

Module-05: Nomenclature & classification of spices and condiments

5.1. Nomenclature of spices and condiments:

1. *Cardamom (Small)*

Botanical name: *Elettaria cardamomum*

Family name: Maton Zingiberaceae

Part used as spice: Fruit, seed

2. *Cardamom (Large)*

Botanical name: *Amomum subulatum*

Family name: Roxb. Zingiberaceae

Part used as spice: Fruit, Seed

3. *Pepper*

Botanical name: *Piper nigrum*

Family name: L.Piperaceae

Part used as spice: Fruit

4. *Chilli*

Botanical name: *Capsicum annuum*

Family name: L. Solanaceae

Part used as spice: Fruit

5. *Ginger*

Botanical name: *Zingiber officinale* Rosc

Family name: Zingiberaceae

Part used as spice: Rhizome

6. *Turmeric*

Botanical name: *Curcuma longa* L.

Family name: Zingiberaceae

Part used as spice: Rhizome

7. *Coriander*

Botanical name: *Coriandrum sativum* L.

Family name: Apiaceae

Part used as spice: Leaf & Fruit

8. *Cumin*

Botanical name: *Cuminum cyminum* L.

Family name: Apiaceae

Part used as spice: Fruit

9. *Fennel*

Botanical name: *Foeniculum vulgare* Mill.

Family name: Apiaceae

Part used as spice: Fruit

10. Fenugreek

Botanical name: *Trigonella foenum-graecum* L.

Family name: Fabaceae

Part used as spice: Seed

11. Cinnamon

Botanical name: *Cinnamomum zeylanicum*

Family name: Breyn Lauraceae

Part used as spice: Bark

12. Garlic

Botanical name: *Allium sativum* L.

Family name: Alliaceae

Part used as spice: Bulb

13. Clove

Botanical name: *Syzygium aromaticum* (L)

Family name: Merr. & Perry Myrtaceae

Part used as spice: Unopened Flower bud

14. Tamarind

Botanical name: *Tamarindus indica* L.

Family name: Caesalpiaceae

Part used as spice: Fruit

15. Celery

Botanical name: *Apium graveolens* L.

Family name: Apiaceae

Part used as spice: Leaf, Fruit, Stem

16. Caraway

Botanical name: *Carum carvi* L.

Family name: Apiaceae

Part used as spice: Fruit

17. Mint

Botanical name: *Mentha piperita* L.

Family name: Lamiaceae

Part used as spice: Leaf

18. Mustard

Botanical name: *Brassica juncea* L.

Family name: Czern Brassicaceae

Part used as spice: Seed

19. Saffron

Botanical name: *Crocus sativus* L.

Family name: Iridaceae

Part used as spice: Stigma

20. Mace

Family name: *Myristica fragrans* Houtt.

Botanical name: Myristicaceae

Part used as spice: Aril

21. Basil

Family name: *Ocimum basilicum* L.

Botanical name: Lamiaceae

Part used as spice: Leaf

22. Dill

Botanical name: *Anethum graveolens* L.

Family name: Apiaceae

Part used as spice: Fruit

23. Parsley

Botanical name: *Petroselinum crispum* Mill.

Family name: Apiaceae

Part used as spice: Leaf

24. Cassia

Botanical name: *Cinnamomum cassia*.Blume

Family name: Lauraceae

Part used as spice: Bark

25. Aniseed

Botanical name: *Pimpinella anisum* L.

Family name: Apiaceae

Part used as spice: Fruit

26. Thyme

Botanical name: *Thymus vulgaris* L.

Family name: Lamiaceae

Part used as spice: Leaf

27. Savory

Botanical name: *Satureja hortensis* L.

Family name: Lamiaceae

Part used as spice: Leaf

28. Sage

Botanical name: *Salvia officinalis* L.

Family name: Lamiaceae

Part used as spice: Leaf

29. Rosemary

Botanical name: *Rosmarinus officinalis* L.

Family name: Lamiaceae

Part used as spice: Leaf

30. Allspice

Botanical name: *Pimentadivica* (L) Merr.

Family name: Myrtaceae

Part used as spice: Fruit & Leaf

31. Nutmeg

Botanical name: *Myristica fragrans* Houtt.

