i> *	Indonesian cardamom	SE. Asia
<i>Amomum costatum</i> *	Chinese black cardamom	E. Asia
<i>Amomum globosum</i>	round Chinese cardamom	China
<i>Amomum kepulaga</i> *	round cardamom	Trop. Asia
<i>Amomum krervanh</i>	Cambodian cardamom; krervanh	Trop. Asia
<i>Amomum maximum</i>	Java cardamom	Trop. Asia
<i>Amomum subulatum</i>	brown cardamom; greater card.; Indian card.	Asia
<i>Amomum tsao-ko</i> *	tsao-ko cardamom; large cardamom	Asia
<i>Amomum villosum</i>	Malabar cardamom; Tavoy card.; wild Siamese card.	Asia
<i>Amomum xanthoides</i>	bastard Siamese cardamom; wild Siamese card.	Asia
<i>Aframomum alboviolaceum</i>	Cameroon cardamom	Trop. Africa
<i>Aframomum angustifolium</i>	Madagascar cardamom	Madagascar
<i>Aframomum daniellii</i>	bastard Melegueta; Cameroon cardamom	Trop. W. Af.
<i>Aframomum hanburyi</i>	Cameroon cardamom	Trop. W. Af.
<i>Aframomum corrorima</i>	Ethiopian cardamom; korarima	Trop. NE. Af.
<i>Aframomum macrospermum</i>	Guinea cardamom	W. Af.

Table 1.17 Spice plants with a common name that includes *cardamom* from the *Amomum* genus in Asia cultivated for their fruit & seed, and those from the *Aframomum* genus of Africa, cultivated for their seed (van Wyk, 2014). Items marked with asterisks are identified as botanical synonyms by me.

*Amomum*⁶⁵ is a genus home to a remarkable number of plants that yield pungent fruits and seeds, most known for *Amomum subulatum*. The *Amomum* genus contains of dozens of aromatic, spice-yielding and medicinal plant species primarily growing in India and China, and elsewhere in tropical and subtropical Asia, New Guinea, and North Queensland. Commonly called black cardamom or brown cardamom, but also referred to in various other names in English, such as Nepal cardamom, greater cardamom, Indian cardamom, Indian black cardamom, fake cardamom, Bengal cardamom, big cardamom, hill cardamon, and winged cardamom, the fruits of *A. subulatum* are larger than green cardamom, and it is native to the eastern Himalayan region; North India, Nepal, Bhutan, and Tibet. In Hindi it is called बड़ी इलाइची *badī ilāichī* ‘big cardamom’ or काली इलाइची *kālī ilāichī* ‘black cardamom’. In Chinese it is known as 香豆蔻 *xiāngdòukòu* ‘fragrant cardamom’, and S.-Y. Hu (2005, p. 327) also reports a local name in eastern Tibet for it: 嘎哥拉 *gágēlā* (ka-ko-la), which we will return to later. The dried fruits of this plant (see figure 1.9) are used in savory dishes of northern India and Pakistan, and have a heavy smoky aroma and camphor-like taste. The brown color is a result of roasting and smoking on open fires (van Wyk, 2014, p. 132).

There are even larger (black) cardamoms, growing in the mountainous Vietnam-China borderlands, important in the cuisines of Vietnam, Yunnan, and Sichuan, such as *A. tsao-ko*⁶⁶ (recently renamed as *Lanxangia tsao-ko* (Crevost & Lemarié) M.F.Newman & Skornick.), which S.-Y. Hu (2005, p. 326) calls Yunnan cardamom, and explains that in Yunnan, it goes into the chicken soup whole, as a flavoring agent. It is also used medicinally⁶⁷, and the scientific species name comes from the transcribed Chinese name 草果 *cǎoguǒ*. In English it is called *tsao-ko cardamom*. S.-Y. Hu (2005, p. 326) distinguishes an *A. hongtsaoko* Liang et Fang (red cardamom), which appears to be a synonym for *A. tsao-ko* after consulting botanical databases. If one searches for “red cardamom” online, spice vendors’ advertisements would appear offering *tsao-ko* cardamom, also named “cao guo”. Putzel (2017) calls *tsao-ko* cardamom simply as black cardamom, and explores its cultivation and trade in Yunnan in great detail. He explains that in the last 50 years it has become a cash crop, and it is now the primary source of cardamom in Yunnan, together with *A. villosum*⁶⁸, known as Tavoy cardamom, or 砂仁 *shāré* in Chinese (Putzel, 2017, p. 41).

Lastly, there are cardamoms that are round and white, indigenous to Southeast Asia. *Amomum krervanh* (newly reassigned as *Wurfbainia vera* (Blackw.) Skornick. & A.D.Poulsen) is Siam cardamom, Cambodian cardamom, or krervanh in English, and 白豆蔻 *báidòukòu* ‘white cardamom’ in Chinese. *A. compactum* (newly reassigned as *Wurfbainia compacta* (Sol. ex Maton) Skornick. & A.D.Poulsen) is known as round cardamom, Indonesian cardamom, or Java cardamom in English, and 爪哇白豆蔻 *Zhǎowā báidòukòu* ‘Java white cardamom’ in Chinese, a spice used in TCM, and botanically very similar to *A. maximum*, which is 九翅豆蔻 *jiǔchìdòukòu* ‘nine-winged cardamom’ in Chinese. These are the first cardamoms that were imported to China from mainland Southeast Asia, together with nutmegs that caused an initial confusion we will shortly see. Cardamom in Indonesian is called *kapulaga* (Javanese

⁶⁵GBIF Secretariat, 2021, *Amomum Roxb.*

⁶⁶<https://herbaltcm.sn.polyu.edu.hk/herbal/caoguo>

⁶⁷FoC — http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=24000100

⁶⁸<https://herbaltcm.sn.polyu.edu.hk/herbal/villous-amomum-fruit>

କାପୁଲାଗା *kapulaga*), primarily referring to *A. compactum* (more specifically *kapulaga jawa* ‘Javanese cardamom’, with an Old Javanese word⁶⁹ that people on the Wiktionary try to connect with Sanskrit कक्कोल *kakkola*⁷⁰. Wyk’s *A. kepulaga* is a synonym for *A. compactum*.

Moving on to Africa, the genus *Aframomum*⁷¹ contains around 50 species from the tropical regions of Africa, including Madagascar, Mauritius, and the Seychelles on the Indian ocean. The most important spice crop of this genus is *Aframomum melegueta* (grains of paradise, Melegueta pepper), and *A. exscapum* (alligator pepper), and staying on cardamoms: *A. corrorima*, commonly known as Ethiopian cardamom, or korarima. The latter is also often referred to as false cardamom, because the structure of the fruit imitates the true cardamom. One difference between the African and Asian cardamoms, is that in Africa, mostly the seeds are used, while in Asia, the whole seed pods are made use of (van Wyk, 2014).

What is common in all these different spice plants spanning from Asia to Africa? What connects them and makes us discuss them under cardamom? Their physical (and biochemical) properties. Not only are these plants related botanically, but the anatomy of their fruits are quite similar. Consequently, we can deduct that cardamom as a prototype has two features: (1) it is aromatic, (2) it is a capsule containing edible seeds. And just as cardamom is a prototypical object, *cardamom* — as a name — is a prototypical word that is used and reused as a headword to propagate spice names. There is also a certain dichotomy at play, the dynamics of adjectives that describe, distinguish, and evaluate a type of cardamom. Think of: green vs. black, Indian vs. Nepal, lesser vs. greater, true vs. false.

1.6.4 Some Remarks on Common Names

When combing through the literature of cardamoms, there is small degree of conflict and overlap in the English common names that authors give to a plant and its spice. The vernacular names contend each other because authors come from different backgrounds, where one name might exist, but another does not, and — as mentioned in the introduction of this thesis — there are no rules governing this; it is up to each author. Scholars such as van Wyk from South Africa, Ravindran and Madhusoodanan from India, and S.-Y. Hu from China all bring a layer of diversity to the discussion of spices with their mentions and omissions of various common names of the plants/spices they so systematically try to present. This is expected, writers with a botanical focus pay attention to the strictly regulated scientific names in plant identification, so sometimes the included and excluded vernacular names are chosen on a whim, or depend on how much space is there left on the page. Some authors just note one common name, while some try to include as many as there are. A more interesting question would be: how do authorities on plant science go about the selection process? Where do they gather the vernacular names from?

Often, botanical and gastro writers have to make up what I call “speculative names”, where an author feels the need to devise/translate a common name for a plant that does not necessarily exist in the target language they write. In this section, *red cardamom* is certainly a case on point. This is not a

⁶⁹Southeast Asian Languages Library (SEAlang) — <http://sealang.net/ojed/index.htm>

⁷⁰Monier-Williams, 1899, 241.

⁷¹GBIF Secretariat, 2021, *Aframomum K.Schum.*

judgment, rather an observation; sometimes these inventions come to life and begin their journey as “real” plant/spice names that people will use if it fills a need. Further examples are found in Raghavan (2007, p. 64), who calls allspice *English spice* in English, which is an obvious translation from other languages that do in fact call it “English spice” (for the English fleet disseminated it from their colony of Jamaica).

1.6.5 The Names of Cardamom

English

Etymology 18. English *cardamom* ‘cardamom’, (via post-classical Latin *cardimomum*, a. 1398), ?ca. 1425 < later also from Old French *cardemome* ‘cardamom’, ca. 1170; cf. modern French *cardamome* < Latin *cardamōnum* ‘cardamom’, 1st c. AD < Hellenistic Greek καρδάμωμον *kardámōmon* ‘cardamom’, haplological κάρδαμ- *kárdam-* ‘cress’ + ἀμωμον *ámōmon* ‘an Indian spice plant’, 3rd c. BC < Ancient Greek κάρδαμον *kárdamon* ‘garden cress *Lepidium sativum*’, perhaps a loanword (many plant names with *-amon* are clear loanwords; the suffix *-amon* is known from Pre-Greek), 4th c. BC; cf. cognates classical Latin *cardamum* <? unknown *^a

^aOUP (n.d., s.v. cardamom); TLFi (2012, s.v. cardamome); C. T. Lewis and Short (1879, s.v. cardamum); Liddell and Scott (1843/1940, s.v. καρδάμωμον); Liddell and Scott (1843/1940, s.v. κάρδαμον); Beekes and van Beek (2010, p. 644)

#	Species	Name	Source
1	<i>Elettaria cardamomum</i>	cardamom	van Wyk (2014)
2	<i>Elettaria cardamomum</i>	green cardamom	Ravindran and Madhusoodanan (2002)
3	<i>Elettaria cardamomum</i>	true cardamom	Ravindran and Madhusoodanan (2002)

Table 1.18 Various names for cardamom in English.

cardamom The word *cardamom* came from Latin *cardamōnum* via a Late Latin form attested in the late 14th century, and was later also influenced by French *cardamome*, which has the same Latin etymon. *Cardamōnum* is the Latinized form of Greek καρδάμωμον *kardámōmon*, a word that was formed by compounding the Ancient Greek κάρδαμον *kárdamon* ‘cress’, which is of unknown origin, and ἀμωμον *ámōmon* ‘amomum’, signifying an unidentified Indian spice plant, formed with haplogy (**kardamamōmom*).⁷² The OED also lists many other European cognates of the English word, such as Spanish *cardamomo* (mid 13th c. or earlier), Italian *cardamomo* (late 13th c.), and Middle High German *kardamōm* (13th c., modern German *Kardamom*). In some cases, the form shows a dissimilation of the two final nasals, and so we can come across forms, such as *cardamon*.

Beekes and van Beek (2010, p. 644) does not speculate on the origin of *kárdamon*, but explains that plant names ending in *-amon* are clearly and frequently loanwords, and that the suffix *-anon* is a known pre-Greek element. He also mentions some doubtful attempts to explain the word by

⁷²OUP, n.d., cardamom; AHD, 2022, cardamom.

previous authors, and mentions that it has been connected with a Hittite word: *karšani* ‘an alcalic plant’. *Kárdamon* was identified with the word $\oplus\text{V}\ominus ka-da-mi-ja$ ⁷³, (*kardamia* as a feminine form of *kardamon*) appearing on Mycenaean tablets listing spices in Linear B, excavated in the “House of the Sphinxes” in 1950s, and dated to the 1200s BC (Bennett et al., 1958, p. 107). Meaning ‘garden cress’ (*Lepidium sativum*), of which the pungent seeds were consumed similarly to that of mustard and was popular in ancient Persia, it has been suggested that this is a Near Eastern *Wanderwort*, related to Middle Armenian կոնելս *kotem* ‘garden cress’, and Classical Persian كودم *kūdim* ‘a sort of plant (water-cress?)’, and Akkadian *kudimmu(m)* ‘a herb, perhaps cress’.⁷⁴

Etymology 19. English *amomum* ‘any of several species of genus *Amomum*, family Zingiberaceae, including cardamom.’, An odoriferous plant. The *Amomum* of the ancients not being certainly identified, the word was used with uncertain denotation by earlier writers;; a. 1398 < Latin *amomum* ‘amomum and a balm containing this spice’ < Ancient Greek ἄμωμον *ámōmon* ‘an Indian spice-plant, black cardamom (*Amomum subulatum*)’, an Oriental loan-word, cf. κιννάμωμον < Semitic* ‘id.’; cf. cognates Classical Syriac ܚܾܻܸܻܰ *ḥamāmā* → Arabic حمّام *ḥamāmā*; Akkadian *ḥamīmu*^a

^aOUP (n.d., s.v. *amomum*); C. T. Lewis and Short (1879); Liddell and Scott (1843/1940) and Beekes and van Beek (2010, p. 97); Löw (1881, p. 169), Lev and Amar (2008, p. 100), and Roth et al. (1968/2004, vol. 6, p. 66)

As for the identity of Greek *ámōmon* (Latin *amomum*)⁷⁵, it is one of the more perplexing ancient *amomum* spices. Although some consider it unidentified, the *amomum* of antiquity was probably what we call today as black cardamom. In the *Liddel-Scott-Jones: A Greek-English Lexicon* (LSJ) entry, it is defined as “an Indian spice plant, prob.”, but nevertheless recognized as *Amomum subulatum*, “Nepal cardamom”.⁷⁶ Dalby (2000, p. 103) thinks that Linnaeus made a good guess about the identity of the spice plant when he aptly named the Asian genus *Amomum*, in which several other spice yielding plants we discussed above bear fruits known as “false cardamom” and “bastard cardamom”. The Greek word of *ámōmon* is a loan from Semitic languages whose further origin is uncertain, akin to and Akkadian *ḥamīmu*, Classical Syriac ܚܾܻܸܻܰ *ḥamāmā*, Arabic حمّام *ḥamāmā*⁷⁷, and Hebrew בַּמְּמָן *ḥāmām*, which are not re-borrowings from Greek according to Löw (1881, p. 123). Denoting ‘a spice-plant’, these are probably from the Semitic root *h-m-m* ‘to be hot’ (Klein, 1987, p. 222). Thus, rendering the Greek word to be a loanword, just like in the case of *cinnamon*, which is clearly marked as an “oriental loanword” in Greek etymological dictionaries.

If most likely candidate for this “lost spice” is black cardamom, what happened to the name? One of the last reports on it comes from 1834, when Edmund Roberts traveling on a diplomatic mission sent by United States president Andrew Jackson listed items of Chinese trade lesser known in the West,

⁷³Palaeolexicon — <http://www.palaeolexicon.com/Word>Show/16764>

⁷⁴cf. Kouyoumdjian, 1970, p. 371; Asatrian, 2012; Black et al., 1999/2000, p. L14.

⁷⁵C. T. Lewis and Short, 1879, *amomum*.

⁷⁶Liddell and Scott, 1843/1940, ἄμωμον.

⁷⁷cf. Roth et al., 1968/2004, vol. 6, p. 66; AHD, 2022, *cardamom*; Löw, 1881, p. 169; Lev and Amar, 2008, p. 100.

and among them: amomum. He notes in his account that amomum is a seed, with “strong pungent taste, and a penetrating aromatic smell; [...] used to season sweet dishes” (Roberts, 1837, p. 135), which can easily describe any kind of cardamom people nowadays use. The term *amomum* is not used anymore; no prevailing spice, seed, or medicinal herb today is called the sort, however the Latin name for the genus *Amomum* from the ginger family (*Zingiberaceae*) carries on the name. The question of amomum will come up again in the discussion of cinnamon’s origins in section 1.8.4. Cardamom is also referred to as the queen of spices, as it can be seen on the book title of Nair (2011), *Agronomy and Economy of Black Pepper and Cardamom: The “King” and “Queen” of Spices*, and we can come across green cardamoms advertised using its Hindi name spelled in English: *ilaichi/elaichi*, especially in the locales of the Indian diaspora.

And so, reflecting on table 1.18 which shows all the names using the headword *cardamom*, we identified *cardamom* as a prototype word used in the propagation of other, related spice-names.

Arabic

Etymology 20. Arabic *هال* *hāl* ‘cardamom’ < Persian *هیل* *hil* ‘the lesser cardamoms’ < Sanskrit एला *elā* ‘cardamom’ < Proto-Dravidian* **ēla* ‘cardamom’; cf. Tamil *ēlam*^a

^aWehr (1976, p. 1223); Steingass (1892, p. 1521); Dalby (2000, p. 104); Burrow and Emeneau (1984, p. 87)

In Arabic, cardamom is known by many different names varying from dialect to dialect, but the most common to come across in both modern and historical dictionaries is *hāl* or هيل *hayl*. *Hāl* is from Persian هیل *hil* ‘id.’ which goes back to a Sanskrit etymon, एला *elā*, which is ultimately a Dravidian loanword, reconstructed as **ēla*. In modern Arabic dialects, an occasional /l/ to /n/ sound change can be observed, resulting in a version with a final /n/. Sometimes it is also prefixed by the word for ‘seed’, as in *habb al-hāl* [cardamom seed], referring to true cardamom, hence the contracted modern Egyptian Arabic *habhān*. *Hāl* appears in Ibn Sina’s *Canon of Medicine* (1025), in a passage on how to prepare a concoction made with *hāl* (cardamom), *qāqulla* (black cardamom?), *qaranful* (clove), *dār filfil* (long pepper), using one *dirham* (~3 gr) each.⁷⁸

Etymology 21. Arabic قاقلة *qāqulla* ‘cardamom; black cardamom’ < Classical Syriac qāqullā ‘cardamom’ < Akkadian (qa-qu-ul-lu.SAR) *qāqullu* ‘cardamom’ <? Sanskrit तक्कोल, कक्कोल *takkola, kakkola* ‘plant with aromatic berry; the perfume made from it’; cf. Pali *takkola*; Tibetan དකྱ ས ཀ ག ང *kakola*^a

^aWehr (1976, p. 863); Löw (1924, vol. 1, p. 489); Zimmern (1915, p. 58); Monier-Williams (1899, pp. 431, 241)

Whether we consult dictionaries, explore the spice terminology of modern dialects, or read medieval travel writers, the word *قاقلة* *qāqulla* emerges often. This word is unmistakably a loanword, indicated by its distinct, alien form deviating from the usual Arabic word patterns. It is first attested

78 SkE

in 8th-century medical literature.⁷⁹ In contemporary dictionaries it is usually glossed simply as ‘cardamom’. If we look at the origins of names for cardamom in modern languages, *qāqulla* is not a remarkably “successful” word; in terms of distribution, words originating in Greek surpass this and most others. However, if we dig deeper, we will find that *qāqulla* is likely a prominent ancient *Wanderwort*, possibly exhibiting a long journey in its history. Modern Turkish *kakule* is one of the few breadcrumbs to hint that we are dealing with a regional *Wanderwort*. According to the *Nişanyan Sözlük* (NS), *kakule* is attested in the 15th century, and comes from Arabic whose etymon is Aramaic *qāqūlā*, a word going back to Akkadian *qāqullu*, thus stretching our investigation to quite the time depth.⁸⁰. The *Chicago Assyrian Dictionary* (CAD)’s only information on it that it was a plant, growing in the garden of Merodach-Baladan II, a king of Babylon who ruled in the 8th century BC.⁸¹. The Arabic word later entered the vocabulary of Latin, and survives today as the name for the genus *Cakile*.

Similarly to amomum, we are not entirely sure what Arabic *qāqulla* denoted in the past, but due to the fact that some medicinal recipes list both *hāl* and *qāqulla* as ingredients, we can be certain that they denoted different materials. Furthermore, it is likely that similarly to the word *cardamom*, *qaqulla* was an umbrella term. Consulting Ibn Sīna confirms this approach, he distinguishes a greater and a lesser kind of qaqulla, and describes their appearance, taste, and uses:

“Qāqulla. Its nature: There are big ones and there are small ones. The big ones are like small black walnuts [...] reminding the tongue of aromatic cubebs. The small ones are like cloves in shape, and also aromatic (Ibn Sīnā, 1025/1329).

In Amar and Lev (2017, pp. 66–68)’s work, the big qāqulla is identified as *Amomum melegueta* [sic] (grains of Paradise) with a question mark attached to it, while the small qāqulla is identified as true cardamom *E. cardamomum*. I would argue with the first. Both items appear in the book of Ibn Rushd (1126–1198), also known as Averroes.

#	Species	Name	Tr.	Gloss	Source
1	<i>Elettaria cardamomum</i>		هال <i>hāl</i>	phonetic	Wehr (1976)
2	<i>Elettaria cardamomum</i>		خير بواء <i>khayr buwwā'</i>	good-scent	Lane (1863)
3	<i>Elettaria cardamomum</i>		قاقلة صغيرة <i>qāqulla ṣaghīra</i>	small cardamom	Amar and Lev (2017)
4	<i>Elettaria cardamomum</i>		حب الهاں <i>habb al-hāl</i>	cardamom-seed	Baalbaki (1995)
5	<i>Elettaria cardamomum</i>		حبهان <i>habhān</i>	cardamom-seed	Wehr (1976)

Table 1.19 Various names for cardamom in Arabic.

⁷⁹SkE

⁸⁰Nişanyan, 2022, kakule.

⁸¹Roth et al., 1968/2004, Vol. 13, p. 124.

