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**MORE PRECIOUS THAN GOLD.
SPICES FROM THE EDGES OF THE WORLD
IN THE MEDITERRANEAN KITCHEN
IN LATE ANTIQUITY AND EARLY BYZANTINE TIMES**



In this article authors present a few remarks about the use of exotic spices in the Mediterranean world in the first millennium AD, which spices were in use, where they came from, and what people knew about them.

There are not many sources of information on these questions. Authors can however find some interesting indications in a few categories of the literary sources such as: Diocletian's Edict of Maximum Prices, *De recoquinaria*, *Epistula Anthimi*, the Rule of the Monastery of Saint John Stoudios in Constantinople and a few works of the historians and geographers Zosimos, Ibn 'Abd al Hakam, Cosmas Indicopleustes and the traveler Al Masudi.

Analysis of these sources allows us to determine that knowledge about the origin of the spices in use was very fragmentary, even among the sailors and travelers up to beginning of the Arab sea trade in the 8th–9th centuries.

Key words: Spice trade, Byzantine trade.

Since early Roman times there has always been a great demand for exotic spices, and this demand has had a constant upward tendency since. During a 17th century war for the monopoly of the nutmeg trade, over 15,000 people from the population of just a few islands were killed, and during the Dutch monopoly of this trade, prices were astronomical. In the first millennium AD the situation was not yet so dramatic, but spices were already very costly. According to Diocletian's Edict of Maximum Prices one pound (about 330 gram) of pepper was worth the monthly salary of an unqualified worker or more than two weeks of work of a qualified worker such as a mason or a craftsman making mosaic pavements [21].

In this paper we would like to present a few remarks about the use of exotic spices in the Mediterranean world in the first millennium AD, which spices were in use, where they came from, and what people knew about them.

There are not very many sources of information concerning these questions. We can, however, find some interesting indications in a few categories of the literary sources. On the other hand, during recent years, advanced archaeological techniques have allowed us to start finding evidence of such perishable cargo as spices, even if such findings are up to now very scarce.

In chronological order, the first late Roman source that we can use for the analysis of the exotic spice trade is of course Diocletian's Edict of Maximum Prices. This text mentions a long list of 115 articles in the category named *Plants*. Most of the mentioned items are indeed of vegetal provenance even if among them we also found corals and minerals. Many of them are really condiments, and among these we find a few of exotic provenience, such as nard (spikenard), oil of cardamom, ginger and pepper.

The next source is an authentic cookbook called *De recoquinaria*, the authorship of which is not known; Apicius, the traditional name of the author was a synonym of cook, after at least two famous cooks from late Republican Rome. Scholars usually disagree about the precise date of this text. It is generally believed that it was compiled during the late 3rd or 4th century, but has only survived in two 9th century manuscripts and in an 8th century copy of a 5th century excerpt made by a certain *Viridarius* [8; 19]. In the short list of indispensable kitchen condiments, as well as in the recipes themselves this text mentions pepper, costus, ginger, cardamom, nard and cloves, among other spices.

Another cookbook, or rather set of pieces of medical and dietetic advice is the 6th century document called *Epistula Anthimi*, a text written by a Greek physician who was sent as an ambassador to the court of Theuderic, king of the Franks [1; 18]. In his recipes we can find pepper, costus, spikenard, ginger and cloves.

Some spices were also used for medicinal purposes. For example, Alexander of Tralles, a 6th- century Byzantine physician proposes using cloves to prepare a mixture in one of his recipes *On fever* [13, p. 226-227].

From later times, we have the text of the Rule of the Monastery of Saint John Stoudios in Constantinople, written probably in the second half of the 9th century. [25]. In this text we find that during almost all weeks of the Lenten fast, these monks used to eat boiled legumes with ground nutmeg.

To this list we can add a few mentions of spices in the work of historians and geographers such as Zosimos, Ibn 'Abd al Hakam and Cosmas Indicopleustes. Zosimos informs us that pepper was so famous in the Roman Empire that its fame reached the barbarian tribes. Consequently, after long negotiations, 3000 pounds of pepper was a part of tribute paid by the Romans to Alaric [26, V, XVI, 4]. Ibn 'Abd al Hakam, a 9th century historian of Egypt says

that a collector of taxes in Egypt was instructed by Caliph al-Walid to send pepper worth 20,000 dinars to the Sahib al-Rum – the Byzantine emperor. The tax collector stored this pepper in his house at Fustat so this property became known as Dar al-Fulful – the Pepper House [5, p. 231]. Cosmas describe the geographical location of the so called ‘pepper country’ and ‘clove country’ [20, XI].