Family name: Myristicaceae

Part used as spice: Seed

32. Bay Leaf

Botanical name: *Laurus nobilis* L.

Family name: Lauraceae

Part used as spice: Leaf

33. Asafoetida

Botanical name: *Ferula asafoetida* L.

Family name: Apiaceae

Part used as spice: Oleo gum resin from rhizome and thickened root

34. Horse Radish

Botanical name: *Armoracia rusticana* Gaertn.

Family name: Brassicaceae

Part used as spice: Root

35. Tejpat

Botanical name: *Cinnamomum tamala* (Buch Ham)

Family name: Lauraceae

Part used as spice: Bark, Leaf

36. Capsicum

Botanical name: *Capsicum annuum* L.
 Family name: Solanaceae
 Part used as spice: Fruit

5.2. Classification of Spices:

Spices can be classified or grouped according to different systems of classification such as:

5.2.1. Classification based upon the plant organ from which they are obtained:

Plant organs	Spice crops
Seeds or nuts	Coriander, Fennel, Cumin, Fenugreek, Dill, Aniseed, Caraway, Almond, Poppy, Pepper, Tamarind, Vanilla, Celery, white mustard, cardamom, sesame.
Plant bark	Cinnamon, Cassia.
Leaf spices	Bay leaf, curry leaf, basil, parsley, rosemary, mint, parsley, coriander, celery, sage
Latex	Asafoetida
Flower bud	Clove
Root or bulbs	Horseradish, Wasabi, garlic, onion, celery,
Seed	cumin, white mustard, cardamom, sesame
Rhizome	Turmeric, Ginger
Fruit	Cardamom, Black Pepper, Vanilla, All spice, Cassia, Tamarind, paprika, pepper, coriander, star anise
Aril	Mace, nutmeg
Flower Stigma	Saffron
Berries	Allspice, black pepper, chilli
Kernel	Nutmeg
Tubers	Galangal

5.2.2. Classification of spices based on Botanical families:

Family	Crop
Apiaceae	Coriander, cumin, dill, celery, fennel, lovage, parsley, asafoetida
Lamiaceae	Mint, basil, rosemary, sage, thyme, savory
Liliaceae	Leek, chive
Solanaceae	Capsicum, chilli
Zingiberaceae	Ginger, turmeric, cardamom
Myrtaceae	Clove, allspice
Alliaceae	Garlic
Lauraceae	Cinnamon, cassia, bay leaf

Brassicaceae	Mustard, horse radish
Myristicaceae	Nutmeg, mace
Piperaceae	Pepper

5.2.3. Classification based on duration of crop:

Annual	basil, coriander, dill
Biennial	caraway, parsley, leek
Perennial	curry leaf, mint, oregano, thyme

5.2.4. Classification based on growth habit:

Herbs	caraway, coriander, mint,
Shrubs	rosemary, sage, thyme
Trees	curry leaf, laurel

5.2.5. Conventional classification of spices:

Classes	Spices
Hot spices	Chillies, black and white pepper, ginger, mustard, cayenne pepper
Mild spices	Paprika, coriander
Aromatic spices	Allspice, cardamom, cinnamon, dill, clove, cumin (jinten), mace, nutmeg, fennel, fenugreek
Herbs	Basil, bay leaves, dill leaves, marjoram, tarragon, thyme
Aromatic vegetables	Onion, garlic, shallot, celery

5.2.6. Classification of condiments:

Class	Condiments
Aromatic	Vanilla, cinnamon, clove, parsley, bay leaf, caraway and cumin seeds.
Acrid or Peppery	Black and white pepper, cayenne, chillies, curry, allspice, ginger.
Allylic or Alliaceous	Garlic, onion, mustard, horseradish, chives, leeks.
Acid	Vinegar (white, cider or wine), capers, gherkins
Animal	Caviar, anchovies, beef boullion.
Mineral	Salt and all salt-based seasonings (miso, soy, tamari, etc.)

Spices have substantial antioxidant activity due to phenolic compounds mostly flavonoids present in them. These antioxidants may also act as natural preservatives by preventing or slowing spoilage of foods.

SUGGESTED READINGS

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