

## COMMON SPICES OF INDIA

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The exploration and crusades by European countries from the 15th century onwards were mainly to obtain spices since they were highly prized in Europe. Many spices have medicinal value and they have been the basis of many home remedies for years. Some common ones are described.

### Black Pepper (*Piper nigrum*)

Black pepper is one of the oldest and most important of all spices and is known as the “king of spices” (Fig. 1). It is a native of Western Ghats of India, but now is grown in many parts of world. Black pepper is the whole dry fruit, while white pepper is subjected to treatment in water with the *mesocarp* (middle layer of fruit) removed.

Both varieties are ground and used in powder form. Pepper is most widely used as a condiment as a table spice—its flavor and pungency blending well with most savory dishes. It is extensively used in pickles, ketchups, and sausages, and for seasoning food and as a preservative in curing meats.

Black pepper is a pungent and aromatic stimulant. Its pungency is due to resin *clavicine*. It has a promotility effect on digestive organs in dyspepsia. Pepper has been claimed to be beneficial in the treatment of the common cold. It also dilates superficial vessels and acts as a counter irritant in painful disorders.

### Cardamom (*Elettaria cardamomum*)

Cardamom is the “queen of spices,” second only to black pepper. Dried cardamom fruits of the plant constitute the main spice (Fig. 1). They have a pleasant aroma with a characteristic, slightly pungent taste.

Cardamom was mentioned by Theophrastus and Dioscorides. Cardamom is indigenous to South India growing in the rich moist soil at Mysore, Travancore, and Cochin. A volatile oil imparts the aroma and therapeutic properties of cardamom, the main constituents being *cineol* and *terpinol*.

It is used for flavoring curries, cakes, bread, and other culinary purposes. It gives a pleasing aroma to tea and coffee. Aromatic flavor in cardamom is a breath freshener. It has been considered effective in hiccups. The essential oil of cardamom is used for pharmaceutical purposes, perfumery, and flavoring liquors.

### Clove (*Syzygium aromaticum*)

Cloves are dried unopened flower buds from a mid-sized tree that have been used in India and China for over 2000 years (Fig. 1). It became known to Europe by the 8th century AD. The clove tree is a native of the Moluccas islands in Indonesia. Today Zanzibar is the leading producer of cloves.

Clove is used as a table spice and in the preparation of curry powder along with other spices. It is also used in the manufacture of perfumes and soap. Clove oil applied to the cavity of a decayed tooth relieves toothache—an age

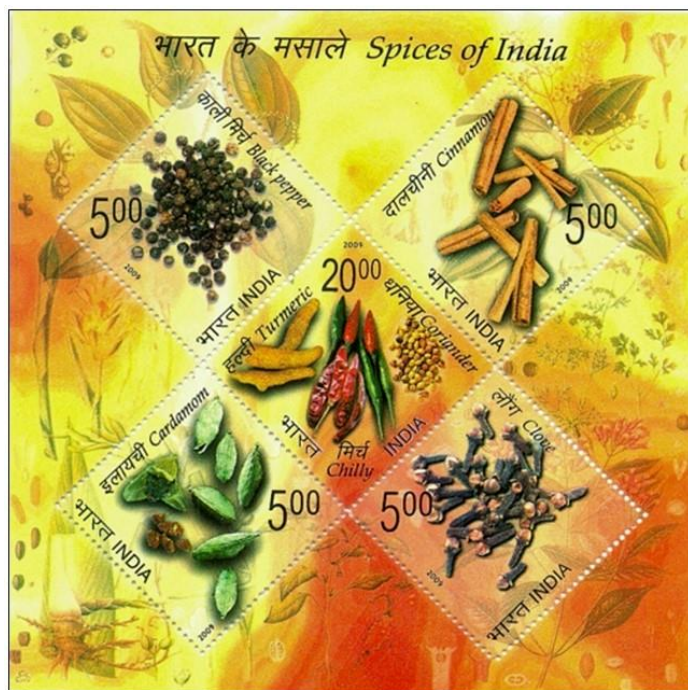


Fig. 1. Clockwise from UL: Black Pepper, Cinnamon, Clove, & Cardamom. Center L-R: Turmeric, Chili, & Coriander India, 2009, Sc#2321f

old remedy. It promotes enzymatic flow and boosts digestive functioning. It eases expectoration and relieves irritation of the throat helping to ease coughing. It is also considered effective in asthma.

### Star Anise (*Illicium verum*)

Star Anise is obtained from the flowers of an evergreen tree of Vietnam and southwest China. Star anise is called *fulchakra* in India. It enhances the flavor of meat and fish, as shown in duck head curry on the Singapore stamp (Fig. 2).

It is used as a spice in preparation of *biryani* and *masala chai* all over the Indian subcontinent and widely used in Chinese cuisine. In India, Star anise is a major component of *garam masala*. It is widely grown for commercial use in China, India, and most other countries in Asia. Star anise is an ingredient of the five-spice powder of Chinese cooking.

