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10/10/2019

Wheat

Botanical name - *Triticum aestivum*

Hindi name (vernacular name) - Gehen, Kanak.

Family - Gramineae OR Poaceae.

Comments:-

- 1- The grains are produced in an inflorescence which is a spike of spikelets.
- 2- Wheat flour is used, for breads, cakes, biscuits and other confectionary products.
Starch is employed in the preparation of beer, industrial alcohol and other alcoholic beverages.
- 3- Largest producer of wheat is U.S.A other wheat producing countries are Russia, China, Canada, India.
- 4- In India it is a major cereal and covers 12% of the total area under cereals and 76% of that under winter cereals.
- 5- It is mainly cultivated in U.P., Haryana, Punjab and M.P.
October - November.



Fig :- Wheat - Triticum aestivum

Rice.

Botanical Name - *Oryza sativa*

Hindi name Chawal, Dhan

Family - Gramineae or Poaceae

Edible part - is caryopsis which is a fruit called grain.

Comments:-

Half the world's population, mostly the densely populated regions of the world.

2- Plant is a large annual grass. The inflorescence is a panicle, its branches ending in to a grain, covered by a husk.

3- The grains are used after removal of the husk and are very nutritious.

4- Grain contains considerable amount of proteins, fat and starch. The stems are used as ~~hot~~ fibres and ~~store~~ for mushroom cultivation.

5- China produces about 32% of the world's rice, India ~~is~~ following with 21%.

The highest yield in India comes from West Bengal, and Bihar.