Finally, recent years have brought an exceptional find known as the *Tang treasure* or *Belitung wreck*. It was a 9th century Arab or Indian ship heading to the Middle East with a Chinese cargo consisted of mainly luxury Chinese pottery, but included star anise [3, p. 339-341]. All of these spices come from South, South East or East Asia, but some of them are more exotic than others. Let’s analyze their origins.

The most popular and the most precious of these spices was pepper. In Diocletian’s Code one pound (about 330 grams) of pepper cost 800 dinars. In Roman times both black pepper and long pepper were called by the same name, because it was believed that they came from the same plant. From antiquity up until today, the most important and, during the Roman and Byzantine periods, the only known exporter of pepper was the Indian Malabar coast. Long pepper was cultivated in the more northern region of Indian Dekkan [6, p. 80-83].

Nard, or spikenard is from a plant of the valerian family. It was used for preparing aromatic oil used mainly in the preparation of ointments, but also in the kitchen and as medicine. It grows principally in the Himalayan region of present-day China, India and Nepal, but it was imported to the West via the ports of the Indian west coast and Indus valley as early as the 1st century AD, as testified by the text of the *Periplus Maris Erythraei* [6, p. 88-92].

Cassia is the bark of a small tree, very similar to and up to now confused with cinnamon. The smell is almost the same, but a little more subtle. It grows in China and South East Asia, but Pliny the Elder in his *Historia Naturalis* believed it to have come from Ethiopia, which has caused great confusion among scholars and a long discussion as to whether he really meant cassia itself, or something completely different. As cassia appears only in Diocletian’s Edict among our sources, it is impossible to decide whether in this instance it concerns true cassia, or the almost identical cinnamon that originated from Sri Lanka and South East Asia. It is less probable that it is senna, which does not look or smell like cassia but grows in Somalia and is believed by some scholars to be the cassia of Pliny (Pliny, XII, 43) [6, p. 42-47; 15].

Ginger is a plant that originates from Southern China and South East Asia. It had to be imported from India, at least in Greek and early Roman times, because the name of it in Latin (*zingiber*) and Greek (*ζιγγίβερις*) derives from Pali *śingivera*, or Sanskrit *śrīgavera* which means “shaped like an antler”, although we cannot determine if it was already grown in India as it is today. Its horizontal subterranean stem was used in the kitchen for multiple purposes like today, because of its characteristic smell [2; 6, p. 53-57; 10]. It was quite costly, although two times less than pepper. In Diocletian’s Edict, the maximum price for prepared ginger is 400 den., and for dried – 250 den.

Cardamom is a plant from the ginger family that has its origins on the Malabar Coast in south – western India. Unlike true ginger, not the roots but its dried seeds are used as a spice [6, p. 71-73].

The next species are most interesting. Cloves are the dried flowers of a plant from the *Myrtaceae* family, which up to modern times was growing only on a few of the Northern Maluku Islands (Moluccas), also called the Spice Islands, located in the eastern archipelago of present Indonesia. Miller supposes that the Greek and consequently Latin name *caryophyllon* is actually an adaptation of original name in one of the South Indian or South East Asian dialects, but the most popular word used in Pali and Sanscrit was *lavaṅga*. The cultivation of cloves didn’t start to expand until the Dutch occupation of these islands in the 17th century, first to other Indonesian islands, then to East Africa. In the first millennium, however, the Moluccas were undoubtedly the only exporter of this spice [6, p. 47-51; 16].

Nutmeg is the seed of a plant of the *Myristhica* family. Until the 18th century it grew only on the Banda Islands in at the southern tip of the Moluccas, in eastern Indonesia [6, p. 58-60].

Finally, star anise is a typically Chinese product, although it also grows in Vietnam and Laos. It is a fruit of a plant of the *illiciaceae* family, closely related to the well known magnolia. Apart from the Belitung wreck cargo, there are no other traces of the importation of this spice to west Asia. No literary source from the Mediterranean region mentions it [3, p. 349].

A consideration of the items on only this short list leads us to some interesting information about the spice trade in Late Antiquity and early medieval times.

In our sources (apart from Indian cassia which needs a special discussion that we do not have time for here) we have seven spices. Two spices are from India; pepper and cardamom – two from South China or the Indochina region, but imported via West Indian ports; nard and ginger – one from China; star anise – and two from the eastern part of the Indonesian Archipelago; cloves and nutmeg. The question is how they could get to the kitchens of rich citizens of Constantinople or Rome.

The spices from India and those that could be obtained in the Indian ports were of course transported by sea. That was objectively easy and the route was well known, and frequently used from at least the end of the 1st

century BC when sailors started to sail with the monsoon winds. They usually started from one of Egyptian ports on the Red Sea, sailed along the coast of the Arabian Peninsula, stopped in at least one port on the South Arabian coast or Dioscorida (present Sokotra) and then sailed directly to the north or south Indian ports. Up until the second half of the 3rd century AD there also existed an alternative, shorter way from the Levantine coast through the Syrian Desert to the mouth of the Euphrates, continuing by sea along the coast of the Persian Gulf to India. From the second half of the 3rd century, trade on this route started to decline and was finally blocked almost completely because of the Persian wars, leaving the sea route as the only option for large scale trade up until the Arab conquest.