Anise tea is a traditional remedy for rheumatism and has been used to relieve the symptoms of colds. Star anise is a major source of the chemical compound shikimic acid, a primary precursor in pharmaceutical synthesis of anti-influenza drug *oseltamivir* (Tamiflu). Also grown in Japan, Japanese star anise is a similar tree, but is highly toxic and inedible. Hence genuine star anise should be obtained from a reliable source.

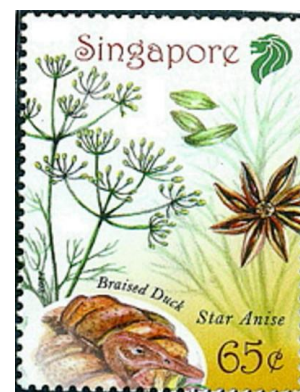


Fig. 2. Star Anise used with Braised Duck Singapore, 2011, Sc#1501

### Cinnamon (*Cinnamomum* sp.)



Fig. 3. Cinnamon in Masala Tea (spice tea) Singapore, 2011, Sc#1499



Fig. 4. Cinnamon B.I.O.T., 1968, Sc#10

Cinnamon leaves (dried) along with its dried, carefully selected inner bark that has been cured and dried, are used all over the world as a spice or condiment (Figs. 1, 3, 4). It is a native of Sri-Lanka, South India, and tropical Asia. It has a pleasing fragrance and a warm sweet aromatic taste.

Cinnamon was known to ancient physicians even before 2000 BC. Romans knew about the medicinal value of the bark. Galen and Dioscorides have described various uses of cinnamon.

The dried leaves of cinnamon are used for flavoring cakes, sweets, liquors, and in curry powder. Cinnamon acts as a mouth freshener, has been used to treat nausea and is an effective remedy for common colds. It also has a remarkable effect in countering the early release of ova after childbirth and has been used for natural birth control.

### Turmeric (*Curcuma longa*)

Turmeric has a short stem with raised or lifted branches. The rhizomes, or underground stems, are short and thick and constitute commercial turmeric (Figs. 1, 5). It is an important common flavoring spice of daily use in India and has been mentioned in Ayurveda since ancient times.

Turmeric is native to Southern and Southeastern Asia. The essential rhizome oil contains curcumin, ketone, and alcohol. It has a musky flavor, and imparts a yellow color to curries. It is also used as a coloring matter in the pharmaceutical and food industry.

Turmeric has many medical virtues. Juice given along with lime is a digestive and anti-flatulent. It has also been used for a long time as an antiseptic in acute skin abrasions and boils in India. When there was an attempt to patent the remedy by some recently, it led to an uproar in India. Turmeric is effective in the common cold, throat irritation, chronic cough, and treating sprains, and since it is rich in iron has been useful in anemia.



Fig. 5. Turmeric used in Fish Head Curry Singapore, 2011, Sc#1503

### Coriander (*Coriandrum sativum*)

Coriander is both an annual and perennial herb. Leaves are compound, thin, and easily breakable. Fruits are spherical having longitudinal ridges and are brownish yellow when ripe (Figs. 1, 6). It is a native of the Mediterranean region thriving in black soil and arid regions, but is now cultivated in many countries.

Coriander seeds are dried when they are ripe and are aromatic and spicy and an important ingredient of curry powder. It is also used in pickling spices, sausages, seasoning, confectionary, and flavoring spirits particularly gin. The leaves are used in chutneys, sauces, curries and soups.

They also have stimulant and tonic properties and coriander seeds have been used to reduce fever. Regular drinking of coriander water is believed to reduce cholesterol and is a good diuretic. It is also used as an eye wash in conjunctivitis.

### Tamarind (*Tamarindus indica*)

Tamarind is a large symmetrical spreading tree with small compound leaves, yellowish flowers with reddish streaks, and fleshy brown fruits (Fig. 1, 7, 8). It is a native of Africa, but is now grown in most tropical countries.

The pulp contains tartaric and other acids and carbohydrates including pectin. Ripe fruit and tamarind pulp is widely used in culinary preparations, notably *sambar*, *rasam* curries, and chutney in South India.

The whole plant has medicinal value. The pulp of ripe fruit is beneficial in bilious vomiting, and loss of appetite. The pulp is rich in vitamin C, making it valuable in preventing scurvy, and as it does not lose its anti-scorbutic property when dry, unlike other fruits and vegetables, it was an important item in the diet of sailors in the past. The leaves are cooling and anti-bilious, while the bark and seeds act as an astringent, a tonic that reduces fever.



Fig. 6. Coriander used in Satay Dish Singapore, 2011, Sc#1500



Fig. 7. Tamarind used in Assam Prawns Dish Singapore, 2011, Sc#1502



Fig. 8. Tamarind Plant Cameroun, 1981, Sc#700