June - July

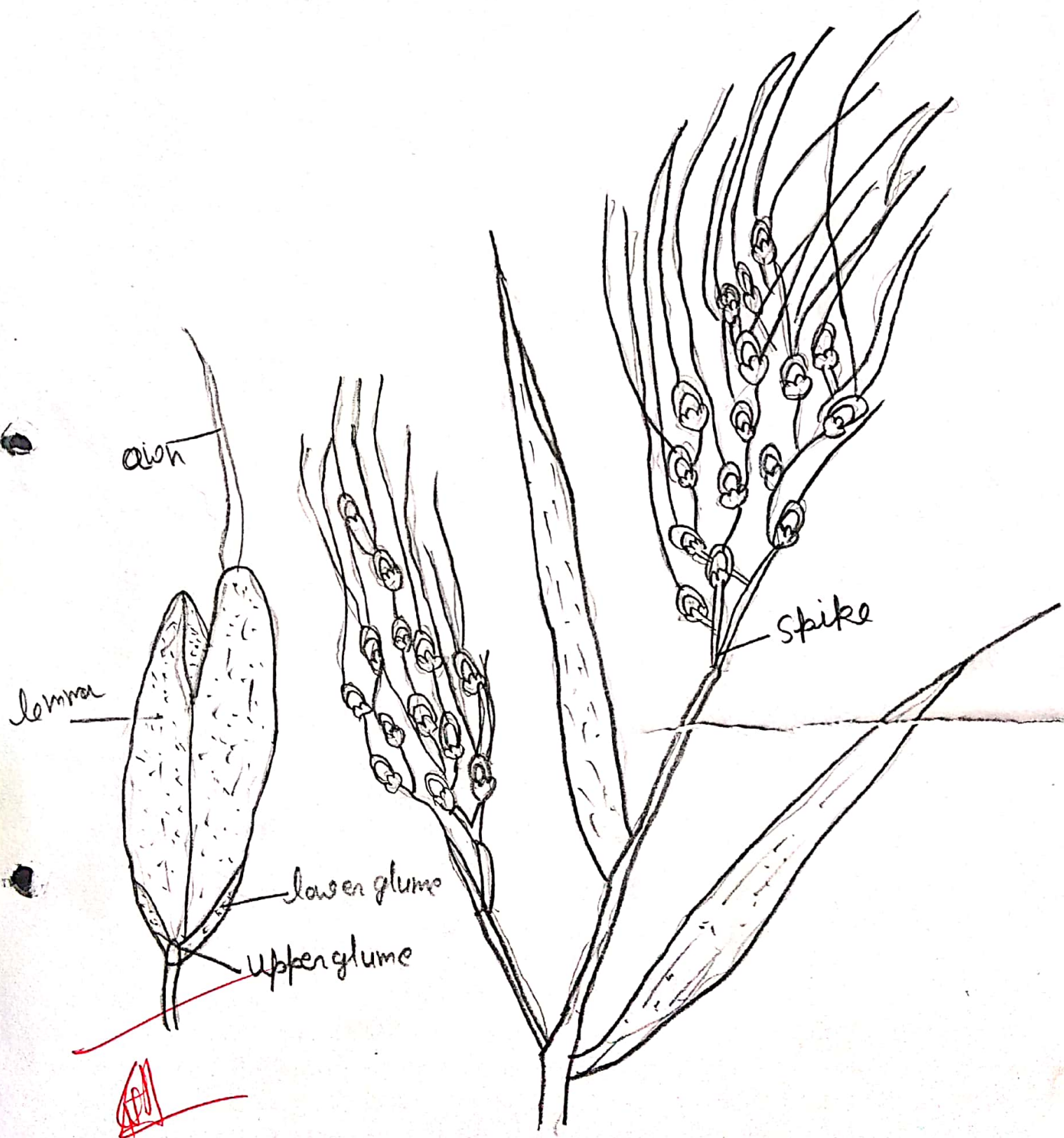


Fig: Rice - Oryza sativa

Maize

Botanical name - Zea mays

Vernacular name - Makka, Bhutta.

Family - Gramineae OR Poaceae

Edible part - is caryopsis which is a fruit called grain.

Comments:-

The plant is annual grass. It possesses both male and female flowers on the same plant.

- 2- Maize is used as a food for livestock flour is used include the preparation of corn bread.
- 3- Other uses include corn flake, corn starch, syrup, corn oil, dextrins, industrial alcohol.
- 4- U.S.A produces half the world's output, other corn producing countries include China, Argentina, Brazil, India, Mexico etc.
- 5- In India, maize was introduced by East India company in 12th century.
It is cultivated in U.P. Bihar, Rajasthan, M.P. Punjab M.P etc.



Fig:- Maize - Zea Mays

Cajon Pea OR Pigeon Pea

Botanical name- *Cajanus Cajan*

Vernacular name- Arhar

Family - Papilionaceae or Fabaceae

Edible part is the seed produced in pod or legume.

Comments:-

- 1- This annual plant is 6-7 feet tall. The leaves are triplicate and flowers are borne in an axillary raceme.
- 2- It is grown as a mixed crop with jowar, bajra, ragi, cotton, maize, ground nut etc.
- 3- Cajon pea is extensively used as dat. The green leaves and tops as animal feed and also as a green manure.
- 4- It is chiefly grown in U.P., Rajasthan, Orissa, Maharashtra, Bihar, M.P. etc.
- 5- India also export small quantities to U.K, France, Sri Lanka, Burma etc.