That decline at the end of 3rd century AD can be seen in the archaeological evidence from such sites as Palmyra, situated on the Syrian Desert [4]. In contrast Berenike, port situated on Egyptian coast of the Red Sea, developed from the 3rd BC to the 1st century AD and declined in the 2nd century AD, but experienced a renaissance of prosperity in the 4th and 5th centuries AD. Once in Red Sea ports, exotic cargoes were transported to Alexandria and distributed to Mediterranean ports [14].

It is very doubtful whether any western ship sailed further than India during this period. While some scarce evidence exists, usually from the Roman time of some kind of exchange (for example Roman imports in the Funan site of Oc`Eo), [7; 11] it represents rather indirect contacts. The cross points of western and eastern trade was naturally India and Sri Lanka.

In his work titled *A Record of Buddhistic Kingdoms*, the Chinese Buddhist monk Fa Xian (who at the beginning of the 4th century traveled to Nepal, India and finally Sri Lanka to copy the holy sutras) relates his way back from Sri Lanka to China by sea. From his account, it is clear that the traffic on this route was quite extensive, and that the range of travelers was not limited to major merchants with large cargoes. Fa Xian embarked on big merchant ship with 200 other men (probably merchants) and sailed to China, changing to an even larger ship on an island, probably Java or Sumatra, where he spent 5 months waiting for it [22, XL].

The peak of the trade between China and Sri Lanka came in the time of the Tang dynasty, between the 7th and early 10th centuries (AD 618–906). On the site of the ancient port of Mantai, a large deposit of Tang pottery was found. It comprised large, typical Chinese storage jars with pale olive green glaze that could be used for shipping liquids or dry products. [7].

At this time Arab traders were already starting to sail further than India. There was no reason to not use the old route from the Persian Gulf to the West Asian mainland, especially after the capital of the Caliphate was moved to Baghdad in the 8th century AD. The most important ports used for this eastern commerce therefore developed on the coast of the Persian Gulf, like Siraf, probably erected in late Sassanian or the early Arab period, but flourishing between AD 800 and AD 1200, or Basra. The old ports of the Arabian Peninsula, however, especially the Oman port of Muscat also sent ships to China and South East Asia [17; 24].

Another Chinese monk, Yi Jing, who voyaged from China to Sumatra in AD 671, says that in Guangzhou he embarked on a ship owned by a Bosi – a Persian merchant. Many Arab and Persian merchants lived in this region. In this time ships from Arab ports sailed using the monsoon winds or along the coast, though that was not recommended because of the risk of meeting pirates. They then stopped at Ceylon or Nicobars for water and then in Kalah bar (Kedah). From there they could go to the other ports of Sumatra, Java or China. On Sumatra the state of Srivijaya that developed at this time controlled all of the main water passages in the region: the Melakka Strait, the Sunda Strait and the western part of the Java Sea. Its main port, Palembang, was a very convenient center to buy goods such as spices from Eastern Indonesia, or Chinese products, without the necessity of further travel [3, p. 349-352].

Many Arab traders decided to omit the middlemen anyway and gain more. However, according to the Arab historian and traveler Al Masudi, after the massacres of Arab and Persian traders at the end of the 9th century in Guangzhou the earlier structures of trade with China collapsed and sailors chose rather to stop in Kedah, where they used to trade with merchants coming from the East and South [24].

Recent archaeological research on the island of Indonesia has revealed the existence of trade ports in places such as northern Bali. As it is known that the interior of this island had no natural resources that could explain the existence of such a center, it is supposed that it was a station on the way from Moluccas or Bandas to the big international ports such as Palembang [12].

When Chinese, Indian or South Asian cargo came back to ports in the Persian Gulf, it was then distributed by land to the main trade centers in the Middle East. Spices were usually transported by land through the territory of Syria, and one of the stopovers was Trebizont. They could be also transported from Levantine ports to Attaleia, but for spices Trebizont was the most important center of distribution [9, p. 725, 748]. Exchange between Arab and Byzantine merchants was finely regulated from the early Umayyad period. Much information about taxes for Muslim and Christian merchants operating on the Byzantine – Umayyad border has been collected in the work of

Abu 'Ubaid al Qasim bar Sallam compiled in the first half of the 9th century. It is a corpus of information about fiscal institutions, principally in Syria and, among other things; the author cites the tax regulations of Omar I [5].