Chinese

Etymology 22. Mandarin Chinese 豆蔻 *dòukòu* MC MC /dəuH həuH/ ‘cardamom’ [bean-cardamom], compound of 豆 ‘bean(-like)’ + 蔻 ‘many; profusion’ (BCGM); or phono-semantic matching (confused with nutmeg at first), ca. 863 <[?] Middle Chinese 多骨 *duōgǔ* MC MC /ta kuət/ ‘round cardamom’ <[?] Pali *takkola* ‘Bdellium, a perfume made from the berry of the kakkola plant’ <[?] Sanskrit तक्कोल, कक्कोल *takkola, kakkola* ‘plant with aromatic berry; the perfume made from it’; cf. Pali *takkola*; Tibetan ལྷକ୍କୋଲ *kakola*; Chinese 嘎哥拉 *gágélā*^a

⁴Donkin (2003, p. 22); Duan (ca. 860, 18:55); Pali Text Society (1921–1925, p. 292); Monier-Williams (1899, pp. 431, 241)

doukou In Chinese, the word equivalent to English *cardamom* is 豆蔻 *doukou* [bean-cardamom], sometimes with a variant of the first character meaning ‘bean’ containing the grass radical 艹. As Donkin (2003, p. 22) points out, cardamom and nutmeg were initially confused in classical Chinese literature. Probably on account of their similar appearance, and the fact that Chinese merchants imported both from somewhere around mainland Southeast Asia, more specifically, from the Malay Peninsula. Initially *doukou* referred to both spices (attested ca. 863), then in later sources, nutmeg was distinguished as 肉豆蔻 *roudoukou*, literally meaning ‘fleshy-cardamom’.

Doukou appears in 9 and 10th-century sources, such as the YYZZ and the TPGJ, as 白豆蔻 *baidoukou* [white-cardamom] reportedly called 多骨 (*MC* /ta kuət/) from the land of 伽古羅 *jiaguoluo* (Kakola?), describing the round cardamom sourced from either in Siam (*Amomum kravanh*) or Java (*Amomum compactum*).⁸² This country refers to Kakola/Takola, a settlement on the western coast of the Malay Peninsula, where cardamoms were marketed together with nutmegs from the Moluccas (Donkin, 2003, p. 22). This word is said to be connected to Sanskrit तक्कोल *takkola* ‘a kind of perfume’, कक्कोल *kakkola* ‘a kind of aromatic plant; and a perfume made from its berries’⁸³, a word that is the proposed etymon for others, such as Tibetan ପାର୍ଶ୍ଵକାଳୀ *kakola*, referring to black cardamom, or Pali *takkola*. The Pali word is given as ‘a perfume made from an aromatic berry’, and also the name of a country.⁸⁴ 嘎哥拉 *gagela/kakola*, a local name for red cardamom mentioned by S.-Y. Hu (2005) also fits in here. Takola as a place name for a trading settlement on the Malay peninsula appears in Ptolemy’s *Geography*, better known as “Golden Chersonese” in antique writings. For more on the mystery of Kakola, see Wheatley (1961). It has not yet been established if *doukou* derives from a foreign name, such as the one reported in the YYZZ, or the phonological similarity is coincidental, but I hope an expert Sinologist will one day give an expert opinion. It is a plausible assumption for the following reasons: The character 蔻 *kou* does not appear in any other context or meaning, consulting the CTP, the first mention is a Tang dynasty poem about Jiangnan⁸⁵ cardamom. The *Nanfang Caomu Zhuang* (NFCM), traditionally dated to the 4th century BC mentions cardamom but the authenticity

⁸²Duan, ca. 860, 18:55.

⁸³Monier-Williams, 1899, pp. 431, 241.

⁸⁴ Pali Text Society, 1921-1925, p. 292; Trenckner, 1879, p. 59.

⁸⁵ Historical region of China south of the Yangtze river

and dating of this particular botanical treatise has been questioned over a hundred years before (Ma, 1978). Moreover, the character itself seems to have been utilized on purely phonetic grounds, and the attached grass/herb radical hinted on the new meaning (艸 *cao* ‘grass’ + 犭 *kou* ‘bandit’). On the other hand, the few Chinese etymological dictionaries I could access did not discuss *kou*. The BCGM interprets *doukou* as ‘bean’ + ‘many; profusion’ ??, which does not explain its use for nutmeg.

#	Species	Name	Tr.	Gloss	Source
1	<i>Amomum spp.</i>	豆蔻	<i>dòukòu</i>	bean-cardamom	S.-Y. Hu (2005)
2	<i>Elettaria cardamomum</i>	綠豆蔻	<i>lǜdòukòu</i>	green-cardamom	Wikipedia (n.d.)
3	<i>Elettaria cardamomum</i>	青砂仁	<i>qīngshārénn</i>	green-gravel-kernel	Wikipedia (n.d.)
4	<i>Elettaria cardamomum</i>	小豆蔻	<i>xiǎodòukòu</i>	little-cardamom	DeFrancis (2003)

Table 1.20 Various names for cardamom in Chinese.

Zhang and Unschuld (2015, p. 729) identifies 豆蔻 with *Alpinia hainanensis* K.Schum. (syn. *Alpinia katsumadai* Hayata)⁸⁶, a medicinal plant bearing round compact fruits, commonly referred to now as 草豆蔻 *caodoukou* [herb-cardamom]. In modern TCM, *doukou* is either *Amomum kravanh* or *Amomum compactum*⁸⁷, while the green cardamoms of *Elettaria cardamomum* are designated as 小豆蔻 *xiaodoukou* [little cardamom]. Finally, the seeds of the greater galangal (*Alpinia galanga*)⁸⁸ are referred to in Chinese as 紅豆蔻 *hóngdòukòu* [red cardamom]. See table 1.20 for an overview.

not really metaphor but simile

Summary

To summarize, I have presented the way of *cardamom* into English, and on the journey I was led astray by the spice amomum, its etymology and possible identity. I have then presented a multitude of spice names, propagated using the word *cardamom* as prototype. In Arabic, I have identified *hal/hayl* and *qaqulla* as important words in the history of cardamom(s) in a Middle Eastern context, the latter term possibly having an obscure but potentially incredible history. According to authors, such as Donkin (2003), Sanskrit seems to be the origin of *qaqulla* and its cognates in the Near East, and there is a possibility that Chinese *doukou* as well is a loanword from the same region: the Malay Peninsula from where the spice were sourced, and country called Kakola/Takola. Product names derived from toponyms are a well known historical linguistic phenomenon (e.g. cologne, hamburger), but here the connection between the Sanskrit plant name and the toponym Kakola is unclear and needs further investigation.

Spice names that are found in general dictionaries can be consulted in table 1.21, and figure 1.10 illustrates the journeys I discussed above.

⁸⁶<https://herbaltcm.sn.polyu.edu.hk/herbal/katsumada-galangal-seed>

⁸⁷<https://herbaltcm.sn.polyu.edu.hk/herbal/round-cardamon-fruit>

⁸⁸<https://herbaltcm.sn.polyu.edu.hk/herbal/galangal-fruit>

#	Language	Term	Gloss	Loan	Source
1	English	<i>cardamom</i>		yes	OUP (n.d.)
1	Arabic	<i>hāl</i>	phonetic	yes	Wehr (1976)
2	Arabic	<i>khayr buwwā'</i>	good-scent	yes	Lane (1863)
3	Arabic	<i>habb al-hāl</i>	cardamom-seed	no	Baalbaki (1995)
4	Arabic	<i>ḥabħān</i>	cardamom-seed	no	Wehr (1976)
1	Chinese	<i>dòukòu</i>	bean-cardamom	maybe	DeFrancis (2003)
2	Chinese	<i>xiǎodòukòu</i>	little-cardamom	no	DeFrancis (2003)

Table 1.21 Conventionalized names for cardamom in English, Arabic, and Chinese, found in dictionaries.

Etymological stages of names for cardamom

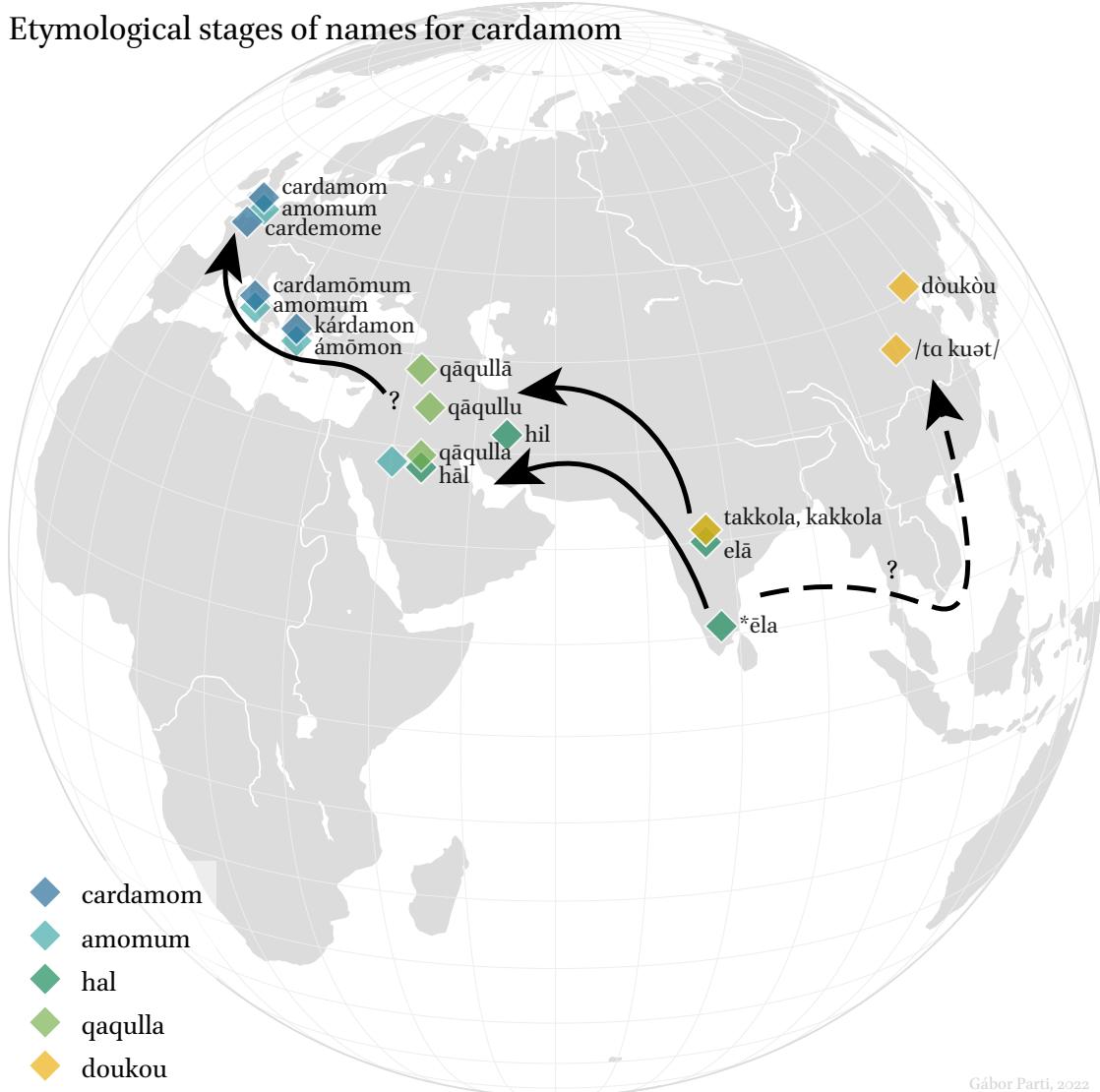


Figure 1.10 Etymological stages in the progression of prototypical names of cardamom.

1.7 Chile

7. CHILE

POWO

English: chile. **Arabic:** فلفل حار *fulful hārr* [hot pepper]; **nan.** **Chinese:** 辣椒 *làjiāo* [pungent-pepper]. **Hungarian:** paprika; pirospaprika [red-pepper]; *fűszerpaprika* [spice-pepper]; *erős-paprika* [strong-pepper]; *csilipaprika* [chili-pepper]; *Cayenne bors* [Cayenne pepper]; *törökbors* [Turkish-pepper] (historic).

Plant species: *Capsicum annuum* L.; *C. frutescens*; *C. chinense*; et al.

Family: *Solanaceae*

Plant part used: fruit

Region of origin: Central America

Cultivated in: Ethiopia, India, Kenya, Mexico, Nigeria, Pakistan, Tanzania, etc.

Color: red and green in many shades



(a) a

Figure 1.11 Chile .

1.7.1 The Botany, Origins, and Cultivation of Chile

1.7.2 The History of Chile

1.7.3 The Names of Chile

English

Etymology 23. English *chilli*, XVII Ee 1660 Et 1604 Mw < Spanish *chile* ‘id.’ < Classical Nahuatl *chilli* ‘id.’^a

a

#	Species	Name	Source
1	<i>Capsicum annuum</i>	paprika	van Wyk (2014)
2	<i>Capsicum annuum Grossum</i>	bell-pepper	OUP (n.d.)
3	<i>Capsicum annuum Grossum</i>	green pepper	van Wyk (2014)
4	<i>Capsicum annuum Longum</i>	paprika pepper	OUP (n.d.)
5	<i>Capsicum annuum Longum</i>	sweet pepper	OUP (n.d.)
6	<i>Capsicum annuum var. glabriusculum</i>	bird pepper	OUP (n.d.)
7	<i>Capsicum annuum; C. frutescens</i>	Cayenne pepper	van Wyk (2014)
8	<i>Capsicum annuum; C. frutescens</i>	Guinea pepper	OUP (n.d.)
9	<i>Capsicum annuum; C. frutescens</i>	Indian pepper	OUP (n.d.)
10	<i>Capsicum cerasiforme</i>	cherry-pepper	OUP (n.d.)
11	<i>Capsicum frutescens</i>	bird chili	van Wyk (2014)
12	<i>Capsicum frutescens</i>	hot pepper	van Wyk (2014)
13	<i>Capsicum frutescens</i>	piri piri	van Wyk (2014)
14	<i>Capsicum frutescens</i>	Tabasco pepper	van Wyk (2014)
15	<i>Capsicum spp.</i>	capsicum	OUP (n.d.)
16	<i>Capsicum spp.</i>	chili	van Wyk (2014)
17	<i>Capsicum spp.</i>	chili pepper	van Wyk (2014)
18	<i>Capsicum spp.</i>	pepper	OUP (n.d.)
19	<i>Capsicum spp.</i>	pod pepper	OUP (n.d.)
20	<i>Capsicum spp.</i>	red pepper	van Wyk (2014)

Table 1.22 Various names for chile in English.

#	Species	Name	Tr.	Gloss	Source
1	<i>Capsicum spp.</i>	بابريكا	bābrīkā	paprika	Wikipedia (n.d.)
2	<i>Capsicum spp.</i>	فليفلة	fulayfila	little pepper	Wehr (1976)
3	<i>Capsicum spp.</i>	فلفل أخضر	fulful akhḍar	green pepper	Wehr (1976)
4	<i>Capsicum spp.</i>	فلفل أحمر	fulful aḥmar	red pepper	Baalbaki (1995)
5	<i>Capsicum spp.</i>	فلفل حلو	fulful hulw	sweet pepper	Baalbaki (1995)
6	<i>Capsicum spp.</i>	فلفل حار	fulful ḥārr	hot pepper	Baalbaki (1995)
7	<i>Capsicum spp.</i>	فلفل	fulful, filfil	phonetic loan	Wehr (1976)
8	<i>Capsicum spp.</i>	شطة، شطيبة	shaṭṭa, shaṭīṭa	phonetic loan	Wehr (1976)
9	<i>Capsicum spp.</i>	حريف	hirrif	pungent; acrid (taste)	Baalbaki (1995)
10	<i>Capsicum spp.</i>	حار	ḥārr	heat	Baalbaki (1995)

Table 1.23 Various names for chile in Arabic.

#	Species	Name	Tr.	Gloss	Source
1	<i>Capsicum annuum</i>	番薑	<i>fānjiāng</i>	foreign-ginger	Dott (2020)
2	<i>Capsicum annuum</i>	番椒	<i>fānjiāo</i>	foreign-pepper	Dott (2020)
3	<i>Capsicum annuum</i>	海椒	<i>hǎijiāo</i>	sea-pepper	
4	<i>Capsicum annuum</i>	辣椒	<i>lājiāo</i>	pungent-pepper	DeFrancis (2003)
5	<i>Capsicum annuum</i>	辣茄	<i>làqié</i>	spicy-eggplant	Dott (2020)
6	<i>Capsicum annuum</i>	秦椒	<i>qínjiāo</i>	Qin-pepper	Dott (2020)
7	<i>Capsicum spp.</i>	紅椒	<i>hóngjiāo</i>	red-pepper	DeFrancis (2003)
8	<i>Capsicum spp.</i>	紅辣椒	<i>hónglājiāo</i>	red-pungent-pepper	
9	<i>Capsicum spp.</i>	紅甜椒粉	<i>hóngtiánjiāofěn</i>	red-sweet-pepper-powder	
10	<i>Capsicum spp.</i>	辣胡椒	<i>làhújiāo</i>	pungent-barbarian-pepper	MDBG (n.d.)
11	<i>Capsicum spp.</i>	辣子	<i>làzi</i>	spiciness	DeFrancis (2003)
12	<i>Capsicum spp.</i>	青椒	<i>qīngjiāo</i>	green-pepper	DeFrancis (2003)
13	<i>Capsicum spp.</i>	柿子椒	<i>shìzǐjiāo</i>	persimmon-ZI-pepper	MDBG (n.d.)
14	<i>Capsicum spp.</i>	甜辣椒	<i>tiánlājiāo</i>	sweet-pungent-pepper	DeFrancis (2003)

Table 1.24 Various names for chile in Chinese.

Arabic

Chinese

Summary

﴿ 8. *Capsicum annuum* L.

POWO

English: *paprika*. Chinese: 紅甜椒粉 *hóngtiánjiāofěn*. Arabic: بابريكا *bābrīkā*. Hungarian: *paprika*.

Etymology 24. English *paprika* 1839 ^{OE} < Hungarian *paprika* ^{OE} < Serbo-Croatian *paprika*, from *papar* ^{OE} *pàprika* from *pàpar* ^{WK} < Slavic **pirvъ* ^{AH} **pъrvъrъ* ^{WK} < Latin ^{Wo} *piper* ^{EE OE MWWK} ‘long pepper, black pepper’ ^{AH} < Ancient Greek *pέperi*, ^{EE Wo MW AH WK} *piperi* ^{OE MW} < Pahlavi ^{WK OE} < Middle Indo-Aryan ^{WK} *pippari*, ^{OE} *pipparī* ‘long pepper’ ^{AH} < Sanskrit *pippalī* ^{AH} ‘berry, peppercorn’, ^{EE Wo} *pippali* ‘long pepper’ ^{OE MW WK} < *pippalam* ‘berry, fruit of the pipal tree’ ^{AH}

#	Language	Term	Gloss	Loan	Source
1	English	<i>paprika</i>		yes	OUP (n.d.)
2	English	<i>bell-pepper</i>		no	OUP (n.d.)
3	English	<i>green pepper</i>		no	OUP (n.d.)
4	English	<i>paprika pepper</i>		no	OUP (n.d.)
5	English	<i>sweet pepper</i>		no	OUP (n.d.)
6	English	<i>bird pepper</i>		no	OUP (n.d.)
7	English	<i>Cayenne pepper</i>		no	OUP (n.d.)
8	English	<i>Guinea pepper</i>		no	OUP (n.d.)
9	English	<i>Indian pepper</i>		no	OUP (n.d.)
10	English	<i>cherry-pepper</i>		no	OUP (n.d.)
11	English	<i>capsicum</i>		yes	OUP (n.d.)
12	English	<i>chili</i>		yes	OUP (n.d.)
13	English	<i>chili pepper</i>		no	OUP (n.d.)
14	English	<i>pepper</i>		yes	OUP (n.d.)
15	English	<i>pod pepper</i>		no	OUP (n.d.)
16	English	<i>red pepper</i>		no	OUP (n.d.)
1	Arabic	<i>fulayfila</i>	little pepper	no	Wehr (1976)
2	Arabic	<i>fulful akhḍar</i>	green pepper	no	Wehr (1976)
3	Arabic	<i>fulful ahmar</i>	red pepper	no	Baalbaki (1995)
4	Arabic	<i>fulful ḥulw</i>	sweet pepper	no	Baalbaki (1995)
5	Arabic	<i>fulful ḥārr</i>	hot pepper	no	Baalbaki (1995)
6	Arabic	<i>fulful, filfil</i>	phonetic loan	no	Wehr (1976)
7	Arabic	<i>shaṭṭa, shaṭṭa</i>	phonetic loan	no	Wehr (1976)
8	Arabic	<i>ḥirrif</i>	pungent; acrid (taste)	no	Baalbaki (1995)
9	Arabic	<i>ḥārr</i>	heat	no	Baalbaki (1995)
1	Chinese	<i>làjiāo</i>	pungent-pepper	no	DeFrancis (2003)
2	Chinese	<i>hóngjiāo</i>	red-pepper	no	DeFrancis (2003)
3	Chinese	<i>lāhúijiāo</i>	pungent-barbarian-pepper	no	MDBG (n.d.)
4	Chinese	<i>lāzī</i>	spiciness	maybe	DeFrancis (2003)
5	Chinese	<i>qīngjiāo</i>	green-pepper	no	DeFrancis (2003)
6	Chinese	<i>shízijīāo</i>	persimmon-ZI-pepper	no	MDBG (n.d.)
7	Chinese	<i>tiánlājiāo</i>	sweet-pungent-pepper	no	DeFrancis (2003)

Table 1.25 Conventionalized names for chile in English, Arabic, and Chinese, found in dictionaries.

1.8 Cinnamon and Cassia

9. CINNAMON

POWO

English: *cinnamon*. Arabic: قرفة *qirfa* [rind; bark]; دارصيني *dārsīnī*. Chinese: 錫蘭肉桂 *xīlánròuguì* [Ceylon-flesh-cinnamon]. Hungarian: *fahéj* [tree-bark].

Plant species:	<i>Cinnamomum verum</i> J.Presl. (syn. <i>C. zeylanicum</i> Blume)
Family:	<i>Lauraceae</i>
Plant part used:	bark; leaf
Region of origin:	Sri Lanka; SW. India
Cultivated in:	Sri Lanka; Seychelles; Madagascar; India
Color:	warm yellowish-brown, cinnamon ■



(a) quills



(b) quills



(c) powder



(d) leaves

Figure 1.12 Cinnamon quills, powder, and leaves from *Cinnamomum verum*.

Cinnamon is well-known around the world for its sweet aroma and flavor, and as one of the oldest spices of commerce. It was a sought-after substance in rituals and traditional medicine systems of different cultures, and today it is an essential spice of several cuisines — both Eastern and Western. Cinnamon has maintained its level of demand ever since humans first traded it, and even in contemporary times it is the second most important spice in the markets of Europe and the United States (including cassia cinnamon), falling only behind black pepper (Ravindran et al., 2004).