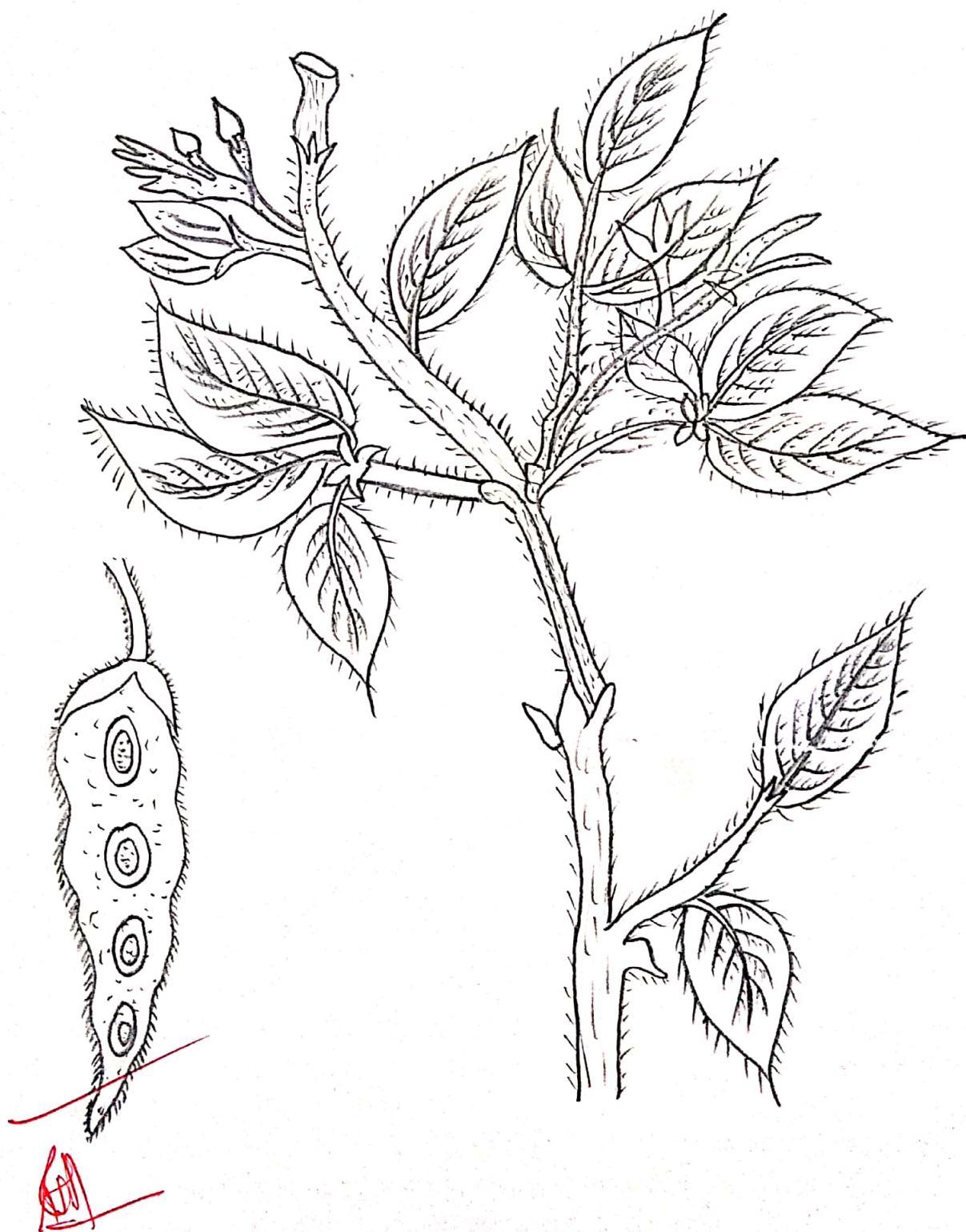


Fig:-

Pigeon Pea (congo pea) - *Cajanus cajan*

Chick peas

Botanical name - *Cicer arietinum*

Vernacular name - Chana

Family - Papilionaceae or Leguminosae

Edible part is - a seed producing in pod or legume.

Comments:-

The plant is branched, about 2 feet tall, leaves are pinnately compound and the fruit contains 1-3 seeds.

- 2- It is a dry crop grown in rabi season. It is best suited to areas of moderate rainfall with mild cold weather in water retentive clay loams and black cotton soils.
- 3- Gram is eaten raw, Bailed or cooked. It is used as a dal and gram flour or besan is used in various preparations.
- 4- It is rich in ~~proteins~~, carbohydrates, and contains varied amounts of vitamins.
- 5- In India it is mainly cultivated in U. P. Punjab, Rajasthan, M. P., Bihar, Maharashtra, A. P. West Bengal, Tamil-Nadu and Karnataka.