Byzantine emperors introduced their own regulations, and sometimes even forbade commerce with Syria or Egypt, like Leo VI (AD 886 to AD 912). Usually, however, the Byzantines traded with the Arabs and stopped only in case of the outbreak of war [9, p. 717].

Finally we come to the last question: what did people in the Mediterranean region know about the spices they used? First we have to assume that there might always be a difference between what is published or spoken, and what is true. In those times this was much more distinct because knowledge was a basis for making money, and so was protected from becoming public. Already by that time Pliny had written that Arabic merchants said that cassia was found only in some specific kind of bird's nests, and so was very rare and had to be expensive, and that this had no connection with the truth (Pliny, XII, 43). From the other side, we also have the Chinese account of Hou Han Shu (official chronicler of the Later Han Dynasty). In this text, we can read that Parthian sailors discouraged a Chinese emissary from sailing to Rome by saying that the journey was so long that many sailors died before seeing the land, because they did not want to lose the monopoly on the lucrative exchange between China and Rome [23, 88, Xiyu chuan 78, Anxi].

For that reason, the only credible information we can find is in the works of merchants or travelers who decided and wanted to write what they had seen. This is the case of *Periplus Maris Erythraei*, and for the times of interest to us – 'The Christian Topography' by Cosmas Indicopleustes. This last work has in fact more false facts than real information, but Cosmas not only properly described the land of pepper as the Malabar Coast, but also informs us that the land of cloves is somewhere East of India, but closer than China. This could be a reflection of knowledge about ports such as Palembang or Kedah, but could also be caused by the fact that this spice was imported to India or Ceylon, and Western merchants knew only that it was not an Indian product.

Complete information about trading centers and trade routes was already accessible in the 9th century. Al Masudi in his 'Meadows of Gold' precisely describes the whole journey to China and the ports on the way though he had never sailed that way personally. He had had a good informant, surely a merchant or sailor who frequently went on that journey.

That of course says nothing about the knowledge of people who had nothing to do with commerce and travel, but their opinion is unfortunately a mystery.

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ЦІННІШЕ ЗА ЗОЛОТО. ПРЯНОЩІ З КРАЮ СВІТА У СЕРЕДЗЕМНОМОРСЬКІЙ КУХНІ У ПІЗНЬОАНТИЧНИЙ ТА РАННЬОВІЗАНТІЙСЬКИЙ ЧАС

У цій статті представлено кілька поглядів авторів щодо використання екзотичних спецій у Середземному світі в першому тисячолітті нашої ери, які спеції та прянощі вживалися, звідки їх привозили та що знали про них люди.

Існує не так багато джерел інформації з цього питання. Однак авторам вдалося знайти кілька цікавих згадок у деяких категоріях писемних джерел, наприклад, «Едикт Діоклетіана про (максимальні) ціни», давньоримська кухонна книга *De ReCoquinaria*, церковне послання *Epistula anthimi*, Статут Студійського монастиря Іоанна Продрома (Іоанна Предтечі) в Константинополі й кілька робіт істориків та географів: Зосима, Ібн Абд аль Хакама, Косми Индикоплевста і мандрівника Аль Масуді.

Аналіз цих джерел дозволяє стверджувати, що знання про походження існуючих спецій було дуже фрагментарним, навіть серед моряків та мандрівників, аж до початку епохи арабської морської торгівлі VIII–IX століть н.е.

Ключові слова: торгівля спеціями, візантійська торгівля.

ЦЕННЕЕ ЗОЛОТА. ПРЯНОСТИ С КРАЯ СВЕТА В СРЕДИЗЕМНОМОРСКОЙ КУХНЕ В ПОЗДНЕАНТИЧНОЕ И РАННЕВИЗАНТИЙСКОЕ ВРЕМЯ

В этой статье авторами представлено несколько идей по поводу использования экзотических специй в Средиземном мире в первом тысячелетии нашей эры: какие специи и пряности употреблялись, откуда их привозили и что люди знали о них. Существует не так много источников информации по данному вопросу. Однако авторам удалось найти несколько интересных упоминаний в некоторых категориях письменных источников, например «Эдикт Диоклетиана о (максимальных) ценах», древнеримская поваренная книга *De ReCoquinaria*, церковное Послание *Epistula Anthimi*, Устав Студийского монастыря Иоанна Продрома (Иоанна Предтечи) в Константинополе и несколько работ историков и географов – Зосима, Ибн Абд аль Хакама, Космы Индикоплевста и путешественника Аль Масуди.

Анализ этих источников позволяет нам утверждать, что знания о происхождении имевшихся специй были очень фрагментарны, даже среди моряков и путешественников вплоть до начала арабской морской торговли VIII–IX веков н.э.

Ключевые слова: торговля специями, византийская торговля.