

Scotopia: A multidisciplinary biannual e-journal  
ISSN: 2455-5975  
Website: <https://scotopia.in/>

## **The Story of Spices: From Past to Present**

Dr. Madhushri Das Datta

Assistant Professor, Department of Botany

Hiralal Mazumder Memorial College for Women, Dakshineswar Kolkata-700035

### **Abstract**

Traditionally used to flavour food, spices are the fragrant portions of tropical plants or the dried seeds or fruit of temperate species. While certain spices are used for flavour, others are used more for scent. The development of human civilization has depended heavily on spices. Saffron is the priciest spice in the entire world. The "King of Spices": pepper. The only tree that produces two distinct kinds of spices is the nutmeg tree. Endorphins are produced as a result of the chilies. Since the dawn of time, spices have been significant to humanity, inspiring trade, exploration, conflict, and poetry. In the past, India was the world's top producer of spices, but as globalisation advanced, it lost its dominance. To restore the position in international trade, new actions should be performed. Not only do they serve as the primary ingredient in food that gives it flavour and aroma, but they are also used in a variety of items for their medical benefits.

### **Introduction**

Spices have been an integral part of human civilization for centuries, adding flavor, aroma, and color to dishes across different cultures. The story of spices is a tale of exploration, trade, colonization, and cultural exchange. From ancient civilizations to modern times, spices have played a significant role in shaping the culinary landscape and socioeconomic dynamics of various regions.

It's hard to tell anything about the fascinating history of those unassuming spice jars in your pantry. It seems unfathomable that today's prices for spices like black pepper, cinnamon, cloves, nutmeg, and others make them as expensive as gold and silver were in the past. However, did you know that at one time, nutmeg was more valuable than gold by weight?

Before beginning with the story of spices let us know: **What spices are?**

Scotopia: A multidisciplinary biannual e-journal  
ISSN: 2455-5975  
Website: <https://scotopia.in/>

Traditionally used to flavour food, spices are the fragrant portions of tropical plants or the dried seeds or fruit of temperate species. The majority of the ingredients we refer to as spices are berries, seeds, or dried fruits, however some are derived from the bark or roots of specific plants.

The origin of spices can be traced back to ancient times, where they were used for medicinal purposes and to enhance the taste of food. The early civilizations of Mesopotamia, Egypt, and India embraced the use of various spices such as cinnamon, cardamom, turmeric, and cumin.

The Asian tropics are home to some of the most well-known Indian spices, including cinnamon, cloves, nutmeg, ginger, and pepper. Coriander, fennel, fenugreek, mustard, and poppy are some of the aromatic seed spices that are indigenous to the Mediterranean region. Some spices, like vanilla and chillis, are indigenous to the Caribbean and Central America.

Next question arises **How to use spices?**

While certain spices are used for flavour, others are used more for scent. Even the timing of an addition to a dish can significantly alter its flavour. Typically, they will provide taste if put at the start of the cooking process, but their fragrances will be most apparent if added towards the end.

Essential oils are what give spices their distinct flavour and scent. The majority of spices include many chemical constituents in their oils. Spices' cell walls must be broken in order for their essential oils to be released. This can be accomplished by heating, grating, hammering, and grinding.

Spices contain volatile essential oils that, when exposed as a result of processing, start to dissipate. This is why freshly processed spices are preferable.

These spices were once regarded as expensive goods and were frequently offered in religious rituals.

Regarding the history of spices, it is clear that they have always been a vital component of human civilization. We know that man left us a trail to the past as soon as he realized the value of preserving and documenting the intricate existence of his life and his brain advanced to the point of drawing simple pictures. Spices have been used since the development of hieroglyphic practice. One of the most priceless of all spices, saffron, is picked by a monkey-man on a wall in the castle of Knossos in Crete. The carving was made around 1700 BC.

Scotopia: A multidisciplinary biannual e-journal  
ISSN: 2455-5975  
Website: <https://scotopia.in/>

The 15th century's Age of Exploration was sparked by the quest for spices as European countries searched for new avenues to enter the lucrative spice trade. Christopher Columbus, one of the most famous explorers of the time, set out in 1492 in search of a direct route to India in order to avoid the Ottoman Empire, which ruled the main spice routes.

The Spice Islands, modern-day Indonesia, developed became the hub of the spice trade during this period. Here, essential spices like pepper, nutmeg, and cloves flourished in profusion. Competition among European nations for control of these islands, notably the Portuguese, Dutch, and British, resulted in colonization and the development of trading posts.

The spice trade significantly influenced world commerce and gave different cuisines access to new tastes and ingredients. Due to the need for spices, which became a sign of riches and power, nations in Asia and Africa were colonised. The trade channels developed at this time permitted the flow of goods, cultures, and ideas in addition to spices.