Fig :- Chick Pea (Gram) - Cicer arietinum

Ground nut

Botanical name - *Arachis hypogaea*

Vernacular name - Moong-phali

Family - Papilionaceae or Fabaceae

Edible part - plant used are seeds from which oil is extracted.

Comments:-

Seeds are an important source of vegetable non-drying oil.

- 2- The oil is expressed by hydraulic presses and expellers.
- 3- The filtered and refined oil is edible, and is used as salad oil, Making margarine.
- 4- The residual oil cake is a good cattle feed and is also used as fertilizer.
- 5- The major ground nut producing countries are India, China, West Africa, U.S.A etc.



Fig: Groundnut - *Arachis hypogaea*

Mustard

Botanical name - *Brassica campestris*

Vernacular name - Sarson

Family - Cruciferi or Brassicaceae

Edible part - Plant used are seeds for extracted oil.

Comments:-

It yields one of the most important edible oils, the oil content varies between 30-48%.

- 2- It is mostly grown along with kharif crops. ~~The~~ Alternaria blight is the common disease.
- 3- Oil contains glycerides and erucic acid
- 4- The seeds and oil are used in the preparation of pickles and flavouring curries.
- 5- India is the first both with regard to acreage and production in the world.
It is chiefly grown in Bihar, M.P., W.B. Orissa, U.P. etc.



Fig :- Mustard - Brassica Compestris

Black pepper

Botanical name - *Piper nigrum*

Vernacular name - Kalimirch

Family - Piperaceae

Part of the plant used - are fruits used as a spice

Comments:-

Seeds yield an oil of aromatic odour. The pungent taste is due to the presence of an alkoreshin.

- 2- It stimulates the flow of saliva and gastric juice and has a cooling effect.
- 3- It is chiefly cultivated in India, Malaysia, and Indonesia.
- 4- Black pepper is also called Black gold of spices.
- 5- In India most of the pepper comes from Kerala other states being Karnataka, Tamil-nadu, Maharashtra and Assam.

