

and internally as Coriinielline & antiseptimide

② Black pepper. (*Piper nigrum* L.) Kalimirel.

Systematic position - - Kingdom - Plantae

Division - Angiosperms

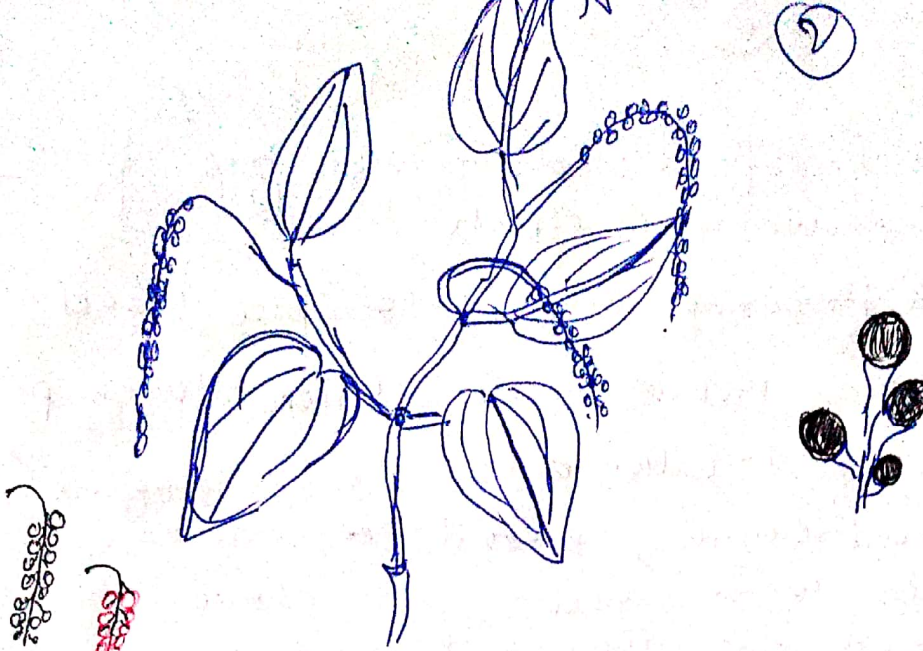
~~Subclass~~  
Subclass - ~~Dicotyledonous~~ Monocotyledon

Order - Piperales

Family - Piperaceae

Genus - Piper

Species - nigrum



Pepper plant with immature Pepper Corns

### Vernacular Names

Sans - Maricha, Ushana  
Hindi & Beng - Kalimirch, Golmirch.  
Urdu - Golumich

### Origine & Distribution

- i/ commonly called as "King of Indian Spices"
- ii/ It is native to present-day Kerala in South & is extensively cultivated in tropical regions.
- iii/ Black Pepper is the world's most-traded <sup>Spice</sup> & is one of the most-common Spices.
- # iv/ It is cultivated for its fruit known as a peppercorn, which is usually dried & used as a spice. When, fresh & fully mature, it is about 5mm (0.20 in) in diameter & dark red, & contains a ~~single~~ single seed, like all drupes.
- v/ It is cultivated in <sup>Kerala</sup> Karnataka, Tamil Nadu & Pondicherry. Kerala contributes 96% of the total Indian production.



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⑦ Spices - General description with reference to  
Clove & Black Pepper (Botanical name,  
family, Parts, uses & morphology &  
uses)

✓ Also Cultivated in Various Countries -

Indonesia, Malaysia, Sri Lanka, Comboia,  
Brazil, etc.

✱ Morphology (description)

✓ Perennial vine, up to 9 meters in wild state  
with dimorphic branching.

a) orthotropic with roots

(b) Plagiotropic without roots.

Both have leaves & axillary buds.

✓ Leaves simple, alternate, ovate, dark green.  
with Pungent test.

✓ Flowers minute, white, borne on dense spike  
on plagiotrophic branches.

✓ Flowers are partially enclosed by a  
flesh bract.

✓ Fruit, Single seeded drupe

✓ Each Spike may bear 50-60 spherical  
drupe, bright red at maturity  
which turns black & become wrinkled  
on drying which yield the black pepper of  
Commerce.

✓ The major portion of seed consists of



## Cultivation

- i/ It grows in well drained clay loam soil, rich in humus & flourishes in warm moist climate -
- ii/ Annual rainfall of 250 cm, also can be cultivated in slightly lower range of rainfall through out the year.
- iii/ Can tolerate temp  $10^{\circ}\text{C} - 40^{\circ}\text{C}$  and can grow from sea level upto an altitude of 1200 m.
- iv/ Red, laterite virgin soil on the slopes of the Western Ghats is also suitable for growing pepper.

The process of cultivation can be done in following steps:-

- (A) Propagation & planting.
- (B) Manure & Fertilizers
- (C) Harvesting
- ~~(D) Improved Varieties~~

### (A) Propagation & planting

- i/ Pepper is propagated best from cutting of the runner shoot which originate from base of vines.
- ii/ The runner shoots of selected high-yielding healthy vines are kept coiled in the fork.
- iii/ 2 to 3 sticks fixed in the ground so that the shoots don't come in contact with soil & sticks roots.
- iv/ cutting from lateral fruiting branches can also be used for planting.
- v/ They are separated from vines in February-March.
- vi/ The cutting with 2 or more nodes are planted with last one node below the soil in nursery beds or in polythene bags or bamboo baskets filled soil kept under partial shade.



(4)  
They form roots & become ready for planting in June - July.

Pepper cuttings are planted, each with 2 or 3 nodes of pepper is planted with nodes of the seedling - was lately monsoon.

Pits of 0.5 m cube are 2 to 4 m apart in each direction.

With the 1st showers in May-June, the cutting of Murukku & rythme wild are planted.

### Manures & Fertilizers

Each vine may be manured with about 100 g of a kg of compost as basal dose & 100 g of it. 100 g of 1.05 & 60 g of 2.0 annually in 2 split doses, when they are 3-4 years old.

Harvesting - It takes 6-8 months from flowering to harvesting. The harvesting season

mature berries in November - February in the plains & January - March in the hills.

### Chemical Composition

Moisture — 8.7 — 12.0%  
Nitrogen — 1.5 — 2.6%  
Starch — 28.0% — 49.0%  
Crude fibres — 8.1 — 18.0%  
Total ash — 3.9 — 5.7%

### Uses

Used in spices  
Used in preparation of sauce, soups, curry powder  
Used in processing of all kinds of meals  
Used for flavouring sauce.  
Applied to relax sore throat, scurvy, piles etc.