The Rigveda and Yajurveda hymns both describe the value and applications of spices in India. Turmeric is recommended by Atharvaveda as a treatment for leprosy and jaundice. Both Charaka and Susruta highlighted the use of spices in their dishes. The history of spices is closely linked to both their uses and trade. From the time of Theophrastus (372-287 BC), spices were traded through India. An unsuccessful attempt was made by Augustus to include Saudi Arabia in the Roman Empire. The quickest way to the Malabar shores was discovered by a Greek merchant by the name of Hippalus during the reign of the Roman Emperor Claudius (A.D. 40).

Arab traders provided spices to Europe between the seventh and fifteenth centuries, and for a very long period they kept their source of spices in India a well-guarded secret. Many ships sailed from Europe to India in pursuit of its spices.

The "Spice Bowl of the World," India, was a significant producer and exporter of spices. Black pepper, cloves, and ginger are just a few of the Indian spices that traders from over the world coveted and revered. The perfect fusion of flavorful spices and herbs became a hallmark of Indian cuisine, resulting in a distinctive flavour profile that continues to appeal to food lovers around the world. The following list of significant spices includes:

Saffron (*Crocus sativus*) is the costliest spice in the entire world. The stigma of a stunning purplish-blue flower produces this vibrant spice. Surprisingly, this plant doesn't even exist in nature, and

Scotopia: A multidisciplinary biannual e-journal  
ISSN: 2455-5975  
Website: <https://scotopia.in/>

each blossom has three extremely precious stigmas. The Mediterranean flower *C. cartwrightianus*, *C. thomasi*, or *C. pallasii* is thought to be the ancestor of this sterile flower. It was subjected to extensive artificial selection over a period of more than 3000 years by cultivators in search of longer stigmas until the plant became sterile and was no longer the species at its original source. A sterile species must have its bulbs dug up, broken into pieces, and then replanted in order to survive. Ten to twelve bulbs can be produced by each plant.

Saffron's high price can be attributed to this procedure as well as the small amount of the flower that is used. The spice has been used historically to season food, dye garments, treat illnesses, and bathe in. Saffron was used by Alexander the Great to help heal his war wounds and to flavour his rice and bath. Saffron was marketed as a remedy during the Black Plague to combat the disease. The spice turns out to be a very effective treatment, however its ability to combat the epidemic is still debatable. According to recent studies, it can heal conditions including depression, obesity, breast cancer, allergies, and it can even help prevent eye problems.

South Asian native pepper (*Piper nigrum*), known as the "King of Spices," has been a staple of Indian cuisine since 2000 B.C. As early as 3000 BC, archaeologists found it among other spices in Egyptian tombs. Many spices were perfect for embalming since they had potent preservation properties. The 1500 B.C. text Ebers Papyrus mentions the therapeutic benefits of pepper and cinnamon. When India and the rest of the world were connected by trade routes, pepper was one of the most highly coveted spices and was frequently referred to as "black gold" because of the very high costs. Due to a paucity of gold and silver coinage in the thirteenth century, peppercorns were used as a form of payment for taxes, tolls, and rent.

Pepper was a common currency among European tradesmen, and pepper was sometimes given as dowry to "brides."

By the late Middle Ages, eastern spices were roughly valued at one pound of saffron being equal to the cost of a horse, one pound of ginger being equal to the cost of a sheep, and two pounds of mace being equal to the cost of a cow. A pound of nutmeg is listed as being worth seven large cows in a German pricing table from A.D. 1393.

Scotopia: A multidisciplinary biannual e-journal  
ISSN: 2455-5975  
Website: <https://scotopia.in/>

The spice was so significant to Europeans that it even altered the course of world history. It was one of the spices that inspired the Portuguese during the age of discovery to seek out a quicker maritime route to India.

Contrarily, peppercorn is very inexpensive today, but that doesn't mean it has lost value in terms of commerce. Actually, pepper still accounts for 20% of all spice imports, making it the spice that is traded the most globally.

Pepper has a variety of chemicals, but piperine, the main phytochemical, has antibacterial and appetite-stimulating properties in addition to curing throat ailments, colds, and coughs. Others, such as acetophenone, -terpineol, -pinene, piperonal, nerolidol, etc., give odour, aroma, and pungency. Because it contains phenolic amides and flavonoids, it is a natural antioxidant.

The only tree that produces both nutmeg (the tree's egg-shaped seed) and mace (the dried lacy reddish coating or aril of the seed) is the nutmeg tree (*Myristica fragrans*). The tree and clove both have Indonesian origins in the Molucca Islands. The island was first found by Arab spice dealers, who also kept the existence of the islands containing spices a secret. Later, the Portuguese tried to extract the secret from the natives by kidnapping them, but the Moluccans resisted, forcing the Portuguese to flee the islands. While this was going on, the Dutch and English engaged in a deadly conflict for the island's spices, which the Dutch finally won at the expense of a sizable portion of the native population.