Cinnamon comes from the inner bark (cortex) of the tropical tree *Cinnamomum verum* J.Presl (syn. *C. zeylanicum* Blume)⁸⁹, which are stripped and rolled into quills of several tightly packed layers by skilled peelers of (mostly) Sri Lanka, where the plant is native. In a rare example, the literal translations of the binomial names *C. verum* meaning ‘true cinnamon’, and *C. zeylanicum* meaning

⁸⁹It is difficult to navigate between the hundreds of species and subspecies of cinnamon and their overlapping botanical taxons and binomial synonyms, *C. verum* for example has 51 scientific synonyms, mainly a result of botanical history and competing naturalists. In plant taxonomy, species often have dozens of scientific names called “synonyms”. If there is consensus on the name within the scientific community, that binomial name (appended with the abbreviated name of the person who coined it) will be marked as “accepted”, while the status of the other names will be “synonym”, or “unresolved”. This is the product of the efforts of the last couple hundred years, when botanists tried to collect, describe, name, and categorize plant life around the world. As the consensus changes with time, competing names can appear in the literature. Botanical databases, such as the *World Flora Online* (WFO) and POWO, or specialized plant name checklists usually list all synonyms of a species to help us orientate in the jungle of plant nomenclature. Synonyms (abbreviated as syn.) are only given if a plant is known by multiple names in non-specialist literature, such as the case above.

etymology of ‘Ceylon cinnamon’⁹⁰ are used as common names for cinnamon in several languages. Ceylon/serendipity

10. CASSIA

POWO

English: cassia. **Arabic:** سليخة *salīkha* [peel; bark]; nan. **Chinese:** 肉桂 *ròuguì* [flesh-cinnamon]. **Hungarian:** *kasszia(fahéj)* [cassia (tree-bark)].

Plant species:	<i>Cinnamomum cassia</i> (L.) J.Presl. (syn. <i>C. aromaticum</i> Nees); et al.
Family:	<i>Lauraceae</i>
Plant part used:	bark; fruit
Region of origin:	Southeast China
Cultivated in:	Indonesia; China; Vietnam; Timor-Leste; etc.
Color:	reddish brown



(a) stick



(b) bud (dried unripe fruit)



(c) bud

Figure 1.13 Cassia sticks and buds from *Cinnamomum cassia*.

The phrase *true cinnamon* implies that there is a false cinnamon as well, and that would be cassia. Cassia, also known as Chinese cinnamon, Chinese cassia, cassia cinnamon, and — somewhat harshly — bastard cinnamon, is obtained similarly from the aromatic inner barks of closely related species, especially *Cinnamomum cassia* (L.) J.Presl. (syn. *C. aromaticum* Nees), which is produced in Southeast China and Vietnam. Although seemingly very similar to the uninitiated eye, the two spices are different in many ways. Cassia is more hard and coarse, it is made up of a single layer of thicker rind that have curled up in the heat of the day after harvesting, in the shape of a scroll. This is the cinnamon stick that most of us are familiar with, and it is capable of damage a home grinder. It is also a bit more darker reddish brown in color, and more pungent in flavor. Ceylon cinnamon on the other hand is more fragile, slightly pale in color, and supposedly more delicate in taste because it offers a combination of different essential oils besides cinnamaldehyde (the principal component responsible for its aroma and flavor). Both are marketed in powdered form as well, and as such they are indistinguishable; creating room for adulteration. Since the Europeans took over the cinnamon trade of Sri Lanka and tapping the source of “true cinnamon” (first by the Portuguese, who got a foothold in the city of Colombo in

⁹⁰Ceylon is the former name of Sri Lanka.

1518 together with trading concessions), there is a still ongoing notion that cassia is an inferior product (Chennault, 2006). And this belief eventually became reflected on the plant's Linnaean name. A few cuisines also make use of the leaves (usually from *C. verum*), and the dried, immature fruits called cinnamon buds (usually from *C. cassia*).

There are a handful of other species that are cultivated as a source of commercial cassia, such as *C. burmannii* (Indonesian cassia/cinnamon, Padang cassia, Batavia cassia, Korintje (cassia)), *C. loureiroi* (Vietnamese cassia/cinnamon, Saigon cinnamon), and *C. tamala* (Indian cassia (ligneae), Indian bark, Malabathri bark), which is more known for its leaf as Indian bay leaf, malabathrum, or tejpat. As reported in Ravindran et al. (2004, p. 10), *C. loureiroi* is extremely rare, and in actuality most of what is known as Vietnamese cassia or Saigon cinnamon is in fact *C. cassia*, contrary to what is claimed in most of the literature. This is supported by reports from botanists of French Indochina who insisted that Saigon cinnamon is brought from the north by Chinese and Annamese merchants (S.-Y. Hu, 2005, p. 400). S.-Y. Hu (2005) recounts us a personal experience from the 1960s, regarding a professor of pharmacy asking assistance in the identification of a cassia shipment from Hong Kong to the United States, stopped at maritime customs. If the cinnamon specimens are from *C. cassia*, it must be sent back. If it is *C. loureiroi*, it will be accepted. With no certain indicator or characteristics on the species, Dr. Hu's team made a decision "for humanitarian reasons" and opted for *C. loureiroi*. It is fascinating to see behind the curtain and see how difficult it is sometimes to actually know the identity of plant products circulating in global trade, and what decisions plant taxonomists must make. This is also a good anecdote to demonstrate that for the average consumer, the primary difference between these *Cinnamomum* species are purely geographic. The reason behind the hesitation to accept cassia was presumably due to its high coumarin content, a compound that is toxic in large quantities, and therefore cassia has often been portrayed as the less healthy option (Dinesh et al., 2015).

Note 1.8.1. In this dissertation the word *cinnamon* usually refers to all products from the species mentioned above — both cinnamon and cassia — following the everyday common usage in language. However, where a distinction is made between *cinnamon* and *cassia*, *cinnamon* only refers to that of *C. verum*, the "true cinnamon" of Sri Lanka, and *cassia* refers to cassia of any source (China, Indonesia, Vietnam, etc.).

1.8.1 The Botany, Origin, and Cultivation of Cinnamon and Cassia

The plant itself, (*C. verum*) is a medium-sized, evergreen tree in the laurel family (*Lauraceae*), with glossy leaves, small white flowers, and oblong, acorn-like fruits (van Wyk, 2014, p. 104). New trees are propagated both from seeds and cuttings, and are often multi-stemmed due to practice of *coppicing*: the chopping of younger shoots to ground level to stimulate growth. Cinnamon is indigenous to Sri Lanka. Cultivation of high quality true cinnamon is historically important on the island of Sri Lanka, who is the main producer and exporter until this day. It is followed by Madagascar and the Seychelles with minute amounts. Cassia (*C. cassia*) is believed to be native to the borderlands between northern Vietnam and southern China, south of the Nanling mountain range where the ethnic people used its bark as

medicine and spice from “time immemorial” (S.-Y. Hu, 2005, p. 400). Some sources also mention Myanmar, but others refute this (see Haw, 2017). Cassia of various kinds is widely cultivated now in many countries and regions, including India, Indonesia, Laos, Malaysia, Taiwan, Thailand, Vietnam, and tropical and subtropical provinces on the south of China: Guangdong, Guangxi, Guizhou, and Yunnan, where it is indigenous, and Fujian, Hainan where it has been introduced to (Chenmault, 2006; Ford et al., 2019). It is hard to find detailed statistics on production, because most indexes such as the *UN Food and Agriculture Organization Corporate Statistical Database* (FAOSTAT) do not differentiate between true cinnamon and cassia varieties. In any case, most of the world’s “cinnamon” is actually cassia grown on a large scale in Indonesia, Mainland China, and Vietnam. I believe that it is impossible to discuss cinnamon without including cassia as well, since the two are often interchanged — not only in discourse, but also in the shelves of stores and in kitchens around the world. Popular spice compendiums often blend information of cassia and cinnamon, or just ignore it altogether.

1.8.2 The Identity of Cinnamon and Cassia

Cinnamon is often used as an umbrella term and includes both the true cinnamon of Sri Lanka, and cassia varieties of different origins. *Cassia* or *cassia cinnamon* is used as hypernym to refer to any cassia (sometimes explained as a lesser quality cinnamon), unless there is a need to specify the exact variety (e.g.: *Indonesian cassia*). There is a degree of perplexity between the two terms, and the material cinnamon was, and still is often confused with cassia. Evidently, the two products have a high degree of resemblance and their methods of procurement are almost identical; and so they are essentially the two main varieties of a spice product made from aromatic tree bark. Confusion in terminology also arises from the fact that while most of the European market differentiates between culinary cinnamon and cassia, North America does not. In Europe, Australia, New Zealand, and Mexico, where the higher quality — and definitely more expensive — true cinnamon is desired and preferred, sellers must indicate if the product is cinnamon or cassia. Meanwhile, United States laws (or rather the lack of certain regulations) allow for cassia to be labeled and marketed as “cinnamon”; distributors are not legally required to label their product accurately. Consequently, most of cinnamon sold in the United States is in fact cassia (Czarra, 2009, p. 124). Cassia is the main product of choice not only in the United States and Canada, but in South East Asia, and China as well, where it is a native spice (van Wyk, 2014, p. 104).

Different disciplines use varying levels of rigidity when it comes to the choice of names *cinnamon* and *cassia*. Wijesekera and Chichester (1978) consistently refers to *C. verum* as *cinnamon*, and to *C. cassia* as *cassia*, only discussing the cinnamon grown in Sri Lanka in their historical overview of the cinnamon industry, calling it “genuine” as opposed to cassia, a “substitute for cinnamon” which was flooding to London in large quantities starting from the second half of the 19th century, drastically lowering the prices for cinnamon from Ceylon (Wijesekera & Chichester, 1978). The practice of distinguishing the two as such is still commonly used and preferred among spice sellers, however one can find studies where researchers use the name “cinnamon” as an umbrella term for several species (see Rao & Gan, 2014), and it is not uncommon in everyday language use to confound the two,

especially when referring to cassia with the word *cinnamon*, as I mentioned above. The *Handbook of Herbs and Spices* (Peter, 2012) discusses cassia (and other similarly used *Cinnamomum* species under the chapter titled “Cinnamon”), indicating that even for industry professional circles, *cinnamon* is the bigger set, usually referring to all species of the genus, even if there is no botanical hierarchy between cinnamon and cassia. In short, it is customary to use the term *cinnamon* as a collective term, and only make a distinction between different kinds of cinnamon, when it is necessary.

The notion of Ceylon cinnamon being “real” and “genuine”, is apparent and could not be more obvious than in the botanical name *C. verum*, ‘true cinnamon’ in Latin, already explained. Dinesh et al. (2015) outright call cassia “the fake cinnamon” and an “avatar” of true cinnamon (which is a truly creative witticism in an Indian journal), clearly elevating cinnamon on a pedestal and treating cassia as a counterfeit version of the former. Other articles with titles, such as *Bastard Spice or Champagne of Cinnamon?* question the value of specific products and reflect our bias and tolerance toward a spice, which would be a great discussion for marketing experts (see Derkx et al., 2020). This conveniently leads us to the topic of adulteration, which I will briefly mention. Numerous academic articles explore methods to identify the botanical species from cinnamon samples, in order to verify origin and authenticate the quality of *Cinnamomum spp.* products, via analyzing chemical compounds. This unique set of methods rose from the need to expose substances (cinnamon powder, bark oil, leaf oil, etc.) in the spice industry, that are adulterated with other, cheaper, lower quality species purely for financial gain, representing an interesting interpolation of chemistry and geobotany into the spice business (see Ford et al., 2019). Even more interesting is that the confusion in terminology is evidently a problem in pharmacological experiments, as indicated by Oketch-Rabah et al. (2018).

The species prevalent in human consumption today can be seen in table 1.26 (Kawatra & Rajagopalan, 2015), with a minor source from additional species, such as *C. tamala*. According to Ulbricht et al. (2011), true cinnamon (*C. verum*) and cassia cinnamon (*C. cassia*) are the only two species of the genus that are approved medicinal herbs. The existence of an unrelated genus named *Cassia* in the pea family (*Fabaceae*) should be noted as well to avoid confusion. This genus used to be a wastebasket taxon, now containing many ornamental flowering plants, e.g. *Cassia fistula*, commonly known as “golden shower”.

For a comprehensive account on cinnamon, cassia, and other economically important products from the genus *Cinnamomum* such as camphor, please refer to the book by Ravindran et al. (2004).

#	taxon	common name(s)	native habitat
1	<i>C. verum</i>	cinnamon; true cinnamon; Ceylon cinnamon	Sri Lanka
2	<i>C. cassia</i>	cassia; cassia cinnamon; Chinese cinnamon	S. China
3	<i>C. burmannii</i>	Indonesian cinnamon; Batavia cinnamon; korintje	Sumatra; Java
4	<i>C. loureiroi</i> <i>C. cassia</i>	Vietnamese cinnamon; Saigon cinnamom	Vietnam

Table 1.26 *Cinnamomum spp.* cultivated for commercial cinnamon and cassia, their common names and native regions.

1.8.3 The History of Cinnamon and Cassia

During its several thousand years history of human use across various civilizations, knowledge and understanding regarding the origins of this once highly priced product often pertained to confusion and mystery, and the uncertainty between cinnamon and cassia is just one of the reasons. While our contemporary knowledge on the various cinnamon products and their sources are quite clear, the identity of cinnamon and cassia used and described in antiquity is quite puzzling. Cinnamon has been claimed to be found in pharaonic tombs of ancient Egypt (see Meyerhof and Sobhy in al-Ghāfikī, 1932, pp. 471, 475), and was mentioned by early Western authors, such as Herodotus, Theophrastus, Dioscorides, Strabo, and Pliny (Laufer, 1919, p. 541), and the poet Sappho. Haw (2017) suggests that the assumption that the ancient and modern products are identical is problematic, and that the cinnamon and cassia described by early Europeans were sourced from different species of aromatic barks from Africa, and — as a plant taxonomist and historian himself — gives a hint on a probable candidate. “There is no good reason to believe that cinnamon and cassia were traded to the western Indian Ocean and the Mediterranean region at any very early date.” — he writes, even if others claim the opposite, such as “The much-discussed identification of the biblical *kinnamom* as *Cinnamomum* has been clarified and confirmed by various scholars.” (M. Zohary, 1982, p. 202). In any case, cinnamon is one of the oldest of spices, its history reaches back millennia. It is mentioned in the Bible in the Old Testament, in Sanskrit texts, and early Chinese *materia medica*.

It is said that the Chinese used it as early as the 3rd millennium BC, and it reached the West in the 2nd millennium BC (Dietrich, 2004), with evidence of Chinese poetry from the 2nd century BC (Dalby, 2000, p. 38). Archaeological discoveries from 2013 found 3000-year old cinnamaldehyde residue inside elegant flasks in a Phoenician site at Tel Dor, modern day Israel. The researchers stipulate that cinnamon was used to flavor wine, and that this could be evidence for early trade in aromatics from Southeast Asia (Namdar et al., 2013). Besides its traditional usage as a stomachic and carminative medicine, aiding digestion and promoting appetite (still popular as such), it is a popular culinary spice today (Ulbricht et al., 2011). However, this was not always the case; for example, in European antiquity cinnamon was not used in food preparation, it was rather burned like incense as an offering to the gods, sprinkled in the air as perfume, and mixed in healing decoctions and spiced wines. It has been reported by Pliny that after the death of Poppaea in 65 AD, (by the hands of?) her husband, emperor Nero, burned a year’s worth of supply of Rome’s cinnamon on his young wife’s funeral (Counts, 1996). The earliest mentions of cinnamon come from around the Mediterranean in 6th century BC. The *Exodus*, the second book of the Bible traditionally attributed to Moses, contains the following paragraph:

²² The LORD spoke to Moses, ²³ “Take the finest spices: of liquid myrrh five hundred shekels, and of sweet-smelling cinnamon half as much, that is, two hundred fifty, and two hundred fifty of aromatic cane, ²⁴ and five hundred of cassia—measured by the sanctuary shekel—and a hin of olive oil, ²⁵ and you shall make of these a sacred anointing oil blended as by the perfumer; it shall be a holy anointing oil. ²⁶ With it you shall anoint the tent of meeting and the ark of the covenant ²⁷ and the table and all its utensils and

the lampstand and its utensils and the altar of incense²⁸ and the altar of burnt offering with all its utensils and the basin with its stand;²⁹ you shall consecrate them, so that they may be most holy; whatever touches them will become holy.” (Exodus 30:22-29)⁹¹

This is a good demonstration of how important perfume and ointments were in early Judaistic rituals; while God is leading the Jews out of Egypt after the ten plagues, he methodically describes the expected sacrifices and rituals. If rightly prepared, these aromatics have the power to turn the things they touch sacred, and holy. Cassia appears in more mundane parts of the Bible as well, in the *Book of Ezekiel* the Hebrew prophet, who is attributed with the authorship of the chapter around the 6th century BC, gives his observations on the spice trade in Tyre (today on the coast of South Lebanon).

¹⁸ Damascus traded with you for your abundant goods—because of your great wealth of every kind—wine of Helbon and wool of Zahar.¹⁹ Vedan and Javan from Uzal[a] entered into trade for your wares; wrought iron, cassia, and sweet cane were bartered for your merchandise. (Ezekiel 27:18-20)⁹²

In the chants of an unknown poet on a wedding addressing a royal bride, cinnamon is accompanied with myrrh and aloes(wood): “Your robes are all fragrant with myrrh and aloes and cassia [...]” (Psalm 45:8)⁹³. This is similar to a poem about adultery showing that it was used as perfume, sprinkled on clothes and linen, emanating beauty and attracting love seekers.

¹⁷ I have perfumed my bed with myrrh,
aloes, and cinnamon.

¹⁸ Come, let us take our fill of love until morning;
let us delight ourselves with love.

¹⁹ For my husband is not at home;
he has gone on a long journey.

(Proverbs 7:17)⁹⁴

¹⁷ I have perfumed my bed with myrrh,
aloes, and cinnamon.

¹⁸ Come, let us take our fill of love until morning;
let us delight ourselves with love.

¹⁹ For my husband is not at home;
he has gone on a long journey.

(Proverbs 7:17)⁹⁵

⁹¹<https://www.biblegateway.com/passage/?search=Exodus+30&version=NRSVUE>

⁹²<https://www.biblegateway.com/passage/?search=Ezekiel%2027%3A18%2D20&version=NRSVUE>

⁹³<https://www.biblegateway.com/passage/?search=Psalm%2045%3A8&version=NRSVUE>

⁹⁴<https://www.biblegateway.com/passage/?search=Proverbs%207%3A17&version=NRSVUE>

⁹⁵<https://www.biblegateway.com/passage/?search=Proverbs%207%3A17&version=NRSVUE>

The Bible mentions cinnamon four times, three in the Old Testament and one in the New Testament, and cassia four times, three in the Old Testament and one in the Apocrypha. Besides the Bible, our most important source is Sappho (d. c. 570 BC), a Greek poet from Lesbos. On an imaginary Troyan wedding she writes: “[...] and everywhere through the streets... wine bowls and goblets... myrrh, cassia, and frankincense mixed together.” (Rayor & Lardinois, 2014, p. 49). Cinnamon appears in *The Histories* of Herodotus, his 430 BC magnum opus about the Persian wars, which is considered the founding work of Western historiography.

“As for cinnamon, they gather it in an even stranger way. Where it comes from and what land produces it they cannot say, except that it is reported, reasonably enough, to grow in the places where Dionysus was reared. There are great birds, it is said, that take these dry sticks which we have learned from the Phoenicians to call cinnamon and carry them off to nests stuck with mud to precipitous cliffs, where man has no means of approach. The Arabian solution to this is to cut dead oxen and asses and other beasts of burden into the largest possible pieces, then to set these near the eyries and withdraw far off. The birds then fly down (it is said) and carry the pieces of the beasts up to their nests, while these, not being able to bear the weight, break and fall down the mountain side, and then the Arabians come and gather them up. Thus is cinnamon said to be gathered, and so to come from Arabia to other lands.” (Herodotus, 430 B.C.E./1921, p. 139)⁹⁶

Besides the fabulous tales regarding the procurement of cinnamon, Herodotus explains that the Greeks learned the name from the Phoenicians, and that the source of the product is from Arabia.⁹⁷ Theophrastus (d. c. 287 BC) mentions cinnamon but remains vague about the origins (Arabia, Syria, or India). In his *Enquiry into Plants* he included accounts of plants found outside of Greece, such as the cotton-plant, banyan, pepper, cinnamon, myrrh, and frankincense based on reports of Alexander’s followers (Theophrastus, 1916, pp. xix, 323).

Arabia was the source of cinnamon not only in ancient times, but throughout the Middle Ages as well. The Arabs used the tubular sticks as spice, as well as its leaves and unripe berries. They were familiar with its medicinal values to “strengthen the stomach, liver and spleen”, and thought it to be effective against scorpion venom (Dietrich, 2004). Whenever the “real” cinnamon arrived to the ports of the Red Sea, it was most likely at Aden (Dietrich, 2004), one of the most important ports after the 11th century, but already important in the trade with India in the 1st century AD in the time of the *Periplus*. Western authors doubtful of Sri Lanka’s early cinnamon enterprise often give very later dates for its export: 14th century (Dietrich, 2004), 1770s (Alam, 1994/2011, referring to William Dymock), but we have Arabic eyewitnesses for the opposite. Buzurg ibn Shahriyār (ca. 900–953/1908, p. 126) mentioned *al-qirfat al-sahilānīya* “Sinhalese bark” on his travels. A native of Ramhormoz, north of the port of Siraf (today Iran), Buzurg ibn Shahriyār was a Persian ship captain; his *Kitāb ‘ajāib al-Hind* [*The Book of the Marvels of India*] is one of our most important sources we have on 10th-century Indian Ocean

⁹⁶Hdt. 3.11 — <http://www.perseus.tufts.edu/hopper/text?doc=Hdt.+3.11&fromdoc=Perseus%3Atext%3A1999.01.0126>

⁹⁷These mythical birds in Arabia are called “cinnamon gatherers” κινναμωμο-φόρος *kinnamōno-fóros* after Strabo and κινναμο-λόγος *kinnamo-lógos* after Pliny, or just simply κιννάμωμον *kinnámōmon* after Aristoteles.

trade, his travels and stories also inspired the tales of Sindbad. A century before, (Ibn Khurdādhbih, ca. 870) also talks about cinnamon (*dārṣīnī*) as one of the economic products sold on the Indian Ocean route. For the Europeans, the source of cinnamon remained a mystery until the 16th century, and they had to buy it via Arab middlemen in Alexandria or elsewhere. In colonial times, the cinnamon export was so important in Sri Lanka that in the Dutch period (1602–1796), the colony's coat of arms featured three cinnamon bales, and an elephant holding a cinnamon branch (Hartemink, 1995).

For further details on the history of cinnamon, I recommend Dalby (2000)'s *Dangerous Tastes*.

