

Beverages

Tea ⇒

1) Scientific name → Camellia sinensis

2) Family → Theaceae

3) Parts used → apical vegetative part consists of two tender leaves and unopened buds.

4) Morphology →

i) Tea plants are trees but looks like shrubs due to regular pruning of the apical vegetative parts.

ii) Leaves are alternate, simple, elliptic to oblong with serrate margin and acute apex.

iii) Flowers are bisexual, solitary.

iv) Sepals are 5-6, unequal.

v) Petals are 5-6, white, ovate.

vi) Stamens are many in several whorls.

vii) Ovary is superior, 3-5 celled with 4-5 pendulous ovules in each cell.

viii) Fruit is a loculicidal capsule.

5) Processing → There are 4 major commercial varieties of tea -

- A) Black tea
- B) Green tea
- C) Brick tea
- D) Olong tea.

A) Black tea → 4 major steps are undertaken for the manufacture of Black tea -

i) Withering → In the withering house, the plucked leaves are spread out in 1 square meter area either on slopping wire netting racks or on horizontal Hessian cloth "chung" for 18-24 hrs.

ii) Rolling → After withering, the leaves are taken to rolling rooms. The leaves are subjected to three rolls by ~~means~~ machine for 30 minutes. The temperature of the room should be maintained between 24-26°C.

iii) Fermenting → Now the leaves need to be fermented. The rolled leaves are spread on the floor of fermenting bed for 2½ - 4½ hours at a temperature ranges between 24°C - 26.5°C.

iv) Firing → After fermentation the leaves are taken out and quickly dried in a

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current of hot air by pressure type drier at a temperature between $60-65^{\circ}\text{C}$ for 30-40 minutes.

The dried tea leaves are then passes through meshes of different sizes and separated out leaf, broken and dust tea. These are further graded into BOP, BP, OP, P etc. The different graded tea is then packed properly in different plywood boxes lined with aluminium foil and paper.

B) Green tea → In green tea, the following steps are undertaken in the preparation of green tea —

i) Panning → In this step, twigs are subjected to heat treatment between $71-94^{\circ}\text{C}$ for about 10 minutes in a large cast iron vessel built into a brick stove.

ii) Steaming and rolling → After panning, the leaves are first heat treated at 120°C either by steaming or by pan-firing. As the leaves become soft, they are rolled by hand.

iii) Drying → The rolled leaves are then transferred to brick furnace where they are dried upon trays or charcoal fires until the leaves are properly crisped.

c) Brick tea → This type of tea is consumed in Tibet, Russia. 5 major steps are undertaken for the manufacture of brick tea, these are - i) Panning ii) Rolling iii) Fermenting iv) Drying and v) Moulding.

D) Olong tea → The olong tea is mainly ~~produced~~ an intermediate type of black and green tea having colour like black tea and flavour like green tea.

6) Uses → It is the most popular non-alcoholic beverage and consumed by almost half of the population of the world.