One fascinating detail is that the Dutch, who were in charge at the time, used to add lime to the imported seeds to prevent locals from growing their own spices and undermining their monopoly. All spices were once referred to as peppers, and a pirate by the name of Pierre Poivre—who was also a horticulturist—was successful in attacking a couple of their stores in an effort to steal seeds for creating his own flavourings. Hence, the rhyme about Peter Piper's adventures. By relocating a few nutmeg trees into their other colonial territories under Napoleon's control, the English were able to break the Dutch monopoly.

Myristicin, a hallucinogenic substance found in nutmeg, gives the spice its distinct flavour.

Scotopia: A multidisciplinary biannual e-journal

ISSN: 2455-5975

Website: <https://scotopia.in/>

While the majority of our intake is restricted so that we never experience its effects, it is not allowed in most prison kitchens due to its popularity among drug users who are unable to handle other narcotics. The initial sensation has been compared to smoking marijuana, however there are also adverse effects like headaches, nausea, convulsions, and hallucinations. Camphene and pinene, d-Borneol, Geraniol, etc. are all found in essential oils. They are used to flavour food, make tooth paste, cough syrup, beverages, syrups, and sweets, among other things.

Chilli peppers (*Capsicum annuum*), one of the first domesticated self-pollinated crop plants in America, are mostly from that continent and have likely been consumed since 7500 B.C.

They were initially cultivated by Spanish and Portuguese monks, but when they began experimenting with the chillies' culinary qualities, they grew them themselves and used them as an inexpensive substitute for black pepper, which at the time was very expensive. Without adding Christopher Columbus of Spain, who was trying to find a faster way to India but instead ran into the Americas, the history of chilli would be incomplete. Frustrated, Columbus gave the native Americans he saw in America the names "Indians" and "peppers," along with their local variation of a hot sauce. Capsaicinoids, primarily Capsaicin and dihydrocapsaicin, which bind to the same pain receptors that are responsible for feeling heat, are what give chillies their searing sensation in our mouths. The brain reacts to this by speeding up the heartbeat, making people perspire more, and releasing endorphins, which make people feel happy and content.

Before the development of current refrigeration techniques, spices were also essential for food preservation. Certain spices can be used as natural preservatives because of their antibacterial qualities, ensuring that food stays edible for longer periods of time. This was especially vital on long sea voyages when the health and morale of the sailors depended on the quality and freshness of the food.

The market for spices is worth billions of dollars now as consumer demand rises. In addition to their culinary uses, spices are prized for their possible health advantages. Since traditional therapies like Ayurveda and Traditional Chinese Medicine use spices, their therapeutic benefits have come to light, inspiring scientific study.

## **Conclusion**

Scotopia: A multidisciplinary biannual e-journal

ISSN: 2455-5975

Website: <https://scotopia.in/>

The history of spices is one of exploration, trade, and cultural interchange, to sum up. Spices have travelled the globe from ancient civilizations to the present, enhancing the flavour, aroma, and colour of our food.

The spice trade shaped global economics, introduced new cuisines, and facilitated the exchange of goods, cultures, and ideas. They were inspiration for war and poetry. The rich history of spices showcases their enduring importance in our lives and the valuable role they played in creating a truly global culinary tapestry. Every spice has its own story. Whether its saffron, pepper, nutmeg, chilies, cinnamon or any other. India was the main productive house of spices in the ancient time but with the advancement of globalization it lost the monopoly. New measures should be taken to regain the position in global trade. Not only they are the raw material imparting aroma and flavor to food but they also have uses in different products which utilizes their medicinal properties.

### References

Dorman, H. J. D., Figueiredo, A. C., Barroso, J. G. and Deans, S. G. 2000, *In vitro* evaluation of antioxidant activity of essential oils and their components. *Flavour Fragr. J.*, 15: 12–16. doi: 10.1002/(SICI)1099-1026(200001/02)15:1<12:AID-FFJ858>3.0.CO;2-V

Wesołowska A., Jadczak D., Grzeszczuk M., 2011 Chemical composition of the pepper fruit extracts of hot cultivars *Capsicum annuum* L., *Acta Sci. Pol.*, 171-184

Meghwal M, Goswami T. K. 2012 Chemical Composition, Nutritional, Medicinal And Functional Properties of Black Pepper: A Review. 1: 172. doi:10.4172/scientificreports.172

Turner, J. 2004. *Spice: The History of a Temptation*. Knopf. ISBN 0-375-40721-9.

Philip, A. P. 2010, "Marketing of spices a study with special reference to pepper and cardamom."

<http://www.neatorama.com/2011/08/17/the-spicy-history-of-your-favorite-spices/#!oR6n7>

<http://www.livescience.com/7495-spice-trade-changed-world.html>

<http://postcolonialstudies.emory.edu/>

<http://www.thespicehouse.com/info/lore>