1.8.4 The Names of Cinnamon and Cassia

English

^aOUP (n.d., s.v. *cinnamon*); TLFi (2012); C. T. Lewis and Short (1879); Beekes and van Beek (2010, p. 701); Klein (1987, p. 585); Rosól (2018)

Cinnamon, or more accurately one its countless Middle English spelling variants among *sinamome* or *cynamom*, were first attested in the 15th century (ca. 1430), and became relatively more frequent in the following 16th century (OED, “cinnamon”). It can be traced back to Ancient Greek and Hebrew with certainty, but not further. According to the OED, the English term was loaned from French *cinnamome* (attested in the 13th century as *cynnamome*)⁹⁸, which comes from Latin *cinnamōnum*. The Latin word is a direct borrowing from the Greek κιννάμωμον *kinnámōmon* (since 5th century BC), which is in turn a Semitic loanword. According to Beekes and van Beek (2010, p. 701), (who is citing Herodotus), the Greek word comes from Phoenician. Herodotus wrote in the 3rd century BC that the word *kinnámōmon* was “taught” to the Greeks by the Phoenicians (Herodotus, 430 B.C.E./1921, p. 139)⁹⁹, a Canaanite Semitic speaking seafaring people, originally from the Eastern Mediterranean, roughly around today’s Lebanon. According to Klein (1987, p. 585) however, the Greek is a loanword from Hebrew, and he observes that this word seems to be “of foreign origin”. Indeed, the Semitic root system does not support this type of native word form, but we have no further attestation to the origins of this word. Besides Biblical Hebrew קִנְמָן *qinnāmōn*, Semitic cognates are also attested in Judeo-Aramaic *qnmn/qnmwn* Samaritan Aramaic *qynmwn* and Syriac *qūnnāmā* (Rosół, 2018). The alteration of the Greek word ending (*kinnámōnon* > *kinnámōmon*) is probably due to folk-etymology,

⁹⁸ *Trésor de la Lanque Francaise informatisé* (TLFi) — <https://www.cnrtl.fr/etymologie/cinnamome>

⁹⁹Hdt. 3.111 — <http://www.perseus.tufts.edu/hopper/text?doc=Hdt.+3.111&fromdoc=Perseus%3Atext%3A1999.01.0126>

modelled after the *phytonym* ἄμωμον *ámōmon* ‘a spice plant’ (Beekes & van Beek, 2010; Klein, 1987).

Amomum is an spice of uncertain identity, featured in the writings of European antiquity but cannot be positively matched today. I have briefly introduced amomum in section 1.6, explaining that it most probably refers to black cardamom. Appearing in Pliny’s *Natural History*, it is “an aromatic shrub, from which the Romans prepared a costly, fragrant balsam”¹⁰⁰ and for the Greeks it denoted an Indian spice-plant: “Nepaul cardamom”.¹⁰¹ This brings us is one of the popular theories one may find when searching for the origins and explanations of the word *cinnamon*, that it is made up of the combination of Κίνα *Kína* ‘China’ + ἄμωμον *ámōmon* ‘amomum’, as in ‘Chinese amomum’. This is somewhat analogous with the plant’s Persian name *dārčin* ‘cinnamon’ (lit. ‘Chinese tree’), which is a *Wanderwort* that have spread far and wide from South and Central Asia to the Balkans.

Another — seemingly rather far-fetched — theory is the presumed relatedness to Malay *kayu manis* ‘cinnamon’, (lit. ‘sweet wood’). Even a Google search for the etymology of cinnamon powered by Oxford Languages data does return Malay as possible etymon. This speculation (probably on the account of a similar consonant sequence) seemed to gain some traction with a reference work of Biblical Hebrew and Aramaic titled *A Hebrew and English Lexicon of the Old Testament*, commonly known as the Brown–Driver–Briggs (see Brown et al., 1906/1939, p. 890)¹⁰². “Prob. foreign wd., coming with the thing from remote E[ast]; cp. with Malay *kainamanis* by Röd, *kāyū mānis* Lewi [...]” — says the old dictionary guiding the reader further down the rabbit hole. As I mentioned above, cinnamon is attested in the Old Testament in three places¹⁰³, among other spices, incense, and perfumes. I think the logic of the authors lay in that cinnamon was thought to be imported to the Middle East at the earliest of times from East Asia, and that if anyone could afford exotic spices coming through the hands of early Babylonian and Malay traders, King Solomon — who is considered to be the author of several Biblical books — must be one. To sum up, we have no way of knowing *cinnamon*’s origins for certain prior to Hebrew, only speculations.

Besides *kinnámōmon*, there is also κίνναμον *kinnamon* in Greek, a later, more rare form of the former, appearing first in the writings of Pliny. The current English form is in part derived from the Latin versions *cinnamum/cinnamon* refashioned after this.¹⁰⁴.

Etymology 26. English *cassia*, ca. 1000 < Latin *casia* ‘id.’, 1st c. AD < Ancient Greek κασία *kasía* ‘id.’, 6th c. BC < Ancient Hebrew קְנָמֵן *qənām̄en* ‘a bark resembling cinnamon, but less aromatic, so called from being stripped off’, from *qṣā* ‘to cut off, strip off bark’ (hapax legomenon in the Bible; Ps. 45:9)^a

^aOUP (n.d., s.v. *cassia*); Rosól (2018); Beekes and van Beek (2010, p. 653); Klein (1987, p. 589)

¹⁰⁰C. T. Lewis and Short, 1879, *amomum*.

¹⁰¹Liddell and Scott, 1843/1940, ἄμωμον.

¹⁰²BDB — <https://mg.alhatorah.org/Dictionary/7076>

¹⁰³Exodus 30:23; Proverbs 7:17; Song of Songs 4:14 — <https://www.biblegateway.com/quicksearch/?quicksearch=cinnamon&version=NRSVUE>

¹⁰⁴Hoad, 2003, *cinnamon*.

The English word *cassia*, similarly to *cinnamon*, goes back to Latin. *Casia* (rarely *cassia*) is a direct borrowing from Greek κασία *kasiā*, occasionally with double sigma: κασσία *kassía* (OED, “cassia”). The Greek word, appearing first in Herodotus’s writings, once again is “an oriental loanword” and often explained as ‘wild cinnamon’, comparable to Hebrew קַשְׁתָּא *qəšṭā* and “Assyrian” *kasiā* (Beekes & van Beek, 2010, p. 653). Although Beekes and van Beek (2010) indicates that the word originally is Austro-Asiatic, there is no further elaboration there, and according to Welles (1934, p. 342) it is a Semitic loan-word. This conforms with the current popular theory that the source of the Greek term is the Hebrew word *qəšṭā*, literally meaning ‘peel’ i.e. “the peel of the plant, which is scraped off the tree” (Klein, 1987, p. 589). *Qəšṭā* derives from the root *q-ṣ-*, this Semitic root means “to cut, cut off; to scrape”, which clearly refers to the procurement of this spice, the peeling off the tree bark (Klein, 1987).¹⁰⁵ Not everyone subscribes to this inherited Semitic word theory, and there were wild speculations that the Biblical Hebrew word is a loan from Chinese 桂枝 *guìzhī* or 桂子 *guìzǐ* (which were not attested until the 11th and 14th centuries (Noonan, 2019, p. 197)). This words is a hapax legomenon in the Hebrew Bible, it occurs only once¹⁰⁶ in the plural form (*qəšṭōt*), mentioned in connection with myrrh and aloes, being used to perfume garments. It was probably prepared from the peeled bark of some cassia-like plant, as the Hebrew word suggests. (Noonan, 2019, p. 196) is sure that the cassia in the Bible is a spice from Arabia or Ethiopia, and not the cassia of today, trusting classical authors and citing that it appears with other Red Sea products such as myrrh, ivory, and the port of Ophir. He also thinks, that this word has to be a loanword from a language in this region. Although a hapax legomenon according to Klein (1987), *qəšṭā* also appears in Job 42:14 as a feminine proper name rendered usually as Keziah in English, who is the second daughter of Job (probably named after the fragrant spice tree). If we search English translations of the Bible, we can find three occurrences of ‘cassia’ as an aromatic substance — in agreement with the The Septuagint (Greek Old Testament) — however, two of these (Ex. 30:24; Ezek. 27:19) are translated from the word קִדְדָּה *qiddah*, “of uncertain origin; prob. a foreign word” — writes Klein¹⁰⁷. In the *Encyclopaedia Judaica* (EJ), the tree kinds of cinnamon are identified in the Bible and Talmudic literature, according to the followings: (1) Cinnamon, Ceylonese; *Cinnamomum zeylanicum* [sic]; קִדְמֹן *qiddam* aromatic tropical spice tree; Ex. 30:23; Prov. 7:17, et al. (2) Cinnamon, Chinese; *Cinnamomum cassia* [sic]; קִדְדָּה *qiddah* aromatic tropical spice tree; Ex. 30:24; Ezek. 27:19. (3) Cinnamon, Indo-Chinese; *Cinnamomum laurei* [sic]; קִדְעָה *qideah* aromatic tropical spice tree; Ps. 45:9 (Feliks, 2007, vol. 16, p. 221).

Both words spread in Europe significantly via Latin, and especially with the spread of Christianity, through Medieval Latin. Words for cinnamon and cassia (cf. Musselman, 2012, p. 38) might be one of the few spice names that have spread to places where the spice itself have not reached yet. For example, *cassia* is attested in Old English and Middle English, but was not naturalized until the 16th

¹⁰⁵ Cognates are Aramaic קְטַת *qtat*, and Arabic قَطْعَة *qaṭa‘a*

¹⁰⁶ Ps. 45:8 — <https://www.biblegateway.com/passage/?search=Psalm%2045%3A8&version=NRSVUE>

¹⁰⁷ In Easton’s Bible Dictionary: “*qiddah*’, i.e., ‘split’. One of the principal spices of the holy anointing oil (Ex. 30:24), and an article of commerce (Ezek. 27:19). It is the inner bark of a tree resembling the cinnamon (q.v.), the *Cinnamomum cassia* of botanists, and was probably imported from India.” — <https://www.blueletterbible.org/search/dictionary/viewtopic.cfm?topic=EToooo734>

century.¹⁰⁸.

#	Species	Name	Source
1	<i>Cinnamomum verum</i>	Ceylon cinnamon	van Wyk (2014)
2	<i>Cinnamomum verum</i>	cinnamon	van Wyk (2014)
3	<i>Cinnamomum verum</i>	true cinnamon	van Wyk (2014)

Table 1.27 Various names for cinnamon in English.

English names are concerned with two things regarding cinnamon: place of origin, and genuineness. Sometimes the *semantics* of these two overlap, especially if one is familiar with the qualities and grades associated with the source of the cinnamon. For those who know what these epithets actually mean, *Chinese cinnamon* should signify the same thing as *bastard cinnamon*, and *Ceylon cinnamon* is the same as *true cinnamon*. For the rest, all these names would just fall in the category of culinary cinnamon, and they can only infer further information from the meaning of the distinguishing words (*true*, *Ceylon*, *bastard*, *Chinese*, etc.). The phrase *bastard cinnamon* is not in frequent daily use anymore, but at some point it was important enough to explain it in dictionaries (cf. OED, “*bastard cinnamon*”)¹⁰⁹. Attested in 1678, it was inspired by French [†]*cannelle bastarde*¹¹⁰, and was born during an English translation of a travelogue.

“After the Dutch had disposses’d the Portugals of whatever they had in Ceylan, they cast their eyes upon Cochin, in the Territories whereof grows the Bastard Cinnamon, which hinder’d the utterance¹¹¹ of Ceylan Cinnamon.” (Tavernier, 1678, p. 88)

As the quote shows, the phrase *bastard cinnamon*’s sole role is to stand opposed to *Ceylon/true cinnamon*, and if we think about the European maritime powers vying for power at this time, this dysphemism could be regarded as a negative marketing strategy as well; whoever owned Ceylon and the trade in *real* cinnamon, did not want others to have an attractive alternative supply from around the corner.

Arabic

Etymology 27. Arabic قرفة *qirfa* ‘cinnamon’ [bark, rind], from *qarafa* ‘to peel, bark, derind’; Semitic root q-r-f (related to root q-l-f); cf. Amharic *kerefe*^a

^aWehr (1976, p. 888) and Leslau (1991, p. 427)

qirfa In Modern Standard Arabic, cinnamon is known as قرفة *qirfa*, literally ‘rind, bark’.¹¹² *Qirfa*

¹⁰⁸Hoad, 2003, cassia.

¹⁰⁹<https://www.oed.com/view/Entry/16044?redirectedFrom=bastard+cinnamon#eid1265820550>

¹¹⁰Coined in 1605 or before; now *cannelle bâtarde*

¹¹¹The word *utterance*’s now obsolete meaning was: “the disposal of goods, commodities, etc., by sale or barter”

is not a modern word though, thanks to literary Arabic's rigid resistance to change, we can easily recognize cognates from the times of Classical Arabic and even before; e.g. Classical Syriac **ܩܠපܬ** *qlāptā* 'bark, peel, Hebrew **קַלְיָה** *qəlippâ* 'id.', and many others (see Leslau, 1991, p. 427). When Herodotus mentioned cinnamon in his story with the giant cinnamon gatherer birds of Arabia (<http://www.perseus.tufts.edu/hopper/text?doc=Hdt.+3.111&fromdoc=Perseus%3Atext%3A1999.01.0126>), he used the word **χάρφος** *kárphos* 'dry stalk, dry sticks of cinnamon; twigs that birds use to build a nest'¹¹³. There is some speculation that this Greek word is a Semitic loan as well, but this is unfounded, and Beekes and van Beek (2010) stays silent on the matter; the related *káro* 'to dry' seems to be of Pre-Greek origin. The wildest fantasies I came across tried to connect this word with a Dravidian etymon, musing that this Semitic word might be a loanword from Tamil கருவா *karuvā* 'cinnamon'. But, the fact that the early Semitic root related to the concept of peeling is attested in several languages strongly goes against any idea of borrowing in this case. In the *Lisān al-‘Arab*, *al-qirfa* is defined as *dawā ma‘rūf* 'a well-known drug/medicine'.¹¹⁴

Etymology 28. Arabic *dārṣīnī* دارصيني ‘cinnamon’ < Persian *dārčīnī* ‘cinnamon’ [Chinese wood], from Persian *dār* ‘wood’ + *cīn* ‘China’; cf. cognates Sanskrit *dāru* (PIE *dóru) < Pahlavi *dār ī čēnīg **dār ī čēnīq* ‘cinnamon’, (cf. Armenian *daričenik*)^a

^aWehr (1976, p. 31); Dietrich (2004); Alam (1994/2011)

In Classical Arabic literature however, one can find another names for cinnamon, and the most important of those is دارصيني *dār ṣīnī* or دارچيني *dār ḥīnī*, a loanword from Persian *dārčīnī*, darsini (or دارچين *dār-i chīn*), literally meaning ‘Chinese wood’, seemingly referring to Chinese cinnamon. In Persian, *dār* is ‘tree; wood’¹¹⁵, while *chīn* is ‘China’ — arriving via Middle Persian *chīn*, via Sanskrit चीन *cīna*, likely originating from Old Chinese 秦 /**zin/*, after the Qin dynasty of ancient China. The latter half or *dārčīnī* went through Arabicization, rendering it *ṣīn* in Arabic.¹¹⁶ The *-ī* suffix makes the adjective: ‘Chinese’.

As a loanword in Arabic, the word *dārṣīnī* must have been confusing for some people, and less confusing for others. After the eastward expansion of the Abbasid Caliphate consolidated, it was not uncommon for native Persian scholars to work and write in Arabic. One Persian bureaucrat and postmaster, Ibn Khurdādhbih (ca. 870, p. 71), writing in the 9th century in his *Kitāb Al-Masālik Wa l-Mamālik*, mentions *dārṣīnī*, as one of the many products that are shipped to *al-Sīlā* [Korea] from other parts of East Asia.¹¹⁷ He does not give any explanation on the name, in fact *dārṣīnī* is one of the least confusing ones, which might indicate that for a Persian speaker, the meaning was trivial.

¹¹²From *qarafa* ‘to peel, bark, derind’ (*Hans-Wehr: A Dictionary of Modern Written Arabic* (HW), “*qarafa*”); doublet of *qitif* and *qulāfa* ‘bark, rind’, from *qalafa* ‘to strip the bark of a tree’ (HW, “*qalafa*”)

¹³LSJ, “κάρφεα” — <https://www.perseus.tufts.edu/hopper/morph?l=ka%2Frfea&la=greek&can=ka%2Frfea&prior=ta&d=Perseus:text:1999.01.0125:book=3:chapter=111:section=2&i=1#Perseus:text:1999.04.0057:entry=ka/rfos-contents>

¹¹⁴Ibn Manzūr, 1290/1979, 3599.

¹¹⁵PIE *dóru

¹¹⁶There is no, /tʃ/, sound in Standard Arabic.

¹¹⁷Also transcribed as Ibn Khordadbeh, he is the first Western author that mentioned Korea.

On the other hand, Abū Ḥanīfah al-Dīnawarī (d. 895), a Persian polymath also writing in Arabic mentions *dārṣīnī* in his *Book of Plants*, but he is quite confused about the term *ṣīnī*, and associates with another (unidentified) drug called *ṣīnīn* (ad-Dīnawarī, 1974, p. 210). According to the *Encyclopaedia of Islam, Second Edition* (EI2) Ishāk b. Sulaymān al-Isrā'īlī (d. 955), a scholar from Egypt was the first to acknowledge that *dārṣīnī* comes from China.

Etymology 29. Arabic *salīkhā* سليخة ‘cinnamon bark; cassia bark’ [peeled off, stripped off], from *salakha* ‘to pull off, strip off; skin, flay’; Semitic root s-l-kh; cf. cognates *^a

^aWehr (1976, p. 491)

Medieval Arabic pharmacognostic literature always makes a distinction between *dārṣīnī* and *salīkhā* another substance, سليخة *salīkhā*¹⁸, a term that has been associated with cassia (*C. cassia*) from early texts until today.

If *dārṣīnī* and *salīkhā* are not identical, *dārṣīnī* must be a cinnamon from another source. Could it be the cinnamon from Sri Lanka? Documents from the Cairo Geniza show that Arab traders have purchased cinnamon from Ceylon in rather large quantities (sixty bags, each bag 100 pounds) in around 1140, calling it *qirfa sīlī* ‘Ceylon(?) cinnamon’ (Goitein & Friedman, 2008, p. 375) and we can presume it was the local product. I agree with Dietrich (2004)’s opinion that the identity of the plant source “cannot be established with certainty”. Lev and Amar (2008, pp. 143–144) suggested that the three terms were used interchangeably, but in general *dārṣīnī* referred to both Ceylon cinnamon and Chinese cassia, whereas *qirfa* was Ceylon cinnamon, and *salīkhā* was Chinese cassia. This could be close to the truth, but I would like to entertain Haw (2017)’s theory as well, who is convinced that “*salīkhā* really refers to the genus *Cassia*”, and to the Chinese cassia, and that Herodotus, Theophrastus and Pliny were right when writing about ancient “cinnamon” coming from Africa, which Haw identifies with *Cassia abbreviata*, a tree native to East and South Africa.

The other problem is that according to our current understanding, Ceylon cinnamon was not exported from the island until a quite late date, “hardly before the 14th century” (Dietrich, 2004), which agrees with the problems raised by Haw (2017). This sheds a cloud of uncertainty on every claim that ancient cinnamon mentioned by Greeks, Romans, and Arabs is the same as the cinnamon from Ceylon, and that what the Arabs knew and used early on were cinnamon from Asia or something else.

In the writings of Dioscorides from the 1st century AD, both classes of κινάμωμον *kinámōmon* and κασ(σ)ία *kas(s)īa* rind are listed, but he fails to mention their source (A'lām, 1994/2011). Muslim writers translating the Greek works from the 9th century rendered the classes as *dārṣīnī* and *salīkhā* (A'lām, 1994/2011). Figure 1.14 shows a folio from a Greco-Islamic pharmacopoeia, where the heading right under the red stroke says: قينامامون وهو الدارصيني: *qīnāmāmūn wa-huwa l-dārṣīnī* ‘*Kīnāmāmon*, which is cinnamon’, shows that Arabic translators transcribed the Greek names for herbal remedies, even when they had their own terminology. The Islamicate scholarly world of scholars were closely familiar

¹⁸From *salakha* ‘to pull off, strip off; skin, flay’, after the method of peeling off a tree’s skin; <http://www.semiticroots.net/index.php?r=root/view&id=387>

with the Greek works, *dārṣīnī* seems to have indicated the same category as Greek *kinnámōmon*, and they knew a “whole range of kinds” of it.¹¹⁹ Ibn al-Bayṭār (d. 1248), an Andalusian Arab physician, pharmacist, and botanist heavily relying on the writings of Dioscorides and Galen, listed the different kinds of cinnamon known under the category of *dārṣīnī* in his *Mufradāt*, citing Ishāk b. Sulaymān (Ibn al-Bayṭār, ca. 1248/1874, vol. I/2, p. 83, s.v. *dārṣīnī*). Dietrich (2004) introduces these products listed by Ibn al-Bayṭār: Chinese cinnamon *dārṣīnī al-ṣīn* lit. ‘Chinese wood of China’, an inferior kind called *dār ṣūṣ*, the “real cinnamon rind” *al-qirfa ‘alā l-haqīqa*, the “clove-rind” *qirfat al-qurunful* [sic], the “pungent cinnamon” *al-hādd al-madhāq* lit. ‘the sharp of taste’, etc. The term *dārṣīnī* still exists in the Arabic scientific name for the genus *Cinnamomum*, and as a colloquial term without an emphatic /s/; دارسين (dārsīn) in some Khalijī (Gulf) Arabic dialects, where the Persian influence was always strong.

According to (A’lam, 1994/2011), some modern scholars have implied that ancient societies sourced their cinnamon from China overland, due to the interpretation of the name, but citing Laufer (1919)’s *Sino-Iranica*, there is no Sinological evidence to support this. I agree with the author here that if cinnamon came from Asia, it must have arrived via the sea trade with South India and Lanka. Yūḥannā bin Māsūya (d. 955), a contemporary of al-Isrā’īlī, mentioned three kinds of *qirfa*: *qirfat al-qaranful*, the best; *qirfa* that smelled like camphor; and *qirfa* that smelled like *dārṣīnī* (A’lam, 1994/2011).

Arabic names shown in table 1.28, similarly to English, focus geographical origin and genuineness, but also quality and grade. This shows us two things. First, people who were part of the spice trade and had some knowledge on it were also concerned about the source of the *real* cinnamon, not only the Europeans were actively trying to *go* and find it some centuries later. Second, there must have been several sources of “cinnamon”. It is not a secret that Arabia and neighboring East Africa had aromatic trees and shrubs, just think of myrrh and frankincense. It is not an impossible idea that words such as *qirfa* and *salīkha* — which literally meant ‘rind’ or ‘bark’ were sourced locally/regionally, and these terms were also applied to similar products arriving from Southeast Asia. As for *dārṣīnī*, it is without a doubt an eastern product. Terms, such as *dārṣīnī al-ṣīn* [*dārṣīnī* of China/Chinese *dārṣīnī*] also indicate that it was a category, rather than a specific kind of product.