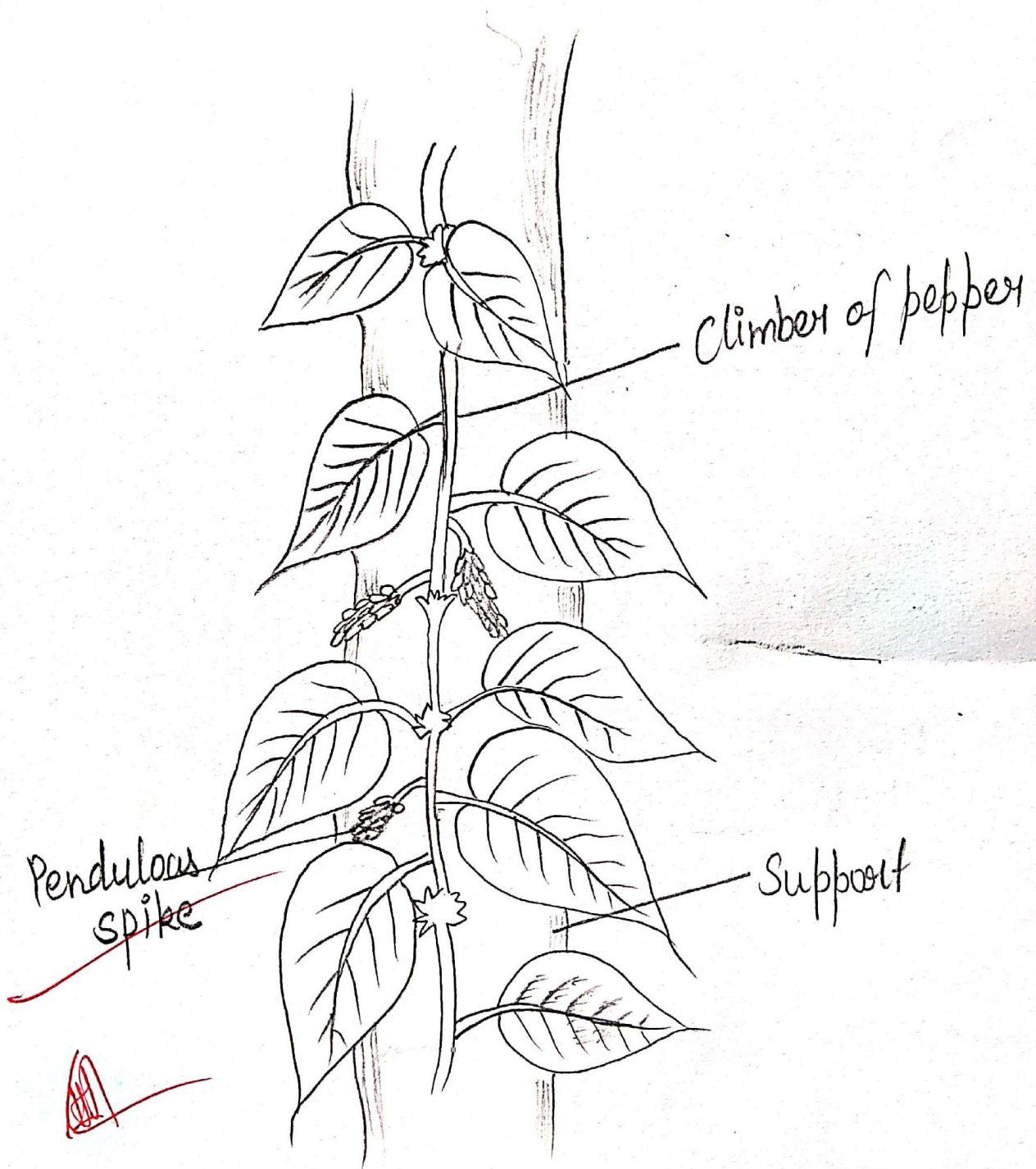


Fig:- Black pepper - *Piper nigrum*

Cinnamon

Botanical name - *Cinnamomum verum*

Vernacular name - Dal chini

Family - Lauraceae

Edible part - Bark.

Comments:-

Cinnamon of Commerce is the dried inner bark of *cinnamomum verum*.

- 2 - It is one of the oldest spices known to Mankind.
- 3 - Cinnamon plant is a small evergreen tree attaining a height of 9-15.
- 4 - Cinnamon is usually propagated by seeds, but plant can also be raised by cutting of young shoots.
- 5 - The plant is a native to ~~Sri Lanka~~ Sri Lanka, and south India, but is now widely cultivated in Seychelles.



Fig:- Cinnamon - Cinnamomum verum

Cloves

Botanical name - *Syzygium aromaticum*
Family - Myrtaceae
Vernacular name - Laung.

Comments :-

Clove of commerce is the dried unopened floral buds of the most. an evergreen tree.

- 2- Cloves are very aromatic possess a fine flavour and impart warming qualities.
- 3- Native home - Sri Lanka, Islands, Madagascar and Indonesia.
- 4- In India, it is mainly grown in Nilgiris, Tanjore hills and Kanyakumari district in Tamil Nadu, and Kottayam and Quilon districts in Kerala.
- 5- Clove is an ingredient of an Ayurvedic preparation Nismusti Vati.