Chinese

The Chinese language does not have two different words for cinnamon and cassia, the term 肉桂 *ròuguì* [flesh-cinnamon] is used, referring to the ‘cassia bark’ of *C. cassia*, often just called “Chinese cinnamon” in English. Furthermore, one can come across 桂皮 *guìpí* [cinnamon-skin] ‘id.’, and S.-Y. Hu (2005, p. 399) also lists 官桂 *guānguì* [official-cinnamon] ‘id.’. The latter makes sense if we imagine the resemblance of the curled barks of cinnamon to the written scrolls of the officials (see Zhang & Unschuld, 2015, p. 732). 桂心 *guìxīn* [cinnamon-heart] ‘id.’ refers to the inner bark specifically.¹²⁰ Hu calls all these products — native to the mountainous regions of Vietnam and China borderlands — *cassia*, and she reiterates the notion introduced by (Ravindran et al., 2004), that Vietnamese and

¹¹⁹For more on the Arabic transmission of Dioscorides’s *Materia medica*, see Gutas (2012)

¹²⁰In case of some cassia varieties, the outer barks could be used as well.

#	Species	Name	Tr.	Gloss	Source
1	<i>Cinnamomum spp.</i>		دارصيني <i>dārshīnī</i>	Chinese wood	Dietrich (2004)
2	<i>Cinnamomum spp.</i>		قرفة <i>qirfa</i>	bark, rind	Wehr (1976)
3	<i>Cinnamomum spp.</i>		قرفة القرنفل <i>qirfat al-qurunful</i>	the bark of clove	Dietrich (2004)
4	<i>Cinnamomum verum</i>	الدارصيني على الحقيقة	<i>al-dārshīnī 'alā l-haqīqa</i>	the real darsini	Dietrich (2004)
5	<i>Cinnamomum verum</i>	القرفة على الحقيقة	<i>al-qirfa 'alā l-haqīqa</i>	the real bark	Dietrich (2004)
6	<i>Cinnamomum verum</i>	القرفة الأصلية	<i>al-qirfat al-aṣliyya</i>	the original bark	Wikipedia (n.d.)
7	<i>Cinnamomum verum</i>	القرفة السهيلانية	<i>al-qirfat al-sihilānīya</i>	Sinhalese bark	A'lām (1994/2011)

Table 1.28 Various names for cinnamon in Arabic.

Chinese cassia is the same, explaining that those that are exported from Saigon are called *Saigon cinnamon* in English, while the others transported to the south to Guangzhou and Hong Kong “have the trade name *cassia*” (S.-Y. Hu, 2005, p. 400). There is also 桂枝 *guìzhī* [cassia-branches] ‘cassia twigs’, which is a particular kind of cinnamon product unique to TCM, made up of the chopped up young branches of the cassia tree, and 桂子 *guìzǐ* [cassia-seeds] ‘cassia buds’ referring to the fruits. As for the other cinnamon products found outside of China, medicinal products from *C. burmannii* (root, bark, leaf), are called 隅香 *yīnxiāng* [yin-spice]¹²¹ (S.-y. Hu, 1980/1999, p. 179). If Sri Lankan cinnamon must be expressed, 锡蘭肉桂 *xílánròugui* ‘Ceylon cinnamon’ is applicable,

In historical texts the character 桂 *guì*¹²² referred to cinnamon/cassia. The Sinogram of *guì*, Old Chinese (OC) /*kʷes/, is a phono-semantic compound made up of semantic 木 ‘tree’ + phonetic 圭 OC /*kʷe:/-. The first instance we are able to find in the corpus available in the CTP of *guì* is in the *Liji*, from the Warring States period (5th c.–221 BC):

曾子曰：「喪有疾，食肉固酒，必有草木之滋焉。以為姜桂之謂也。」

Zeng-zi said, ‘When one during his mourning rites falls ill, and has to eat meat and drink spirits, there must be added the strengthening flavours from vegetables and trees;’ meaning thereby ginger and cinnamon.¹²³

Here too, we must be careful when identifying plants and plant products, because *guì* can also be the sweet-scented osmanthus. In the past, *guì* marked both cinnamon species from the laurel family (*Lauraceae*), and sweet osmanthus (from Greek *osme* ‘fragrant’ and *anthos*, ‘flower’), a fragrant flowering bush with tiny white flowers common all around East and mainland Southeast Asia, frequently picture? found in city parks. *Osmanthus fragrans* Lour.) — also called “sweet olive” and “tea olive”

¹²¹From the feminine, dark, “negative” half of the yin and yang concept.

¹²²CTP, “桂”—<https://ctext.org/dictionary.pl?if=en&char=%E6%A1%82>

¹²³CTP—<https://ctext.org/pre-qin-and-han?searchu=%E6%A1%82>; translations from James Legge

in English — is a species in the olive family *Oleaceae* (Pearlstine, 2022, p. 191), and today it is referred to as 桂花 *guīhuā* [osmanthus-flower] to make a distinction. The synonym 木犀 *mùxi* is said to come from the similarity of the bark's striations and the rhinoceros's horn (Chennault, 2006); another name is 九里香 *jiǔlǐxiāng*, lit. 'fragrant-for-nine-li'¹²⁴. Chennault (2006) uses reasoning along botanical lines, to find out if a line is about cinnamon or osmanthus. For example, if the *guī*-wood is used for temple-building, it must be cinnamon (osmanthus is a shrub, less suitable for construction); if the verse talks about the scent of white or red flowers, it is likely to concern osmanthus (only the bark and leaves are aromatic in case of cinnamon, and cinnamon flowers are always white as opposed to osmanthus, where some varieties have orange/reddish flowers). Osmanthus is used to season tea and it is an ingredient in pastries. An alcoholic beverage called *guīhua* liquor also uses osmanthus tincture to flavour rice gin (S.-Y. Hu, 2005, p. 627). Osmanthus flower is important in Chinese culture — from legends, in poetry, and as a Buddhist symbol — and it is associated with the Mid-autumn Festival. Chennault (2006)'s essay on the identity of *guī* explores the use of *guī* in traditional — especially Buddhist — poetry, and clears the confusion between cinnamon and osmanthus in a Chinese literary context. The character 桂 *guī* appears in the *Shuowen Jiezi* and *Kangxi Zidian* dictionaries, as well as the *BCGM*, where it has been identified as *Cinnamomum cassia* (Zhang & Unschuld, 2015, p. 732).

#	Species	Name	Tr.	Gloss	Source
1	<i>Cinnamomum verum</i>	錫蘭肉桂	<i>xīlán ròuguì</i>	Ceylon-flesh-cinnamon	

Table 1.29 Various names for cinnamon in Chinese.

Chinese names are concerned with plant parts first and foremost. Even the modern Chinese distinction between the two basic meanings of *guī* (cinnamon/cassia and osmanthus) happens with the addition of other Chinese characters referring to the *guī*'s meat or flesh (also used for fruit pulp) if it is cinnamon, or its flower if it is osmanthus. As a native spice of China, we will not find loanwords for cinnamon.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>cinnamon</i>		yes	OUP (n.d.)
1	Arabic	<i>dārṣīnī</i>	Chinese wood	yes	Wehr (1976)
2	Arabic	<i>qirfa</i>	bark, rind	no	Wehr (1976)

Table 1.30 Conventionalized names for cinnamon in English, Arabic, and Chinese, found in dictionaries.

To summarize, the two English quintessential names that cannot be broken down into further parts in English — *cinnamon* and *cassia* — are both loanwords arriving on similar pathways, and also

¹²⁴*Li* is an ancient measure of length, approximately equal to 500 meters.

Wanderwörter. From the three Arabic words that play an important role here, two — *qirfa* and *salīkha* — are native Semitic words, while *dārshīnī* is a borrowing from Persian, which is the source language for many languages borrowing the name for cinnamon. As for Chinese, *guī* is the original Sinogram for cinnamon, and all further words are compounded with this character. In table 1.30, I listed the names that appear in modern dictionaries. One thing to notice here is that the further we are to the source of cinnamon and cassia geographically, the more likely it is for the name to be a loanword.



Figure 1.14 Cinnamon tree in a 10th-century Arabic translation of Dioscorides's *De Materia Medica*, a manuscript at the Oriental Collection of the University Library of Leiden (Shelfmark: Or. 289). This copy is from Samarkand, and dates to 1083, the time of the Karakhanids (Dioscorides, 1083, f. 9a)

1.9 Clove

¶ 11. CLOVE

POWO

English: clove. Arabic: قرنفل qaranful. Chinese: 丁香 dīngxiāng [nail-spice]. Hungarian: szegfűszeg [nail-grass-nail].

Plant species:	<i>Syzygium aromaticum</i> (L.) Merr. & L.M.Perry (syn. <i>Eugenia aromatica</i> (L.) Baill.)
Family:	<i>Myrtaceae</i>
Plant part used:	dried flower buds
Region of origin:	Moluccas (Indonesia)
Cultivated in:	Indonesia, Malaysia, Tanzania
Color:	rich, reddish brown



(a) a



(b) b



(c) c

Figure 1.15 Clove .

1.9.1 The Botany, Origins, and Cultivation of Clove

1.9.2 The History of Clove

1.9.3 The Names of Clove

English

Etymology 30. English *clove*, ?ca. 1225 < Anglo-Norman *clow*, c.1200 < Old French *clou*, XII < Latin *clāvus* ‘nail’^a

^a;

#	Species	Name	Source
1	<i>Syzygium aromaticum</i>	clove	van Wyk (2014)

Table 1.31 Various names for clove in English.

#	Species	Name	Tr.	Gloss	Source
1	<i>Syzygium aromaticum</i>	كَبْش قَرْنَفُلْ	<i>kabsh qaranful</i>	ram of cloves?	Baalbaki (1995)
2	<i>Syzygium aromaticum</i>	قرنفل	<i>qaranful</i>		Amar and Lev (2017)

Table 1.32 Various names for clove in Arabic.

Arabic

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Syzygium aromaticum</i>	丁香	<i>dīngxiāng</i>	nail-spice	Kleeman and Yu (2010)
2	<i>Syzygium aromaticum</i>	雞舌香	<i>jīshéxiāng</i>	chicken-tongue-spice	DeFrancis (2003)

Table 1.33 Various names for clove in Chinese.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>clove</i>		yes	OUP (n.d.)
1	Arabic	<i>kabsh qaranful</i>	ram of cloves?	no	Baalbaki (1995)
2	Arabic	<i>qaranful</i>		yes	Wehr (1976)
1	Chinese	<i>dīngxiāng</i>	nail-spice	no	Kleeman and Yu (2010)
2	Chinese	<i>jīshéxiāng</i>	chicken-tongue-spice	no	DeFrancis (2003)

Table 1.34 Conventionalized names for clove in English, Arabic, and Chinese, found in dictionaries.

Etymology 31. English gillyflower (1550s), < Middle English gilofre ‘gillyflower’ (XIV), originally ‘clove’ (c. 1300) < Old French girofle, gilofre ‘clove’ (XII) < Late Latin caryophyllum < Ancient Greek κάρυοφύλλον ‘clove, nut leaf, dried flower bud of clove tree’ < κάρυον ‘nut’ + φύλλον ‘leaf’

1.10 Coriander

12. CORIANDER

POWO

English: coriander; cilantro; Chinese parsley. Arabic: كزبرة kuzbara. Chinese: 芫荽 yánsui [lilac-coriander]. Hungarian: koriander; cigánypetrezselyem [gipsy-parsley].

Plant species: *Coriandrum sativum* L.

Family: Apiaceae/Umbelliferae

Plant part used: fruit; leaf

Region of origin: Mediterranean; W. Asia; India

Cultivated in: Argentina, India, Morocco, Romania, Spain, Yugoslavia

Color: light yellow



(a) a



(b) b

Figure 1.16 Coriander .

1.10.1 The Botany, Origins, and Cultivation of Coriander

Coriander (*Coriandrum sativum* L.), also known as cilantro and Chinese parsley, is an annual herb originating in Western Asia, with several cultivars consumed around the world. The fresh leaves are used as a culinary herb, popular in Asian, Latin American, and Portuguese cooking, while the dried fruits (“coriander seeds”) are used as a spice, mostly in India, the Middle East, and Europe (Davidson, 2014). We can essentially talk about two products from one plant, valued for their different culinary properties. The leaves (and the plant itself) are called *cilantro* in the Americas, but also referred to as *fresh coriander* and *coriander greens*. Coriander seeds (often just termed *coriander*) are in fact the plant’s fruits, and ground coriander is a major component of Indian curry powders and pickles. Although nowadays we consider coriander to be a culinary herb and spice and occasional ingredient in liqueurs, its historical role was tending towards a more medicinal one. Moreover, it was used in perfume making, and even in the traditional making of *confetti*¹²⁵.

¹²⁵<https://archive.ph/20130414183247/http://www.foodinitaly.org/a-brief-history-of-confetti/>; <https://dictionary.cambridge.org/dictionary/italian-english/coriandolo>

Coriander is one of the earliest Old World pants used as a condiment (D. Zohary et al., 1988/2012). The exact origin of this ancient crop is hard to define, but the native range is usually set somewhere between the East Mediterranean through the Transcaucasus to Pakistan. We do not know for sure when the species reached the Indian subcontinent (Prance & Nesbitt, 2005), where it enjoys widespread popularity. Coriander and its cultivars have been slowly spread and introduced to most places in Eurasia and grows almost globally in both wild and cultivated forms for thousands of years now.¹²⁶ *Sativum* (Latin for ‘sown, planted’) in the binomial name is a good indicator of this as well.

Coriander and its use have been documented in antiquity, but linguistic and archaeological evidence points to an even longer history. D. Zohary et al. (1988/2012, p. 163) gives a detailed list of archeobotanical findings, the oldest one of which dates to roughly eight thousand years ago, found in what is today Israel and Palestine. Coriander was also found in Egypt; remnants of desiccated coriander mericarps in Tutankhamun’s tomb (died 1323 BC) are proof for trade or cultivation by the ancient Egyptians (D. Zohary et al., 1988/2012). We know from the Ebers Papyrus – written around 1550 BC, considered amongst the oldest extant medical documents in the world – that the Egyptians used coriander in their medicinal practices (Prance & Nesbitt, 2005). An herbal remedy for headache from these ancient papyri is as follows:

“ANOTHER REMEDY WHICH THE GODDESS ISIS PREPARED FOR THE GOD RA TO DRIVE OUT
THE PAINS THAT ARE IN HIS HEAD!

Berry-of-the-Coriander — I
Berry-of-the-Poppy-plant — I
Wormwood — I
Berry-of-the-sames-plant — I
Berry-of-the-Juniper-plant — I
Honey — I

Make into one, mix with Honey, and smear therewith in order to make him well forthwith. When this remedy is used by him against all illnesses in the head and all sufferings and evils of any sort, he will instantly become well.” Ebers Papyrus (ca. 1550 B.C.E./1930, p. 40)

Coriander was familiar to the bronze age Greeks as well, recorded on Linear B tablets from as early as 2000 BC. According to Chadwick (1976), coriander – reconstructed as *koriadnon* – must have been grown in both Mycenae and Knossos (on Crete) in considerable amounts, since the epigraphs refer to vast quantities. A tablet found in Pylos for example mentions 576 liters of coriander given to a perfume-maker. Later in antiquity, ancient Greek physicians Hippocrates and Dioscorides mentioned the medicinal properties of coriander, around 400 BC and 65 AD, respectively. Coriander was introduced to England by the Romans, and in 812 Charlemagne ordered its subjects to grow it on the farms of the Holy Roman Empire (Prance & Nesbitt, 2005). It was also one of the first herbs to be introduced to

¹²⁶For more details on the plant’s distribution, please refer to the Plants of the World Online (POWO) database at: <https://powo.science.kew.org/taxon/840760-1#distribution-map>. Retrieved March 10, 2022.

the American colonies, by 1670 it was found in Massachusetts. Due to their relative abundance and widespread distribution, coriander seeds never became a pricey commodity during the spice trade, and as an herb the value is in the freshness of the leaves: it is best when used locally. Nevertheless, the coriander seed world trade total value was at US\$192 million in 2019.¹²⁷

1.10.2 The History of Coriander

1.10.3 The Names of Coriander

The word *coriander* entered English in the 14th century via Old French *coriandre*, from Latin *coriandrum*. The Latin word is a borrowing from Greek *koriannon*, a variant of *koriandron*, of uncertain etymology. A shortened version of *korion* also exists, among others. It is often repeated in both popular and scientific literature that the name of coriander comes from the Greek word *koris* ‘bug, bedbug’ (*Cimex lectularius*), for its strong smell of the unripe fruit or the foliage (cf. Harper, n.d.-a). According to most contemporary writers, this idea is first promoted by Pliny the Elder (AD 23/24–79), some even purporting that Pliny named the plant after the stinking bug (Cumo, 2013; O’Connell, 2016; Prance & Nesbitt, 2005) (((O’Connell, 2016, p. 87; Cumo, 2013, p. 318–319; Prance & Nesbitt, 2005, p. 152))). Pliny mentions coriander multiple times in remedies, stating that the best quality comes from Egypt. However, his monumental work, the *Natural History* (Pliny the Elder, 77/1855) does not contain any statement of referring to bugs or the name, regarding coriander. The bedbug connection is not often discussed by lexicographers, and dictionaries generally do not endorse it (except *Merriam-Webster’s Unabridged*). It seems to be a sort of false etymologization, taken for granted and copied for centuries, reaching as far as a statement in *Encyclopaedia Britannica* (1911), although not without reason.

Coriander contains the same aldehydes a stink bug (*Halyomorpha halys*) does, in fact the odor of the stink bug is often likened to that of coriander and (McGee, 2010), and a bed bug infestation reportedly has a similar olfactory experience (Davidson, 2014). One of the reasons for coriander’s divisive nature is that not all of us perceive these chemicals the same way. Opposing opinions on the smell and benefits of it go back to the Middle Ages, arguments or giants, such as Galen (129–216) and Ibn Sina (c. 980–1037) for and against it were reported hundreds of years later (cf. Parkinson, 1640). The hatred is so strong from some people, that a series of websites and social media groups are dedicated to it today, under slogans to the effect of “I HATE CILANTRO!” — plus, the term *cilantrophobe* exists. All this has to do with our predisposed genetic differences in perceiving its sensory qualities, and some sources report on Europeans’ (i.e. non-traditional coriander consumers) strong aversive reactions (Eriksson et al., 2012). It is also to be noted that the fruits of coriander slightly resemble the appearance of a bedbug as well, and we can speculate that this has also strengthened the connection. Anthropologist Leach (2001) retraced the hateful remarks to French and English garden manuals from around the 1600s. Consulting the Google Books Ngram Viewer (Michel et al., 2011), the first claim of coriander’s name deriving from koris in English is from 1640, in John Parkinson’s paramount *Theatrum Botanicum* (Parkinson, 1640, pp. 918–919). Other botanists before him also rushed to mention coriander’s stinking character, although not connecting it with the derivation of

¹²⁷Data from OEC <https://oec.world/en/profile/hsg2/coriander-seeds>. Retrieved March 10, 2022.

its name. These include John Gerard in his 1597 *The Herball, or Generall Historie of Plantes* (p. 859) – who mostly plagiarised the Flemish father of botany, Rembert Dodoens and his 1586 work *A nievve herball, or, Historie of plantes* (p. 313), calling it a “very stinking herbe”. In the following centuries both British and American botanists perpetuated this putative word origin. The Mycenaean Greek forms written in Linear B are recorded as ko-ri-ja-do-no /korihadnon/ and ko-ri-a2-da-na /korihadna/. Beekes and van Beek (2010, p. 754) suggest a pre-Greek origin, citing the -dn- cluster, and dismisses both the folk etymologization by Frisk (1960–1972/2021) Frisk (1960/2021) and a possible connection to Akkadian *huri’ānu* ‘coriander’ proposed by Szemerényi (1971). It is more likely then, that those who already disliked coriander (in this case, 16–17th-century European botanists) played on the koris-korion link, and arbitrarily conformed the explanation of its name for some personal justification. Coriander’s synonym, cilantro, is a doublet of coriander. It comes via Spanish culantro from the Late Latin *coliandrum* a variant of the classical *coriandrum*. The name cilantro entered English usage relatively late in 1907 (Harper, n.d.-a) and it usually refers to the fresh leaves people use as garnish. Its use is restricted to North and Latin America, mainly due to the herb’s rise in popularity with the emergence of Mexican cuisine in the United States, bringing the word cilantro with it. (Culantro now is used for an indigenous Latin American herb (*Eryngium foetidum*), also known as long coriander.)

As for the alternative name Chinese parsley, it refers to the leaves as well, never used to the seeds. Some authors and even authoritative encyclopedias presume that the name Chinese parsley is used in China/the Orient, which is a rather silly assumption, since geographic designations are not likely epithets to be used internally (cf. Davidson, 2014; O’Connell, 2016). The notion to relate coriander to some type of parsley is not far-fetched, the leaves look very similar to other herbs in the *Apiaceae* family (parsley, dill, anise, fennel, etc.). Back to the term Chinese parsley, it apparently emerged in New York at the turn of the century. The phrase first appears in an 1832 United States court document, listing the items of a Chinese grocer, and later in an 1854 work titled *The Transactions of the Royal Hawaiian Agricultural Society*, both without explanation. The first truly interesting story featuring Chinese parsley was an article in Frank Leslie’s Popular Monthly, Volume 35 from 1893. The article, A celestial farm on Long Island, introduces how Chinese immigrants have set up farms in the Astoria neighborhood of Queens, in New York City (Seitz, 1893). The article also contains illustrations, the prices for Chinese vegetables at the time, and identifies Chinese parsley as “yen sai”¹²⁸ in Chinese. Hence, it seems plausible that New Yorkers familiarized themselves with the herb from these Chinese farms and this is how the name gained some popularity.

English

Etymology 32. English *coriander* < Old French *coriandre* < Latin *coriandrum* < Ancient Greek *koriannon;-dron^a*

^a;

¹²⁸ 兼 蔬 yán sui

#	Species	Name	Source
1	<i>Coriandrum sativum</i>	Chinese parsley	van Wyk (2014)
2	<i>Coriandrum sativum</i>	cilantro	van Wyk (2014)
3	<i>Coriandrum sativum</i>	coliander	OUP (n.d.)
4	<i>Coriandrum sativum</i>	coriander	van Wyk (2014)
5	<i>Coriandrum sativum</i>	coriander-seed	OUP (n.d.)
6	<i>Coriandrum sativum</i>	dhania	OUP (n.d.)

Table 1.35 Various names for coriander in English.

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Coriandrum sativum</i>		كزبرة	<i>kuzbara</i>	Wehr (1976)

Table 1.36 Various names for coriander in Arabic.

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Coriandrum sativum</i>	胡荽	<i>húsuī</i>	barbarian-coriander	Laufer (1919)
2	<i>Coriandrum sativum</i>	香菜	<i>xiāngcài</i>	fragrant-vegetable	S.-Y. Hu (2005)
3	<i>Coriandrum sativum</i>	香茜	<i>xiāngqiàn</i>	fragrant-madder	Wikipedia (n.d.)
4	<i>Coriandrum sativum</i>	芫茜	<i>yánqiàn</i>	lilac-madder	Wikipedia (n.d.)
5	<i>Coriandrum sativum</i>	芫荽	<i>yánsuī</i>	lilac-coriander	S.-Y. Hu (2005)

Table 1.37 Various names for coriander in Chinese.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>Chinese parsley</i>		no	OUP (n.d.)
2	English	<i>cilantro</i>		yes	OUP (n.d.)
3	English	<i>coliander</i>		yes	OUP (n.d.)
4	English	<i>coriander</i>		yes	OUP (n.d.)
5	English	<i>coriander-seed</i>		no	OUP (n.d.)
6	English	<i>dhania</i>		yes	OUP (n.d.)
1	Arabic	<i>kuzbara</i>		yes	Wehr (1976)
1	Chinese	<i>húsuī</i>	barbarian-coriander	yes	DeFrancis (2003)
2	Chinese	<i>xiāngcài</i>	fragrant-vegetable	no	MDBG (n.d.)
3	Chinese	<i>yánsuī</i>	lilac-coriander	no	MDBG (n.d.)

Table 1.38 Conventionalized names for coriander in English, Arabic, and Chinese, found in dictionaries.

1.11 Cumin

13. CUMIN

POWO

English: cumin. Arabic: كمون *kammūn*. Chinese: 孜然 *zīrán*. Hungarian: *római kömény* [Roman cumin].

Plant species:	<i>Cuminum cyminum</i> L.
Family:	<i>Apiaceae/Umbelliferae</i>
Plant part used:	fruit
Region of origin:	W. & C. Asia; India
Cultivated in:	India, Iran, Lebanon
Color:	light brown



Figure 1.17 (*Cuminum cyminum*). Credit: Aromatiques.

1.11.1 The Botany of Cumin

1.11.2 The History of Cumin

1.11.3 The Names of Cumin

English

Etymology 33. English *cumin*, Middle English *cumin*, *comin* was either from French (like Middle Dutch *comijn*, Dutch *komijn*), or altered from Old English *cymen* after French. (Old English *cymen*); cf. cognates Old High German *chumin*, *cumin*, also *chumil* (Middle High German *kümel*, German *kümmel*), Swedish *kummin*, Danish *kummen*. The word has also come down in the Romanic languages, Italian *cumino*, *comino*, Spanish *comino*, Portuguese *cominho*, Old French *cumin*, *comin*. < Latin *cūmīnum* ‘id.’ < Ancient Greek κύμηνον *kúmēnon* ‘id.’, The Greek κύμηνον is supposed to have been a foreign word, cognate in origin with the Semitic names < Semitic* **kmn* ‘id.’; cf. cognates Arabic *kammūn*; Hebrew *kammōn*; Akkadian *kamūnu*^a

^aOUP (n.d., s.v. cumin);

#	Species	Name	Source
1	<i>Cuminum cyminum</i>	cumin	van Wyk (2014)
2	<i>Cuminum cyminum</i>	cumin seed	van Wyk (2014)

Table 1.39 Various names for cumin in English.

Arabic

a

#	Species	Name	Tr.	Gloss	Source
1	<i>Cuminum cyminum</i>	كمون	<i>kammūn</i>		Wehr (1976)
2	<i>Cuminum cyminum</i>	سنوت	<i>sannūt</i>		Lane (1863)

Table 1.40 Various names for cumin in Arabic.

Chinese

Etymology 35. Mandarin Chinese 孜然 *zīrán* ‘cumin’, modern loan from Uyghur (the historic term is 蒔蘿 from Middle Persian *zīra during Tang dynasty) < Uyghur ئىزىز *zirä* ‘cumin’ < Persian زیر *zīra* ‘cumin’, distantly related to Sanskrit *jīraka* (zire-ye siyāh [black cumin] ‘caraway’; zire-ye sabz [green cumin] ‘cumin’); cf. cognates Sogdian *zyr’kk* /zīrē/; Hindi-Urdu *zīrā* <? Sanskrit जीरा *jīra* ‘cumin’; cf. Hindi जीरा *jīrā*; English *jeera*^a

^aLaufer (1919, p. 383), Sulaiman (2020, p. 45), and Liu et al. (1985); Schwarz (1992, p. 561); Steingass (1892, p. 634); McGregor (1993, p. 375)

#	Species	Name	Tr.	Gloss	Source
1	<i>Cuminum cyminum</i>	茴香籽	<i>huíxiāngzǐ</i>	hui-spice-seed	MDBG (n.d.)
2	<i>Cuminum cyminum</i>	枯茗	<i>kūmíng</i>	withered-tea	MDBG (n.d.)
3	<i>Cuminum cyminum</i>	羅馬葛縷子	<i>luómǎ gělǚzi</i>	Roman-caraway	
4	<i>Cuminum cyminum</i>	馬芹子	<i>mǎqínzi</i>	horse-celery-seed	
5	<i>Cuminum cyminum</i>	蒔蘿	<i>shíluó</i>	dill-turnip	Laufer (1919)
6	<i>Cuminum cyminum</i>	小茴香	<i>xiǎohuíxiāng</i>	small-hui-spice-seed	Laufer (1919)
7	<i>Cuminum cyminum</i>	孜然	<i>zīrán</i>		MDBG (n.d.)
8	<i>Cuminum cyminum</i>	孜然芹	<i>zīránqín</i>	cumin-celery	S.-Y. Hu (2005)
9	<i>Cuminum cyminum</i>	阿拉伯茴香	<i>ālābó huíxiāng</i>	Arabian fennel	MDBG (n.d.)
10	<i>Cuminum cyminum</i>	安息茴香	<i>ānxī huíxiāng</i>	Parthian fennel	MDBG (n.d.)
11	<i>Cuminum cyminum</i>	歐蒔蘿	<i>ōu shíluó</i>	European dill	MDBG (n.d.)

Table 1.41 Various names for cumin in Chinese.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>cumin</i>		yes	OUP (n.d.)
2	English	<i>cumin seed</i>		no	OUP (n.d.)
1	Arabic	<i>kammūn</i>		yes	Wehr (1976)
1	Chinese	<i>huíxiāngzǐ</i>	hui-spice-seed	no	MDBG (n.d.)
2	Chinese	<i>kūmíng</i>	withered-tea	yes	MDBG (n.d.)
3	Chinese	<i>shíluó</i>	dill-turnip	yes	Kleeman and Yu (2010)
4	Chinese	<i>zīrán</i>		yes	MDBG (n.d.)
5	Chinese	<i>zīránqín</i>	cumin-celery	no	MDBG (n.d.)
6	Chinese	<i>ālābó huíxiāng</i>	Arabian fennel	no	MDBG (n.d.)
7	Chinese	<i>ānxī huíxiāng</i>	Parthian fennel	no	MDBG (n.d.)
8	Chinese	<i>ōu shíluó</i>	European dill	no	MDBG (n.d.)

Table 1.42 Conventionalized names for cumin in English, Arabic, and Chinese, found in dictionaries.

1.11.4 Dill

14. DILL

POWO

English: *dill*. Arabic: شبت *shibitt*. Chinese: 茴蘿 *shíluó*. Hungarian: *kapor*.

Plant species:	<i>Anethum graveolens</i> L.
Family:	<i>Apiaceae/Umbelliferae</i>
Plant part used:	fruit; leaf
Region of origin:	Nort Africa; West Asia
Cultivated in:	India
Color:	greyish brown



(a) a



(b) b

Figure 1.18 Dill .

1.11.5 The Botany of Dill

1.11.6 The History of Dill

1.11.7 The Names of Dill

English

Etymology 36. English *dill*, ulterior derivation unknown, a. 700; cf. cognates Old Low German *dilli*, Dutch *dille*, Old High German *tilli*, Middle High German *tille*, German *dill*, *dille*, Danish *dild*, Swedish *dill* < unknown *^a

^aOUP ([n.d.](#), s.v. *dill*)

#	Species	Name	Source
1	<i>Anethum graveolens</i>	dill	van Wyk (2014)
2	<i>Anethum graveolens</i>	dill-seed	OUP (n.d.)
3	<i>Anethum graveolens</i>	Indian dill	van Wyk (2014)

Table 1.43 Various names for dill in English.

#	Species	Name	Tr.	Gloss	Source
1	<i>Anethum graveolens</i>		شبت	<i>shibithth</i>	Lane (1863)

Table 1.44 Various names for dill in Arabic.

#	Species	Name	Tr.	Gloss	Source
1	<i>Anethum graveolens</i>	蒔蘿	<i>shíluó</i>	dill-turnip	
2	<i>Anethum graveolens?</i>	土茴香	<i>tǔhuíxiāng</i>	earth-fennel	

Table 1.45 Various names for dill in Chinese.

Arabic

Chinese

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>dill</i>		yes	OUP (n.d.)
2	English	<i>dill-seed</i>		no	OUP (n.d.)
1	Arabic	<i>shibithth</i>		yes	Lane (1863)

Table 1.46 Conventionalized names for dill in English, Arabic, and Chinese, found in dictionaries.

1.12 Fennel

15. FENNEL

POWO

English: *fennel*. Arabic: شمار *shamar*. Chinese: 茴香 *huíxiāng* [hui-spice]. Hungarian: édeskömény [sweet-cumin]; ánízskapor [anise-dill].

Plant species:	<i>Foeniculum vulgare</i> Mill.
Family:	<i>Apiaceae/Umbelliferae</i>
Plant part used:	fruit; leaf
Region of origin:	Mediterranean; W. Asia; India
Cultivated in:	Argentina, Bulgaria, Germany, Greece, India, Lebanon
Color:	light green to light brown



(a) a

Figure 1.19 Fennel .

1.12.1 The Botany of Fennel

1.12.2 The History of Fennel

1.12.3 The Names of Fennel

English

Etymology 37. English *fennel*, a. 700 < Old English *fenol*, a. 700 < Latin *faeniculum*, via Vulgar Latin *fēnōclum*, *fēnuclum* substituted for classical Latin *faeniculum*, diminutive of *faenum* hay; cf. Old French *fenoil* (modern French *fenouil*), Provençal *fenolh*, Italian *finocchio*, Spanish *hinojo*.^a

^aOUP ([n.d.](#), s.v. *fennel*);

#	Species	Name	Source
1	<i>Foeniculum vulgare</i>	fennel	van Wyk (2014)
2	<i>Foeniculum vulgare</i>	fennel-seed	OUP (n.d.)
3	<i>Foeniculum vulgare</i>	Indian fennel	van Wyk (2014)
4	<i>Foeniculum vulgare</i>	sweet fennel	van Wyk (2014)

Table 1.47 Various names for fennel in English.

#	Species	Name	Tr.	Gloss	Source
1	<i>Foeniculum vulgare</i>		بسباس	<i>basbās</i>	Wehr (1976)
2	<i>Foeniculum vulgare</i>		رازيانج	<i>rāzyānj</i>	Wehr (1976)
3	<i>Foeniculum vulgare</i>		شمار	<i>shamar</i>	Wehr (1976)
4	<i>Foeniculum vulgare</i>		شمرة	<i>shamra, shumra</i>	Wehr (1976)
5	<i>Foeniculum vulgare</i>		شمار	<i>shamār</i>	Wehr (1976)
6	<i>Foeniculum vulgare</i>		سنوت	<i>sunūt</i>	

Table 1.48 Various names for fennel in Arabic.

Arabic

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Foeniculum vulgare</i>	懷香	<i>huáixiāng</i>	huai-spice	
2	<i>Foeniculum vulgare</i>	茴香	<i>huíxiāng</i>	hui-spice	Kleeman and Yu (2010)
3	<i>Foeniculum vulgare</i>	甜茴香	<i>tiánhuíxiāng</i>	sweet-fennel	
4	<i>Foeniculum vulgare</i>	小茴香	<i>xiǎohuíxiāng</i>	small-anise	

Table 1.49 Various names for fennel in Chinese.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>fennel</i>		yes	OUP (n.d.)
2	English	<i>fennel-seed</i>		no	OUP (n.d.)
3	English	<i>Indian fennel</i>		no	OUP (n.d.)
4	English	<i>sweet fennel</i>		no	OUP (n.d.)
1	Arabic	<i>basbās</i>		yes	Wehr (1976)
2	Arabic	<i>shamar</i>		yes	Wehr (1976)
3	Arabic	<i>shamra, shumra</i>		yes	Wehr (1976)
4	Arabic	<i>shamār</i>		yes	Wehr (1976)
1	Chinese	<i>huíxiāng</i>	hui-spice	no	Kleeman and Yu (2010)

Table 1.50 Conventionalized names for fennel in English, Arabic, and Chinese, found in dictionaries.

1.12.4 Fenugreek

16. FENUGREEK

POWO

English: *fenugreek*. Arabic: حلبية *hulba*. Chinese: 胡蘆巴 *húlúbā*. Hungarian: *görögszéna* [greek-hay].

Plant species:	<i>Trigonella foenum-graecum</i> L.
Family:	<i>Fabaceae/Leguminosae</i>
Plant part used:	seed; leaf
Region of origin:	W. Asia
Cultivated in:	India
Color:	mustard yellow seeds



(a) a



(b) b

Figure 1.20 Fenugreek .

1.12.5 The Botany of Fenugreek

1.12.6 The History of Fenugreek

1.12.7 The Names of Fenugreek

English

Etymology 38. English *fenugreek*, in old English from Latin, in Middle English and later from French < French *fenugrec* < Latin *faenugraecum* [Greek-hay], named *faenum Graecum* ‘Greek hay’ by the Romans^a

^a

#	Species	Name	Source
1	<i>Trigonella foenum-graecum</i>	fenugreek	van Wyk (2014)
2	<i>Trigonella foenum-graecum</i>	fenugreek-seed	OUP (n.d.)

Table 1.51 Various names for fenugreek in English.

#	Species	Name	Tr.	Gloss	Source
1	<i>Trigonella foenum-graecum</i>		هُلْبَةٌ	<i>hulba</i>	Lane (1863)

Table 1.52 Various names for fenugreek in Arabic.

Arabic

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Trigonella foenum-graecum</i>	胡蘆巴	<i>húlúbā</i>	barbarian-reeds-ba	Kleeman and Yu (2010)

Table 1.53 Various names for fenugreek in Chinese.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>fenugreek</i>		yes	OUP (n.d.)
2	English	<i>fenugreek-seed</i>		no	OUP (n.d.)
1	Chinese	<i>húlúbā</i>	barbarian-reeds-ba	yes	Kleeman and Yu (2010)

Table 1.54 Conventionalized names for fenugreek in English, Arabic, and Chinese, found in dictionaries.

1.13 Ginger

17. GINGER

POWO

English: *ginger*. Arabic: زنجيل *zanjabil*. Chinese: 薑 *jiāng*. Hungarian: *gyömbér*.

Plant species:	<i>Zingiber officinale</i> Roscoe
Family:	<i>Zingiberaceae</i>
Plant part used:	rhizome
Region of origin:	South East Asia; India (secondary)
Cultivated in:	India, Jamaica, Nigeria, Sierra Leone
Color:	light yellow when fresh, beige when powdered



(a) a



(b) b

Figure 1.21 Ginger .

1.13.1 The Botany of Ginger

1.13.2 The History of Ginger

1.13.3 The Names of Ginger

English

Etymology 39. English *ginger*, ca. 925 < reinforced by Old French *gingivere*, *gingibre* ‘ginger’ < Medieval Latin *gingiber* ‘ginger’ < Latin *zingiber* ‘ginger’ < Ancient Greek ζιγγίβερις *ziggiberis* ‘ginger’ < Pali *singivera* ‘ginger’; cf. cognates Sanskrit शृङ्गवेर *śṛṅgavera* < Dravidian* **cinki-wēr* ‘ginger’, South dravidian nominal compound from the etyma of Tamil and Malayalam *iñci* (both with regular loss of an initial sibilant) + *wēr* (Proto-Dravidian *wēr*); the base of **cinki* is a loanword < unknown *‘ginger’, unidentified Southeast Asian language; cf. cognates Khasi *sying* /s?inj/, Thai *khing*, Vietnamese *giảng*, Chinese *jiāng* <? Proto-Sino-Tibetan* **kjan* ‘ginger’^a

^aOUP (n.d.) and Ross (1952); Krishnamurti (2003, p. 5);

#	Species	Name	Source
1	<i>Zingiber officinale</i>	black ginger	OUP (n.d.)
2	<i>Zingiber officinale</i>	ginger	van Wyk (2014)
3	<i>Zingiber officinale</i>	ginger root	OUP (n.d.)
4	<i>Zingiber officinale</i>	ginger spice	OUP (n.d.)
5	<i>Zingiber officinale</i>	green ginger	OUP (n.d.)
6	<i>Zingiber officinale</i>	white ginger	OUP (n.d.)

Table 1.55 Various names for ginger in English.

Arabic

^aKaufman et al. (1987); Ciancaglini (2008, p. 90); Krishnamurti (2003, p. 5); OUP (n.d.)

#	Species	Name	Tr.	Gloss	Source
1	<i>Zingiber officinale</i>	زنجبيل	janzabīl		Wehr (1976)
2	<i>Zingiber officinale</i>	زنجبيل	zanjabīl		Wehr (1976)

Table 1.56 Various names for ginger in Arabic.

Chinese

Etymology 41. Mandarin Chinese 薑 *jiāng* ‘ginger’, -221 < Old Chinese 𠀤 MC OC /*kaŋ/ ‘ginger’ < Proto-Sino-Tibetan* **kjaj* ‘ginger’; cf. Burmese ဟိုယ် *hkyang:*^a

a

Summary

#	Species	Name	Tr.	Gloss	Source
1	<i>Zingiber officinale</i>	幹薑	<i>gānjiāng</i>	dry-ginger	DeFrancis (2003)
2	<i>Zingiber officinale</i>	薑	<i>jiāng</i>	ginger	Kleeman and Yu (2010)
3	<i>Zingiber officinale</i>	鮮薑	<i>xiānjiāng</i>	fresh-ginger	DeFrancis (2003)

Table 1.57 Various names for ginger in Chinese.

#	Language	Term	Gloss	Loan	Source
1	English	<i>black ginger</i>		no	OUP (n.d.)
2	English	<i>ginger</i>		yes	OUP (n.d.)
3	English	<i>ginger root</i>		no	OUP (n.d.)
4	English	<i>ginger spice</i>		no	OUP (n.d.)
5	English	<i>green ginger</i>		no	OUP (n.d.)
6	English	<i>white ginger</i>		no	OUP (n.d.)
1	Arabic	<i>janzabil</i>		yes	Wehr (1976)
2	Arabic	<i>zanjabil</i>		yes	Wehr (1976)
1	Chinese	<i>gānjiāng</i>	dry-ginger	no	DeFrancis (2003)
2	Chinese	<i>jiāng</i>	ginger	no	Kleeman and Yu (2010)
3	Chinese	<i>xiānjiāng</i>	fresh-ginger	no	DeFrancis (2003)

Table 1.58 Conventionalized names for ginger in English, Arabic, and Chinese, found in dictionaries.

1.14 Long Pepper

Long pepper is a relative of the black pepper, and as a commercial product it comes from two sources: the Indian long pepper *Piper longum*, and Javanese long pepper *Piper retrofactum* Vahl Vahl. The latter is sometimes also called Balinese long pepper or Indonesian long pepper. According to Peter (551 2012, vol. 2) vol 2

1.14.1 The Botany, Origins, and Cultivation of Long Pepper

1.14.2 The History of Long Pepper

1.14.3 The Names of Long Pepper

English

In English, *long pepper* is a calque after the modelling the Latin *piper longus*, and first appear in the early Old English Medicinal text known as *Bald's Leechbook*¹²⁹. The plant's binomial name was also derived from this term, using the neuter form *Piper longum*. The OED points out that it was supposed to refer to flowers or unripe fruits of the (black) pepper plant in earlier times. This notion must arise from the fact that the long pepper fruits do somewhat look resemble the unripe black pepper clusters looking like catkins, and some Romans must have assumed that long pepper is just the unripe version of small black pepper clumps. Nevertheless, I am certain that the Romans did not see young unripe black peppers still on the vine very often, so we can forgive them this time. The gloss of *long pepper* from Latin is not unique to English, many European languages went down the same route.¹³⁰

In the East, however, where there was no Latin to distinguish between black (*nigrum*) and long (*longum*), simply the Sanskrit name *pippali* was borrowed by the languages whose speakers got familiar with long pepper and its sisters directly from speakers of Indic languages, compare Malayalam *tippali*, Telugu *pippali*, or Tibetan *pi pi ling*. Modern Hindi *pippali* is most probably a *tatsama*¹³¹ word, a learned loan from Sanskrit. The name of the sacred fig (*Ficus religiosa*) – otherwise known as the bodhi tree, under which the Buddha gained enlightenment and rendered *peepul* in English from Hindustani *pīpal* – has Sanskrit *pippala* ‘berry, especially the fruit of the sacred fig’ as an etymon. The sacred fig was a kind of “spiritual import”, we know about two instances when the Indian king gifted bodhi trees to the Chinese emperor in 641 and 647 from Magadha, the homeland of these trees (Schafer, 1985, p. 122).

Long pepper in Chinese is 蕃¹³² *bibō*, as it appears on TCM databases¹³², or 蕃拔 *bibá*, with some

¹²⁹OUP, n.d., longpepper.

¹³⁰Compare Anglo-Norman *poivre long* (13th cent.; Middle French, French *poivre long*), Middle Dutch *lanc peper* (Dutch *lange peper*), Middle Low German *lanc pēper*, *lancpēper*, Old High German *langpfeffar* (Middle High German *langer pheffer*, German *langer Pfeffer*), Old Swedish *langa pipar* (Swedish *långpeppar*), according to the OED; as well as Italian *pepe lungo*, Spanish *pimienta larga*, Portuguese *pimenta-longa*, Finnish *pitkäpippuri*, Polish *pieprz dług*, etc.

¹³¹*Tatsama* refers to a group of vocabulary consisting of learned loanwords from Sanskrit into modern languages of India, including both Indo-Aryan and Dravidian languages. It is comparable to the usage of Greek and Latin words in modern European languages, as they belong to a higher register. E.g.: the choice to use *curriculum* over *courses*. It is accompanied with *tadbhava*, which is the class of words that evolved.