Fig:— Cloves - Syzygium aromaticum

Coffee

Botanical name - *Coffea arabica*

Hindi name - कफी

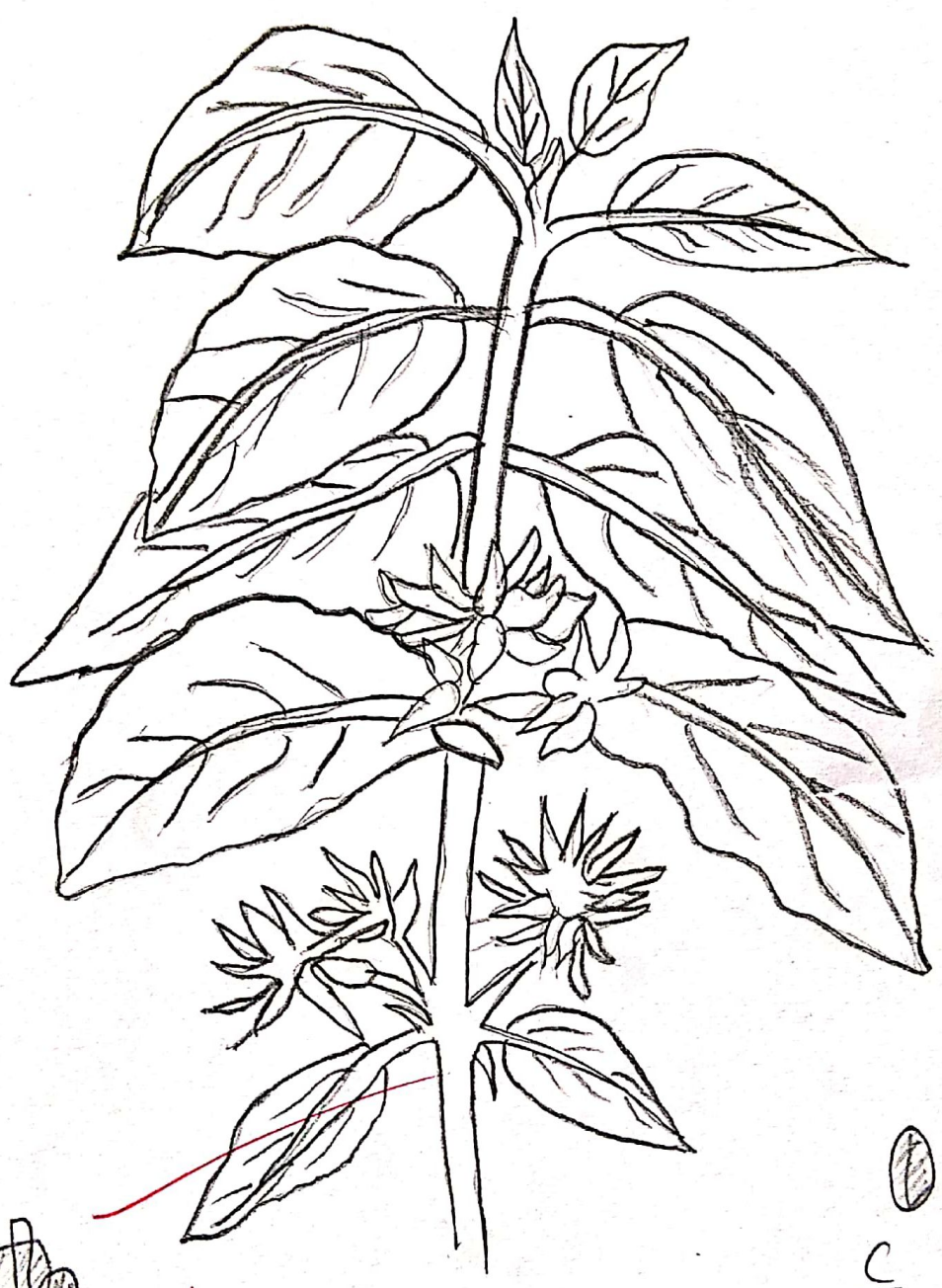
Family - Rubiaceae

Parts of the plant used - are used seeds which are used for the preparation of a beverages called coffee.

Comments :-

The plant grows in hot, moist climate these are raised from seeds or seedling and come into bearing in the third year.

- 2- The fruits are berries and the skin is removed flavour and colour.
- 3- Seeds contain 0.75 to 1.5% caffeine a volatile oil called.
- 4- Seeds Arabian coffee [*C. arabica*] is a source of 90% of the world supply. Brazil tops the world's production.
- 5- In India, coffee is cultivated in Karnataka, Tamil-Nadu and Kerala.