¹³²

other historical character variations. A local Hong Kong spice vendor is marketing it as 長胡椒/薑撥 *zhǎng hújiāo/bibō*, the first of which is a obvious rendering of the English *long [black] pepper*, while the second is using the second character 撥 *bō*, the same that is used the first time in historical documents. The first mention is in 通典 *Tongdian*¹³³ “Comprehensive statutes” written by Du You, a late 8th-century encyclopedia and administrative history covering ancient times up to 756, including the Battle of Talas and other important events in Tang history. Long pepper appears in the last part of the book about “Frontier defense”, under the section 波斯 *Bosi* [Persia], in a listing all the products that are supposed to be found there.¹³⁴ Long pepper also appears in the 西陽雜俎 *Youyang Zazu*¹³⁵ “Miscellaneous Morsels from Youyang”, a 9th century Tang miscellany on various topics by Duan Chengsi. It contains fantastic stories from ghosts to strange animals, “legends and hearsay, reports on natural phenomena, short anecdotes, and tales of the wondrous and mundane, as well as notes on such topics as medicinal herbs, perfume, tattoo and language” – to quote Reed (1995, p. 1). Book¹³⁶ eighteen contains 24 entries of exotic plants that have been imported to China or brought as tribute from places such as Syria, Persia, Malaysia, and Silla [Korea]. The author usually gives the foreign names of these products and tries to compare them to a plant more familiar to the Chinese readership. The plants featured here include cardamom, galbanum, acacia, jackfruit, Balm of Gilead, Narcissus, and jasmine (Reed, 1995, p. 68). Entry 56 is on long pepper (薑撥 *bibō*), where Duan tells us that it comes from Magadha, and pronounced as 薑撥梨 *bit-bat-li¹³⁷. Magadha refers to a culturally important historic region of India roughly on the eastern Ganges-plain. He also tells us the purported Fulin [Roman] name for it, and then proceeds to describes the appearance of the plant, likening the fruit to mulberries, which bear a close enough similarity of long pepper fruits. This is clear evidence that the Chinese used the Sanskrit word referring to long pepper, and Schafer (1985, p. 151) mentions that it was commonly shortened to *pippal* and mispronounced as *pitpat* or *pippat*.

薑撥，出摩伽陀國，呼為薑撥梨，拂林國呼為阿梨訶他。苗長三四尺，莖細如箸。葉似戢葉。子似桑椹，八月採。（YYZZ 18:56）¹³⁸

It is now a good time to remind the reader that it is this long pepper that gave us the word *pepper* in English and many other languages around the world, as it was shown in 15.

I mentioned “sisters” earlier, because long pepper is not alone here, there are other species, such as *Piper retrofractum*, also known as *Javanese long pepper* or sometimes as *Balinese long pepper*. At this point it will make sense to use the name *Indian long pepper* when referring to *Piper longum* to avoid confusion. These two plants and their fruits are very similar, and they are often lumped together in discussions. It is enough to remember that Indian long pepper is important in India and mainland Southeast Asia, while Javanese long pepper is more relevant to insular Southeast Asia, but both were exported to medieval China and most likely there was no distinction made between the two. Javanese

¹³³<http://www.chinaknowledge.de/Literature/Science/tongdian.html>

¹³⁴<https://ctext.org/dictionary.pl?if=en&id=565096>

¹³⁵<http://www.chinaknowledge.de/Literature/Novels/youyangzazu.html>

¹³⁶The original term is 卷 *juan*, menaing ‘scroll, book’, or ‘volume, chapter’.

¹³⁷Reconstructed Tang pronunciation

¹³⁸The same page also has an entry on black pepper. <https://ctext.org/library.pl?if=en&file=85088&page=282>

long pepper is more pungent than both black and long pepper, and is used in medicine, pickling, and curries, and much is exported to China – wrote Burkill (1935). Long pepper also spread through southern Asia before black pepper (Burkill, 1935, pp. 1746–1751).

We know that long pepper was popular in Rome during Pliny's time, and that it was more expensive than black pepper. And if we look at the fact that the name borrowed to Greek from Sanskrit was *pippali* and not *marica*, we can readily assume that it was introduced to Europe before black pepper.

These plants hold the key to one of the questions I asked at the beginning of this project, that is: Why was the Indonesian word *cabai* so resistant, and why Indonesian did not loan words of 'pepper' or 'chili'?

They bear very similar fruits, turning bright red when ripe, reaching upwards.

Chinese

1.15 Nutmeg & Mace

18. NUTMEG

POWO

English: nutmeg. **Arabic:** جوز الطيب *jawz al-ṭib* [fragrant nut]; nan. **Chinese:** 肉豆蔻 *ròudòukòu* [flesh-bean-cardamom]. **Hungarian:** szerecsendió [Saracen nut]; *muskátdió* [musk-nut]; *mácisdió* [mace-nut].

Plant species:	<i>Myristica fragrans</i> Houtt.
Family:	<i>Myristicaceae</i>
Plant part used:	seed
Region of origin:	Moluccas (Indonesia)
Cultivated in:	Grenada, Indonesia
Color:	pale brown nut, dark when powdered



(a) a



(b) b



(c) c

Figure 1.22 Nutmeg, *Elettaria nutmegum*.

19. MACE

POWO

English: mace. **Arabic:** بسباسة *basbāsa*. **Chinese:** 肉豆蔻皮 *ròudòukòupí* [flesh-bean-cardamom-skin]. **Hungarian:** szerecsendió-virág [Saracen nut flower].

Plant species:	<i>Myristica fragrans</i> Houtt.
Family:	<i>Myristicaceae</i>
Plant part used:	aril
Region of origin:	Moluccas (Indonesia)
Cultivated in:	Grenada, Indonesia
Color:	crimson red aril whn fresh, pale yellow when dried

1.15.1 The Botany of Nutmeg

1.15.2 The History of Nutmeg

1.15.3 The Names of Nutmeg

English

Etymology 42. English *nutmeg* < Anglo-Norman **nois mugue* < Old French *nois mug(u)ede*; *nois musquete* < Romance* **nuce muscāta* < Latin *nux muscada* < Pahlavi **mušk* < Sanskrit *muṣka^a*

^a;

#	Species	Name	Source
1	<i>Myristica fragrans</i>	nutmeg	van Wyk (2014)

Table 1.59 Various names for nutmeg in English.

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Myristica fragrans</i>		داركيسة	<i>dārkīsa</i>	Amar and Lev (2017)
2	<i>Myristica fragrans</i>	جوز الطيب	<i>jawz al-ṭib</i>	fragrant nut	Amar and Lev (2017)
3	<i>Myristica fragrans</i>	جوز بوى	<i>jawz bawwā</i>	fragrant nut	Amar and Lev (2017)

Table 1.60 Various names for nutmeg in Arabic.

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Myristica fragrans</i>	肉豆蔻	<i>ròudòukòu</i>	flesh-bean-cardamom	DeFrancis (2003)
2	<i>Myristica fragrans</i>	肉豆蔻籽粉	<i>ròudòukòuzǐfěn</i>	flesh-bean-cardamom- seed-powder	Kleeman and Yu (2010)

Table 1.61 Various names for nutmeg in Chinese.

#	Language	Term	Gloss	Loan	Source
1	English	<i>nutmeg</i>		yes	OUP (n.d.)
1	Arabic	<i>jawz al-ṭīb</i>	fragrant nut	yes	Wehr (1976)
2	Arabic	<i>jawz bawwā</i>	fragrant nut	yes	Baalbaki (1995)
1	Chinese	<i>ròudòukòu</i>	flesh-bean-cardamom	no	DeFrancis (2003)
2	Chinese	<i>ròudòukòuzǐfēn</i>	flesh-bean-cardamom-seed-powder	no	Kleeman and Yu (2010)

Table 1.62 Conventionalized names for nutmeg in English, Arabic, and Chinese, found in dictionaries.

Summary

﴿ 20. *Myristica fragrans* Houtt.

POWO

English: *mace*. Chinese: 肉荳蔻皮 *ròudòukòupí*. Arabic: قشرة جوز الطيب *qišratu jawzi t-ṭībi*, بسباس *basbās*. Hungarian: *szerecsendió-virág*.

Etymology 43. English *mace* XIV (back-formation, false sg. from perceived pl. *macis*) EE XIII MW < Middle English *macis*, *maces*, *mace* MW < Middle French *maci*; *macis* AH < Medieval Latin *macis* misreading? AH < Old French *macis* EE OE < Latin *macir* ‘red spicy bark from India’ EE OE ‘reddish rind of an Indian root’ MW ‘red bark of the root of a South Asian tree (possibly *Holarrhena antidysenterica*) used as a remedy for dysentery’ AH < Ancient Greek *mákir* MW AH < unknown, Oriental loanword

Why is Connecticut called 'The Nutmeg State'? <https://www.ctpost.com/living/article/Why-is-Connecticut-called-The-Nutmeg-State-16233291.php>

1.16 Saffron

21. SAFFRON

POWO

English: saffron. Arabic: زعفران *zafarān*. Chinese: 藏紅花 *zànghóng huā* [Tibetan-red-flower]. Hungarian: *sáfrány*.

Plant species:	<i>Crocus sativus</i> L.
Family:	<i>Iridaceae</i>
Plant part used:	stigma (style)
Region of origin:	Greece
Cultivated in:	Iran; Spain; Kashmir; etc.
Color:	deep red; dyes in orange



(a)



(b)



(c)

Figure 1.23 Saffron threads from the Quercy region of France (a), from La Mancha, Spain (b), and saffron flowers from Khorasan, Iran (c). *Crocus sativus*. Credits: Aromatiques (a, b); Vathlu (c)¹³⁹

Saffron is the dried, dark red stigmas (and styles) of the saffron crocus flower. It owes its reputation to its unique, fragrant aroma, vivid coloring properties, and the fact that it is the costliest spice by weight. Its high price is due to the labor-intensive harvest, and the large growing area it requires. Saffron has been cultivated for thousands of years now, and it is famous for being the most expensive spice throughout much of recorded history. Saffron is a medicine, dye, and spice, with important cultural roles. It gives flavor to Spanish paella, and lends the orange hue to Buddhist monks' robe. In Iran this "red gold" is the pinnacle of all spices, it is a ubiquitous ingredient of Persian cuisine and an important export product. It is cultivated in Mediterranean climate and semi-arid areas, including Spain, Morocco, Iran, Afghanistan, Kashmir, and more recently New Zealand.

¹³⁹Wikimedia Commons CC4.0 https://commons.wikimedia.org/wiki/File:Saffron_Flowers_in_Khorasan,_Iran.jpg

1.16.1 The Botany, Origins, and Cultivation of Saffron

The bulbous plant species yielding the spice and dye is a sterile *cultigen*¹⁴⁰ called *Crocus sativus* L. (van Wyk, 2014, p. 124), *sativus* meaning ‘cultivated’ in Latin. Saffron does not grow in the wild, as it cannot survive without human handling/intervention (Peter, 2012, p. 469). It relies entirely on horticulture, there are no known wild variants, and so the origins of this plant are not entirely clear. Although by now it has propagated throughout much of Europe and Western Asia, its proposed regions of origin range from the Eastern Mediterranean to Asia Minor (today’s Greece, Turkey, Iran). After comparing the related taxa, it is now believed that it was developed in ancient Greece from a wild progenitor, most probably *Crocus cartwrightianus* Herb.¹⁴¹, which also bears the most resemblance to it (Mathew, 1977). Growing in Greece – Attica, the Cyclades, and Crete in the Aegean Sea, this species was likely selected for its long stigmas (Mabberley, 2017, p. 248).

As a crop, saffron spread to various places around the globe, and so today there are some historically important saffron growing regions such as Iran, Kashmir, Spain. Iran is by far the top producer of saffron, accounting for two thirds of the global market (or up to 90% in other sources), which is around 300 tons/year (Mabberley, 2017, p. 248). Spain also produces superb quality saffron in a relatively small, protected designation of origin (PDO) area in La Mancha; their skill results with the highest yields per hectare, and they prepare around 47 tons per annum. Interestingly, Spain was also the top importer of saffron in the last decade. The race for the “who has best saffron in the world” is usually joined by India, as Kashmiri saffron is also held in high regard (saffron is only cultivated in the Jammu & Kashmir territory of India).

To produce one kilogram of saffron, one needs around a 100 000-250 000 flowers...

There are many other decorative flowering species native to Europe that look very similar to the saffron crocus, but they are not used as spice, take for example the toxic “autumn crocus, meadow saffron, naked lady” (*Colchicum autumnale*).

Production, cultivation and harvest

Being sterile, saffron croci has to be artificially propagated by dividing the corms (bulbs) during the summer dormant period, and harvested in autumn when they flower (van Wyk, 2014, p. 124). Work has to be fast and organised, because all the flowers blossom synchronously in a short, one or two week period, and they can be only gathered at dawn when they open; the flowers slowly wilt as the day passes. Each purple flower has three bright crimson stigmas that are connected to the plant’s ovary in the stem by a yellow style, this is called a “thread”. The saffron threads have to be carefully hand-picked from the harvested flowers, and the spice’s quality depends on what part of the threads are then sold. The upper, vivid red stigmas have the most strong aroma, while the lower styles have almost none. Figure 1.24 shows different quality saffron trims, with the popular terminology taken from Persian.

¹⁴⁰Coined in 1918 by Liberty Hyde Bailey (1858–1954) an American horticulturist and botanist, cultigen refers to a plant species that is a result of artificial selection or alteration, typically being cultivated by humans only, sustaining no wild individuals. https://www.actahort.org/books/799/799_23.htm

¹⁴¹POWO: <https://powo.science.kew.org/taxon/436500-1>

Rivaling with the price of gold, this fragrant spice is also known as “red gold”. As of January 2022, a spice shop in Hong Kong is selling a 0.1 gram sample of saffron style¹⁴² for double the unit price as any other spice in their supply.¹⁴³

showing which part of the thread is trim

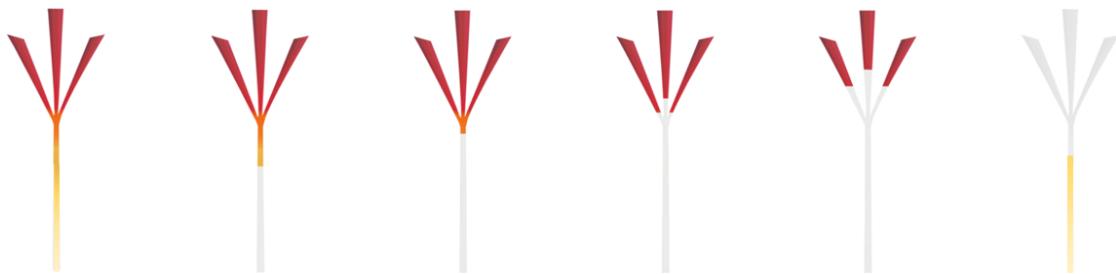


Figure 1.24 Different grades of saffron. From left to right: Daste (bunch saffron), Pushal, Negin, Super Negin, Sargol, Konj (white saffron)

The History of Saffron

Depictions of saffron were found at the wall-paintings of Thera (modern Santorini), on the Aegean Sea. These frescoes are one of the few remaining artistic examples of the ancient Minoan culture, going back as early as the first half of the 2nd millennium BC (Doumas, 1992, pp. 29–31). The murals at the archaeological site of Akrotiri have been preserved in pyroclastic ash due to a massive volcanic eruption, somewhere around the last decades of the 17th century BC, similar to Pompeii.



Figure 1.25 Saffron-gatherers. Details from the mural on the east wall in room 3a, first floor, at Xeste 3 site, Akrotiri (Doumas, 1992, p. 152).

¹⁴²Style refers to a narrow, upward extension of the ovary in a flower, connecting it to the stigmatic papillae (<https://www.britannica.com/science/style-plant-anatomy>)

¹⁴³Source: <https://regencyspices.hk/collections/spices/products/saffron>

“Of no foreign product are the notions of the Chinese vaguer than of saffron.” Laufer

1.16.2 The Names of Saffron

English

Etymology 44. English *saffron*, ca. 1200; cf. Middle English saf(f)rōun < French *safran* ‘id.’, c. 1150; cf. Middle Low German *safferān*, Middle Dutch *saffraen* (Dutch *saffraan*), Middle High German *saffrān* (modern German *safran*) < Medieval Latin *safrānum* ‘id.’ < Arabic زعفران *za'farān* ‘id.’, (not connected with *ṣafrā'* feminine of *asfar* ‘yellow’); cf. Turkish, Persian, and Hindi; Jewish Aramaic *za'perānā*; Spanish *azafran*, Portuguese *açafrão*; the word without this prefix gives rise to Italian *zafferano*, *zaffrone*, Provençal *safran*, *safrá*, Catalan *safrá*, French *safran*, medieval Latin *safranum*, medieval Greek ζαφρᾶς, modern Greek *σαφράνι*, Russian *сафран*. ^a

^aOUP (n.d., s.v. *saffron*); R. E. Lewis et al. (1952–2001, *saf(f)rōun*); TLFi (2012, s.v. *safran*); Wehr (1976)

The word *saffron*, referring to bright red stigmas used as spice and dye was first attested in the start of the 13th century. It entered Middle English via Old French *safran*¹⁴⁴, a 12th century word from Medieval Latin *safrānum*, which is a loanword from Arabic *za'farān*.¹⁴⁵ The origin of the Arabic word is unknown, but it has been compared to Akkadian *azupīru*.¹⁴⁶ The meaning referring to the plant and flower saffron crocus (*Crocus sativus*) is attested from the 15th century onwards, which means that this is a case where the product was known before its plant source (just like in many other cases).

I must emphasize the importance of saffron’s coloring properties. Even far away from its homeland in musty England, the word *saffron* soon gained a meaning of ‘orange-yellow color’, attested as early as the late 14th century and appearing in literature as the color or robes: “Your sonne was misled with a snipt taffata fellow there, whose villanous saffron wold haue made all the vnbak'd and dowy youth of a nation in his colour.” (W. Shakespeare *All's Well that Ends Well* (1623) iv. v. 2, OUP, n.d., *saffron*) Furthermore, *saffron* as a verb in the sense ‘to dye with saffron; to give a saffron-yellow color to’ is attested from the end of the 16th century. E.g.: “In Ireland..they saffron all their wearing linnen.”¹⁴⁷

This is a good example for the kind of cultural acclimatization a spice can achieve that shines through language use: if the name of the spice becomes an adjective and even a verb, it must be reflecting on a situation that is marked by widespread — or at least fashionable — usage.

#	Species	Name	Source
1	<i>Crocus sativus</i>	saffron	van Wyk (2014)

Table 1.63 Various names for saffron in English.

¹⁴⁴TLFi, 2012, *safran*.

¹⁴⁵OUP, n.d., *saffron*; R. E. Lewis et al., 1952–2001, *saf(f)rōun*.

¹⁴⁶AHD, 2022, *saffron*.

¹⁴⁷OUP, n.d., *saffron*, v.

Arabic

^aWehr (1976); Asbaghi (1988), MacKenzie (1971/1986, pp. 65, 98), and Nişanyan (2022, *safran*); Black et al. (1999/2000, p. 33) and Roth et al. (1968/2004, vol. 2, 530–531)

It can be often read (e.g., in van Wyk, 2014, p. 124) that the original Arabic word means ‘yellow’, due to the conflation of Arabic *s-f-r* (the concept of yellow) with the word for saffron, but this is unfounded folk-etymologization and thus a false cognate; there is no known version with *s* /s^f/ in Arabic and there is no supporting evidence for a similar sound change.

On the other hand, Arabic *za'farān* is an obvious candidate to be a loanword — no question about it — and it has been proposed by Asbaghi (1988) that it might be coming from Middle Persian **zarparān*, meaning ‘gold thread’, or ‘golden feathers’, as in *zar* ‘gold’ + *par* ‘feather; wing; leaf’ + -ān, the historical marker for plurals in Persian¹⁴⁸, an explanation that found its way to other dictionaries¹⁴⁹. Unfortunately, this claim was made in a publication that was deemed to be “unserious” (Ullmann, 1997, p. 9) and even a “scandal” (Niehoff, 1989–1990, p. 315) by scholars in the field, and seem to be a classic case of folk etymologization from a Persian as a foreign language teacher. Nevertheless, it remains cited in many places. An even more obscure path takes us to Akkadian; the literature sometimes mentions *azupīru* or *azupīrānu*¹⁵⁰ as a possible source, but the CAD finds this unlikely, citing that the uses for this plant are inconsistent with that of saffron, for example the mentions of its seeds.¹⁵¹ Nevertheless, the assumption that we could be dealing with a regional *Wanderwort* that can be attested in various Semitic languages is not wrong, and to tell the truth I was rather surprised to find out that the etymology of saffron is still shrouded in mystery. I have reached out to an Iranist-linguist friend, who also did not find any conclusive evidence, but pointed me towards the *Bundahishn*, an ancient work of Zoroastrian cosmogony written in Pahlavi (Middle Persian). Looking at the status of saffron in Iran throughout history, it is not surprising that Persian mythological traditions mentioned saffron in their stories (Golfam, 2017; Sharifi, 2010). Ancient texts do not help us in the case of *za'farān*'s origins; in the *Bundahishn*, saffron appears as *kurkum/karkam*. This term can be familiar

¹⁴⁸ MacKenzie, 1971/1986, pp. 65, 98.

¹⁴⁹cf. Nişanyan, 2022, safran.

¹⁵⁰Black et al., 1999/2000, p. 33.

¹⁵¹Roth et al., 1968/2004, p. 531.

from the names of turmeric (*Curcuma longa*) in various languages, a spice also known as a vivid yellow dye, and boasts with an alleged Sanskrit etymon we will investigate later in section 1.19.3.

الأخضران saffron and gold [the two yellow things] in baalbaki

#	Species	Name	Tr.	Gloss	Source
1	<i>Crocus sativus</i>		جادي jādī		Baalbaki (1995)
2	<i>Crocus sativus</i>	زعفران za'farān	saffron		Wehr (1976)
3	<i>Crocus sativus</i>	حص huṣṣ			Wehr (1976)

Table 1.64 Various names for saffron in Arabic.

Chinese

Etymology 46. Mandarin Chinese 藏紅花 *zànghónghuā* ‘saffron’ [Tibetan-red-flower], reached China from way of Tibet, hence the name; cf. synonyms: foreign-red-flower, western-red-flower^a

^aKleeman and Yu (2010)

In Chinese, saffron is known in various names, all pointing to its foreign origins. 藏紅花 *zanghonghua* means ‘Tibetan red flower’, 番紅花 *fanhonghua* is ‘foreign red flower’, and 西紅花 *xihonghua* could be translated as ‘Western red flower’ literally. From these, ‘Tibetan red flower’ is somewhat of a misnomer, but not entirely: although saffron does not originate from Tibet, it became associated with as much as that nowadays travel blogs call Tibet the “land of Saffron” (cf. Kunga, 2017) Saffron in Tibet has a long history, including the western regions of Kashmir. It is an important ingredient in both traditional Tibetan Medicine, and Ayurveda. Saffron’s introduction to India and Tibet from Persia is clad in legends, as it was reported by Dash (1976).