B

fruits



A

Coffea arabica



C



seeds

Fig :- Coffee - coffee arabica

Tea

Botanical name - *Camellia sinensis*

Hindi name - Chai

Family - Ternstroemiaceae or Theaceae

Part of plant used - are leaves which give a which give a popular beverage called Tea.

Comments :-

Plant is a shrub. three to four feet tall. It grows at an altitude of about 5000 above MSL on steep slopes.

- 2- Tea contain 2.5% theine, 13-18% tannine volatile oils and a small amount of caffeine.
- 3- The leaves are plucked and cured on an infusion in boiled water yields most popular of the beverages.
- 4- India is one of the leading producing and exporters of tea.
- 5- About 73% of the total out put comes from south east region, especially Assam & W.B.



Fig :- Tea - *Camellia sinensis*

Jute

Botanical name - *Corchorus capsularis*
Vernacular name - Pat, titapat, Narcha
Family - Tiliaceae
Parts of plant used - are fibres from phloem of stem.

Comments:-

The plant is annual shrub and grown from seeds.

- 2- It is best grown in humid region with moderate rains on light, sandy, detritic loams.
- 3- The fibres are obtained from the secondary phloem by retting the stem.
- 4- The fibres is used for manufacturing packing cloth, hessian, bags for transport and storage, rugs, ropes, twines etc.
- 5- This is the most important cash crop of north east India, especially valleys of Ganges and Brahmaputra in Assam, W.B. Bihar and Orissa.



HA

Fig:- Jute - *Corchorus capsularis*

Cotton

Botanical name:- *Gossypium arboreum*

Vernacular name - Kapas, Rui

Family - Malvaceae

Parts of the plant used:-

- (a) Seeds for oil extraction and,
- (b) Seeds hair as cotton fibres.

Comments:-

This plant is an important fibre and oil seed crop.

- 2 Plant is a perennial shrub or a small tree which grows on sandy damp soil of humid regions.
- 3 - Cotton is cultivated in U.S.A, India, Pakistan, Egypt and Brazil.
- 4 - In India, it is grown Maharashtra, Karnataka, Gujarat, M.P., Punjab, Assam, Uttar Pradesh.



Fig- Cotton

Holy Basil

Botanical name - Ocimum Sanctum

Family - Lamiaceae

Vernacular name - Tulsi

Edible part - Leaf

Comments:-

- 1- Ocimum Sanctum is a 30-75 cm high erect herb which is grown pardically in every part of India.
- 2- The leaves are opposite - decussate, exstipulate, simple.
- 3- It is two type, Rama, and Shyama.
- 4- Tulsi is an ingredient of tepooli. a properly medicine for viral hepatitis.
- 5- The plant is also one of the ingrediantes of the drug shushama.



Fig- Holy Basil

Poppy (Opium)

Botanical name - *Papaver somniferum*

Vernacular name - *Alpin, Pap*

Family - *Papaveraceae*

Edible part - It unripe capsule.

Comments:-

The dried juice or latex obtained from unripe capsule is used.

- 2 - The crude latex contains resins, oil and alkaloids including morphine and codeine
- 3 - The herb is a native of West Asia, and grown in India, China and Asia Minor.
- 4 - In India the plants cultivated in U.P., Punjab, Rajasthan and M.P.