Saffron as a term of color is usually rendered 橘黃色 *juhuangse* in Chinese, which refers to the orange color of tangerines.¹⁵²

#	Species	Name	Tr.	Gloss	Source
1	<i>Crocus sativus</i>	番紅花	<i>fanhónghuā</i>	foreign-red-flower	Laufer (1919)
2	<i>Crocus sativus</i>	紅花	<i>hónghuā</i>	red-flower	Laufer (1919)
3	<i>Crocus sativus</i>	撒法郎	<i>sāfáláng</i>	phonetic	Laufer (1919)
4	<i>Crocus sativus</i>	西紅花	<i>xihónghuā</i>	western-red-flower	PolyU (n.d.)
5	<i>Crocus sativus</i>	鬱金香	<i>yùjīnxīāng</i>	yü-gold-aromatic	Schafer (1985)
6	<i>Crocus sativus</i>	藏紅花	<i>zànghónghuā</i>	Tibetan-red-flower	Laufer (1919)
7	<i>Crocus sativus</i>	咱夫藍	<i>záfūlán</i>	phonetic	Laufer (1919)

Table 1.65 Various names for saffron in Chinese.

¹⁵²Lau, n.d., saffron.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>saffron</i>		yes	OUP (n.d.)
1	Arabic	<i>jādī</i>		no	Baalbaki (1995)
2	Arabic	<i>za'farān</i>	saffron	yes	Wehr (1976)
3	Arabic	<i>ḥuṣṣ</i>		no	Wehr (1976)
1	Chinese	<i>fānhónghuā</i>	foreign-red-flower	no	DeFrancis (2003)
2	Chinese	<i>zànghónghuā</i>	Tibetan-red-flower	no	Kleeman and Yu (2010)

Table 1.66 Conventionalized names for saffron in English, Arabic, and Chinese, found in dictionaries.

1.17 Sichuan Pepper

22. SICHUAN PEPPER

POWO

English: *Sichuan pepper*. Arabic: فلفل سیتشوان *fulful sītshuwān* [Sichuan pepper]; nan. Chinese: 花椒 *huājiāo* [flower-pepper]. Hungarian: *szecsuáni bors* [Sichuan pepper].

Plant species:	<i>Zanthoxylum bungeanum</i> Maxim.; <i>Z. armatum</i> ; et al.
Family:	<i>Rutaceae</i>
Plant part used:	pericarp
Region of origin:	China
Cultivated in:	China
Color:	red; green



(a) a



(b) b



(c) c

Figure 1.26 Sichuan Pepper .

1.17.1 The Botany, Origins, and Cultivation of Sichuan Pepper

1.17.2 The History of Sichuan Pepper

1.17.3 The Names of Sichuan Pepper

English

Arabic

Chinese

Summary

#	Species	Name	Source
1	<i>Z. bungeanum</i> ; <i>Z. armatum</i> ; <i>Z. simulans</i>	Chinese pepper	Davis (1824)
2	<i>Zanthoxylum schinifolium</i>	sанчо	van Wyk (2014)
3	<i>Zanthoxylum ailanthoides</i>	юэ цзяо	van Wyk (2014)
4	<i>Zanthoxylum alatum</i>	тимут	van Wyk (2014)
5	<i>Zanthoxylum armatum</i>	Nepal pepper	Austin and Felger (2008)
6	<i>Zanthoxylum armatum</i>	winged prickly ash	
7	<i>Zanthoxylum armatum</i>	zhu ye jiao	van Wyk (2014)
8	<i>Zanthoxylum piperitum</i>	anise pepper	Austin and Felger (2008)
9	<i>Zanthoxylum piperitum</i>	Japanese pepper	van Wyk (2014)
10	<i>Zanthoxylum piperitum</i>	Japanese prickly-ash	
11	<i>Zanthoxylum piperitum</i>	sansho	van Wyk (2014)
12	<i>Zanthoxylum simulans</i>	chuan jiao	van Wyk (2014)
13	<i>Zanthoxylum spp.</i>	brown pepper	Austin and Felger (2008)
14	<i>Zanthoxylum spp.</i>	Chinese prickly ash	
15	<i>Zanthoxylum spp.</i>	fagara	Austin and Felger (2008)
16	<i>Zanthoxylum spp.</i>	prickly ash	OUP (n.d.)
17	<i>Zanthoxylum spp.</i>	Sichuan pepper	van Wyk (2014)

Table 1.67 Various names for Sichuan pepper in English.

#	Species	Name	Tr.	Gloss	Source
1	<i>Zanthoxylum spp.</i>	فلفل سیتشوان	<i>fulful sītshuwān</i>	Sichuan pepper	Wikipedia (n.d.)
2	<i>Zanthoxylum spp.</i>	فاغرة	<i>fāghira</i>		Lane (1863)

Table 1.68 Various names for Sichuan pepper in Arabic.

#	Species	Name	Tr.	Gloss	Source
1	<i>Zanthoxylum armatum</i>	竹葉椒	<i>zhúyèjiāo</i>	bamboo-leaf-pepper	
2	<i>Zanthoxylum bungeanum</i>	花椒	<i>huājiāo</i>	flower-pepper	S.-Y. Hu (2005)
3	<i>Zanthoxylum piperitum</i>	日本花椒	<i>riběn huājiāo</i>	Japanese-flower-pepper	
4	<i>Zanthoxylum piperitum</i>	山椒	<i>shānjiāo</i>	mountain-pepper	Wikipedia (n.d.)
5	<i>Zanthoxylum schinifolium</i>	青花椒	<i>qīnghuājiāo</i>	green-flower-pepper	S.-Y. Hu (2005)
6	<i>Zanthoxylum schinifolium</i>	香椒子	<i>xiāngjiāozǐ</i>	fragrant-pepper-seed	S.-Y. Hu (2005)
7	<i>Zanthoxylum schinifolium</i>	崖椒	<i>yájiāo</i>	cliff-pepper	S.-Y. Hu (2005)
8	<i>Zanthoxylum simulans?</i>	川椒	<i>chuānjiāo</i>	river(=Sichuan)-pepper	S.-Y. Hu (2005)
9	<i>Zanthoxylum spp.</i>	椒	<i>jiāo</i>	pepper	DeFrancis (2003)
10	<i>Zanthoxylum spp.</i>	麻椒	<i>májiāo</i>	numbing-pepper	
11	<i>Zanthoxylum spp.</i>	蜀椒	<i>shǔjiāo</i>	Sichuan-pepper	Wikipedia (n.d.)

Table 1.69 Various names for Sichuan pepper in Chinese.

#	Language	Term	Gloss	Loan	Source
1	English	<i>Chinese pepper</i>		no	OUP (n.d.)
2	English	<i>zhu ye jiao</i>	Bamboo leaf pepper in Chinese	yes	van Wyk (2014)
3	English	<i>Japanese pepper</i>		no	OUP (n.d.)
4	English	<i>prickly ash</i>		no	OUP (n.d.)
1	Chinese	<i>huājiāo</i>	flower-pepper	no	DeFrancis (2003)
2	Chinese	<i>jiāo</i>	pepper	no	DeFrancis (2003)

Table 1.70 Conventionalized names for Sichuan pepper in English, Arabic, and Chinese, found in dictionaries.

1.18 Star Anise

23. STAR ANISE

POWO

English: star anise. Arabic: يانسون نجمي *yānsūn najmī* [star anise]; nan. Chinese: 八角 *bājiǎo* [octagon]. Hungarian: *csillagánizs* [star-anise].

Plant species:	<i>Illicium verum</i> Hook.f.
Family:	<i>Schisandraceae</i>
Plant part used:	pericarp
Region of origin:	SE. China; Vietnam
Cultivated in:	China, Laos, Vietnam, Korea, Japan, Taiwan, Hainan, Philippines (POWO)
Color:	orange brown



(a)



(b)



(c)

Figure 1.27 Star Anise *Illicium verum*. Credit: Aromatiques.

Star anise is a spice consisting of the dried fruits of the tree *Illicium verum*.

1.18.1 The Botany, Origins, and Cultivation of Star Anise

1.18.2 The History of Star Anise

Star anise has been known in China as a spice and medicine for over 3,000 years. When in 970 AD, the southern states lost a cruel and merciless war with the Chinese emperor, they had to pay war reparations in star anise. The English pirate Sir Thomas Cavendish brought star anise to Europe from the Philippines in 1588. It began appearing in European kitchens during the 17th century as an aromatic agent added to tea in the Russian Czar's court. It was not used in Germany until the end of the 18th century. The genus name *Illicium* comes from the Latin *illucere*, meaning lure or attract.

1.18.3 The Names of Star Anise

English

Etymology 47. English *star anise* ‘star anise’^a

^a

Etymology 48. English *badian* ‘star anise’, 1693 < French *badiane* ‘star anise’, 1681 < Persian بادیان *bādyān* ‘fennel; anise’^a

^aOUP (n.d.); TLFi (2012); Steingass (1892, p. 140) and Hayyim (1934–1936, p. 197)

#	Species	Name	Source
1	<i>Illicium verum</i>	badian	OUP (n.d.)
2	<i>Illicium verum</i>	Chinese anise	van Wyk (2014)
3	<i>Illicium verum</i>	Chinese fennel	
4	<i>Illicium verum</i>	Chinese star anise	van Wyk (2014)
5	<i>Illicium verum</i>	Siberian anise	
6	<i>Illicium verum</i>	star anise	van Wyk (2014)

Table 1.71 Various names for star anise in English.

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Illicium verum</i>	ليسوم حقيقي	<i>laysūm haqīqī</i>	true illicium	Wikipedia (n.d.)
2	<i>Illicium verum</i>	نجمة اليانسون الصينية	<i>najmat al-yānsūn al-ṣīniyya</i>	Chinese star anise	
3	<i>Illicium verum</i>	يانسون نجمي	<i>yānsūn najmī</i>	star anise	

Table 1.72 Various names for star anise in Arabic.

Chinese

Summary

Da liao ‘major spices’ refers to a combination of spices where star anise is the main ingredient, it is used to season meat. What *da liao* is made up of varies from place to place, but the presence of star anise is constant (S.-Y. Hu, 2005, p. 152).

#	Species	Name	Tr.	Gloss	Source
1	<i>Illicium verum</i>	舶茴香	<i>bóhuíxiāng</i>	ship-hui-spice	
2	<i>Illicium verum</i>	八角	<i>bājiǎo</i>	eight-horns/octagon	S.-Y. Hu (2005)
3	<i>Illicium verum</i>	八角茴香	<i>bājiǎohuíxiāng</i>	eight-horned-hui-spice	S.-Y. Hu (2005)
4	<i>Illicium verum</i>	大料	<i>dàliào</i>	big-ingredient	DeFrancis (2003)
5	<i>Illicium verum</i>	大茴香	<i>dàhuíxiāng</i>	big-hui-spice	S.-Y. Hu (2005)

Table 1.73 Various names for star anise in Chinese.

#	Language	Term	Gloss	Loan	Source
1	English	<i>badian</i>		yes	OUP (n.d.)
2	English	<i>Chinese anise</i>		no	OUP (n.d.)
3	English	<i>star anise</i>		no	OUP (n.d.)
1	Chinese	<i>bājiǎo</i>	eight-horns/octagon	no	DeFrancis (2003)
2	Chinese	<i>bājiǎohuíxiāng</i>	eight-horned-hui-spice	no	Kleeman and Yu (2010)
3	Chinese	<i>dàliào</i>	big-ingredient	no	DeFrancis (2003)
4	Chinese	<i>dàhuíxiāng</i>	big-hui-spice	no	MDBG (n.d.)

Table 1.74 Conventionalized names for star anise in English, Arabic, and Chinese, found in dictionaries.

1.19 Turmeric

24. TURMERIC

POWO

English: turmeric. Arabic: كركوم kurkum. Chinese: 薑黃 jiānghuáng [ginger-yellow]; 黃薑 huánghuáng [yellow-ginger]. Hungarian: kurkuma.

Plant species:	<i>Curcuma longa</i> L.
Family:	Zingiberaceae
Plant part used:	rhizome
Region of origin:	India
Cultivated in:	China, Honduras, India, Indonesia, Jamaica
Color:	vivid yellow



Figure 1.28 *Curcuma longa*. Credits: Aromatiques.

Turmeric is a spice obtained from the dried rhizomes of *Curcuma longa*, an aromatic plant closely related, and very similar to ginger (section 1.13). Commercial turmeric can be found in the shape of finger-like knobs, slices, and most commonly, powder, as it can be seen on figure 1.28. Turmeric is an important ancient spice, medicine, dye, and ritual substance, and it turns everything it touches yellow.

#	Species	Name	Source
1	<i>Curcuma longa</i>	curcuma	OUP (n.d.)
2	<i>Curcuma longa</i>	Indian saffron	OUP (n.d.)
3	<i>Curcuma longa</i>	turmeric	van Wyk (2014)

Table 1.75 Various names for turmeric in English.

1.19.1 The Botany, Origins, and Cultivation of Turmeric

1.19.2 The History of Turmeric

1.19.3 The Names of Turmeric

English

Etymology 49. English *turmeric* ‘turmeric’, obscure origin (by alteration of earlier forms), 1545 < akin to French *terre mérite* ‘saffron’ [worthy earth] < and Medieval Latin *terra merita* ‘turmeric’ [deserved earth] < Arabic *kurkum* ‘turmeric; saffron’, maybe a folk-etymological corruption^a

^aOUP (n.d., s.v. turmeric); Harper (n.d.-b, s.v. turmeric); Guthrie (2009); Klein (1971, p. 789)

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Curcuma longa</i>		أصابع صفر <i>aṣābi' ṣufr</i>	yellow fingers	Wikipedia (n.d.)
2	<i>Curcuma longa</i>		هرد <i>hurd</i>		Amar and Lev (2017)
3	<i>Curcuma longa</i>		كركم <i>kurkum</i>	phonetic	Amar and Lev (2017)
4	<i>Curcuma longa</i>		شجرة الخطاطيف <i>shajarat al-khaṭāṭif</i>	tree of hooks	Amar and Lev (2017)
5	<i>Curcuma longa</i>		زعفران هندي <i>za'farān hindī</i>	Indian saffron	Amar and Lev (2017)
6	<i>Curcuma longa</i>		عقدة صفراء <i>'uqda ṣafrā'</i>	yellow knob	Baalbaki (1995)
7	<i>Curcuma longa</i>		عروق صفر <i>urūq ṣufr</i>	yellow roots	Amar and Lev (2017)

Table 1.76 Various names for turmeric in Arabic.

^aKaufman et al. (1987, s.v. *kwrkm*); Guthrie (2009)

#	Species	Name	Tr.	Gloss	Source
1	<i>Crocus sativus</i>	鬱金	<i>yùjīn</i>	yü-gold	Schafer (1985)
2	<i>Curcuma longa</i>	寶鼎香	<i>bǎodǐngxiāng</i>	treasure-cauldron-spice?	
3	<i>Curcuma longa</i>	黃薑	<i>huángjiāng</i>	yellow-ginger	DeFrancis (2003)
4	<i>Curcuma longa</i>	薑黃	<i>jiānghuáng</i>	ginger-yellow	Kleeman and Yu (2010)

Table 1.77 Various names for turmeric in Chinese.

Chinese

Etymology 51. Mandarin Chinese 薑黃 *jiānghuáng* ‘turmeric’, *jiang* ‘ginger’ + *huang* ‘yellow’^a

^a

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>curcuma</i>		yes	OUP (n.d.)
2	English	<i>Indian saffron</i>		no	OUP (n.d.)
3	English	<i>turmeric</i>		yes	OUP (n.d.)
1	Arabic	<i>hurd</i>		yes	Lane (1863)
2	Arabic	<i>kurkum</i>	phonetic	yes	Wehr (1976)
3	Arabic	<i>‘uqda ṣafra’</i>	yellow knob	no	Baalbaki (1995)
1	Chinese	<i>huángjiāng</i>	yellow-ginger	no	DeFrancis (2003)
2	Chinese	<i>jiānghuáng</i>	ginger-yellow	no	Kleeman and Yu (2010)

Table 1.78 Conventionalized names for turmeric in English, Arabic, and Chinese, found in dictionaries.

1.20 Vanilla

25. VANILLA

POWO

English: *vanilla*. Arabic: فانيليا *fānīliyā*. Chinese: 香草 *xiāngcǎo* [fragrant-herb]; Cantonese: 雲呢拿 *wan⁴ nei⁴ laa⁴-2*. Hungarian: *vanília*.

Plant species:	<i>Vanilla planifolia</i> Jacks. ex Andrews (syn. <i>V. fragrans</i> Ames); <i>V. tahitensis</i> J.W. Moore; <i>V. pompona</i> Schiede
Family:	<i>Orchidaceae</i>
Plant part used:	fruit
Region of origin:	Tropical America
Cultivated in:	Madagascar; Indonesia; Mexico; Papua New Guinea; China
Color:	dark brown pod; creamy white extract



(a)



(b)



(c)

Figure 1.29 vanilla... *Vanilla planifolia*? Credits: Aromatiques; Wikimedia Commons (CC4.0)

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Vanilla “beans” are the elongated, dried and cured fruits of the plant *Vanilla planifolia* and spp.¹⁵⁴ with a well-known, attractive aroma. In its relatively recent career, vanilla (better said, vanilla extract) spread around the globe with intensity and haste, and it is an unavoidable flavouring and fragrance of the modern world. From ice cream to candles, baking and aromatherapy, vanilla was so overused commercially, that it became a synonym for ‘plain and conventional’. Because its labour intensive production, vanilla is still the second most expensive spice today after saffron?¹⁵⁵.

The Botany, Origin, and Cultivation of Vanilla

The vanilla vine is an epiphytic¹⁵⁵ orchid, with fleshy leaves and yellowish flowers (van Wyk, 2014, p. 282). The fruits, often called “beans” or “pods” are long and thin, and contain thousands of seeds. It is indigenous to tropical America. There are three species of vanilla that are widely cultivated, all originally from Mesoamerica. *V. planifolia* is grown on various islands of the Indian Ocean, mainly

¹⁵⁴

¹⁵⁵A plant that grows on other plants.

Madagascar, Réunion, Comoros, and the Seychelles. *V. tahitensis* is found on the South Pacific (it escaped cultivation on the Society islands and now grows on trees), while *V. pompona* is the species of Central and South America and the West Indies. More than two thirds of the world's vanilla comes from Madagascar and Indonesia (FAOSTAT).

Plants are grown from cuttings, and require moist, tropical conditions. Until the 19th century, Mexico enjoyed a monopoly on vanilla production, which was broken by the French, who transplanted it to their colonies of Réunion and Madagascar on the Indian Ocean, and later the Dutch to Java (van Wyk, 2014, p. 282). This was made possible by a 12-year-old slave boy, Edmond Albius, pioneered a technique on the island of Réunion to hand-pollinate the plants in 1841, a feat that was almost stolen from him by a famous French botanist. Pollination is absolutely necessary (a task naturally performed by hummingbirds and bumblebees), which makes it the world's only hand-pollinated crop (Mabberley, 2017, p. 959), and drives the price high. The seed-pods are hand picked when near-ripe and still green. Vanilla production requires a rigorous treatment: the beans are briefly put in boiling water, whence the heat disrupts the maturing process and activates enzymes responsible for vanillin production – the main compound that supplies the flavour. Then, the beans are dried on the sun for weeks, during which the vanilla sticks attain their dark brown, shiny colour. In some cases the vanilla beans are left in boxes to ferment up to 9 months, to attain quality flavour (van Wyk, 2014, p. 282). This often results in an effect where the tiny, white vanillin crystals are noticeable on the beans, similar to frost.

History of Vanilla

The Aztecs, but originally Mexicans of Vera Cruz, used vanilla (*Tlilxochitl*) to flavour cacao drinks.^{1,2} A Mexican monopoly was broken when plantations were established on Réunion and Madagascar by the French and on Java by the Dutch.^{1,2} Today, vanilla is also cultivated in other tropical regions, including the West Indies, Central America and Indonesia.

1.20.1 The Names of Vanilla

English

The English word *vanilla* was loaned from Spanish *vainilla* and attested first in 1662: “[...] so they added *Tlilxochitl*, or the *Vaynillas* [to the chocolate] for the like ends, and to strengthen the brain, and womb.” (Stubbe, 1662, p. 11). The author here is explaining how the “Indians” – the Aztecs – flavoured their chocolate drinks. Spanish ‘*vainilla*’, used for the American aromatic plant, was first recorded in 1555. *Vainilla*, literally ‘little vegetable pod’, is the diminutive form of *vaina*, meaning ‘scabbard, sheath’ or ‘shell, husk’ in the botanical sense. (Corominas, 1987, p. 596; Gómez de Silva, 1985, p. 538). *Vaina* descended from Latin *vāgīna* ‘scabbard, sheath; covering, holder of anything’, i.e. husks that enclose an ear of grain

Etymology 52. English *vanilla*, 1662 < Spanish *vainilla* ‘id.’ [little sheath, little pod], from *vaina/vaína* ‘scabbard, sheath; pod, husk’ + *-illa* diminutive suffix, 1555 < Latin *vāgīna* ‘scabbard, sheath; covering, holder of anything’, esp. husks that enclose an ear of grain; also by anatomical figurative sense, origin of *vagina*^a

^aOUP (n.d., s.v. *vanilla*); Gómez de Silva (1985, p. 538) and Corominas (1987, p. 596); C. T. Lewis and Short (1879, s.v. *vāgīna*)

#	Species	Name	Source
1	<i>Vanilla planifolia</i>	Bourbon vanilla	Wikipedia (n.d.)
2	<i>Vanilla planifolia</i>	French vanilla	Wikipedia (n.d.)
3	<i>Vanilla spp.</i>	vanilla	van Wyk (2014)
4	<i>Vanilla tahitensis</i>	Tahitian vanilla	Wikipedia (n.d.)

Table 1.79 Various names for vanilla in English.

Arabic

#	Species	Name	Tr.	Gloss	Source
1	<i>Vanilla planifolia</i>	فانيليا	<i>fānīliyā</i>	phonetic	Baalbaki (1995)
2	<i>Vanilla planifolia</i>	ونيلية	<i>wanīliyya</i>		Baalbaki (1995)

Table 1.80 Various names for vanilla in Arabic.

Chinese

#	Species	Name	Tr.	Gloss	Source
1	<i>Vanilla planifolia</i>	香草	<i>xiāngcǎo</i>	fragrant-grass/herb	DeFrancis (2003)

Table 1.81 Various names for vanilla in Chinese.

Summary

#	Language	Term	Gloss	Loan	Source
1	English	<i>vanilla</i>		yes	OUP (n.d.)
1	Arabic	<i>fānīliyā</i>	phonetic	yes	Baalbaki (1995)
2	Arabic	<i>wanīliyya</i>		yes	Baalbaki (1995)
1	Chinese	<i>xiāngcǎo</i>	fragrant-grass/herb	no	DeFrancis (2003)

Table 1.82 Conventionalized names for vanilla in English, Arabic, and Chinese, found in dictionaries.

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