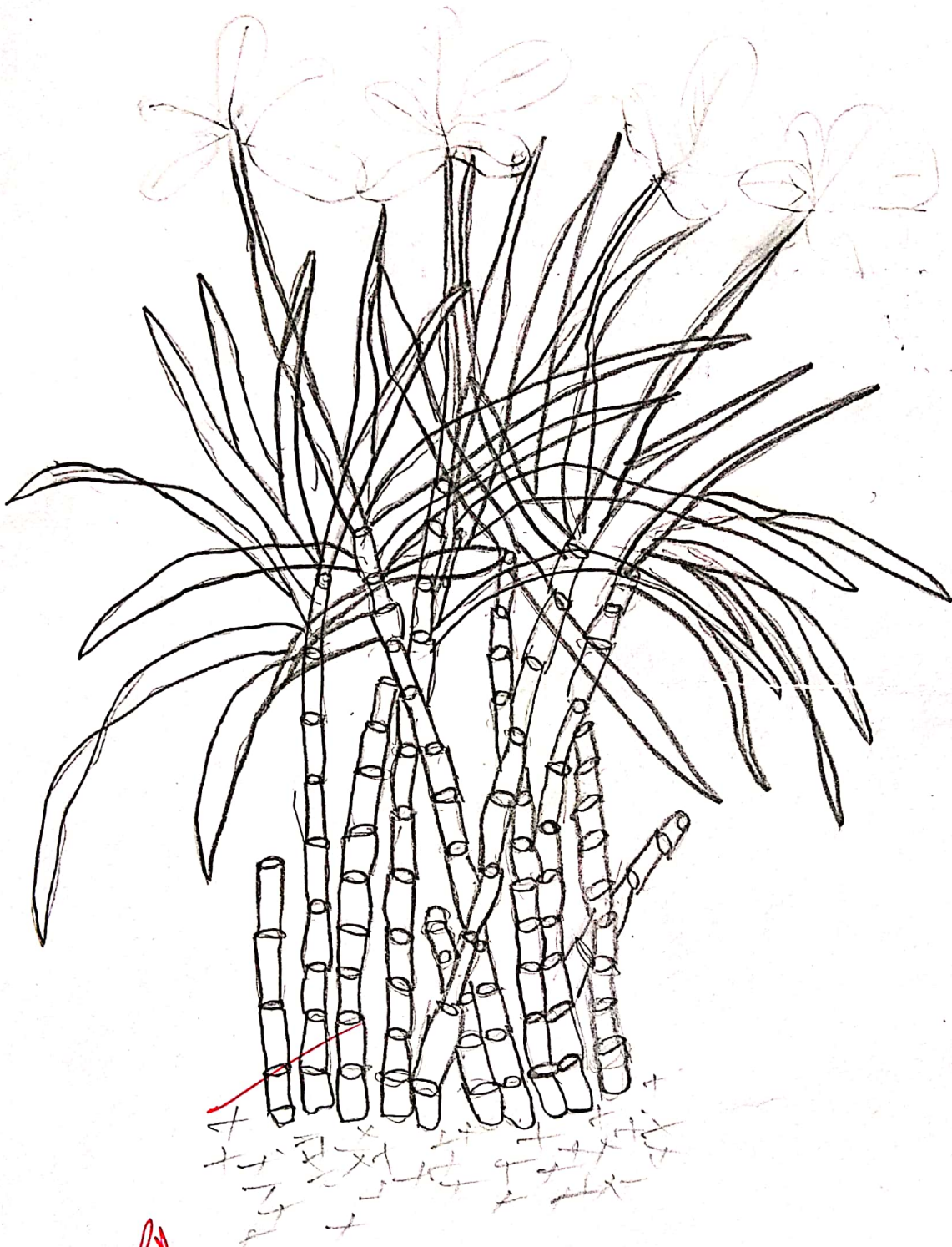
fig:- opium poppy

Sugarcane

Botanical name - *Saccharum officinarum*
Family - Poaceae
Common name - Ganna

Comments:-

- 1- Sweet crystalline substance important source of energy human diet.
- 2- Soft drinks, chocolates, confectionary, Ice-cream & canning industry sugarcane juice is used for preparing of gur, Jaggery & Khandasari
- 3- Green leaves are used as animal feed.
- 4- Leaves of sugarcane diesel.



Sugarcane

Castor oil

Botanical name - *Ricinus communis*

Family - Euphorbiaceae

Common name - Rand

Comments:-

- 1- Food industries used as food additives flavouring. Eg - Candy
- 2- Oil used as making transparent.
- 3- Paints, varnish & other protective covering.
- 4- Used in preparing skin fairness creams
- 5- Castor cake is rich in carbohydrates, protein & minerals, chiefly used as fertilization.



Castor oil

Aloe vera (Ghigvar)

Botanical name - Aloe vera

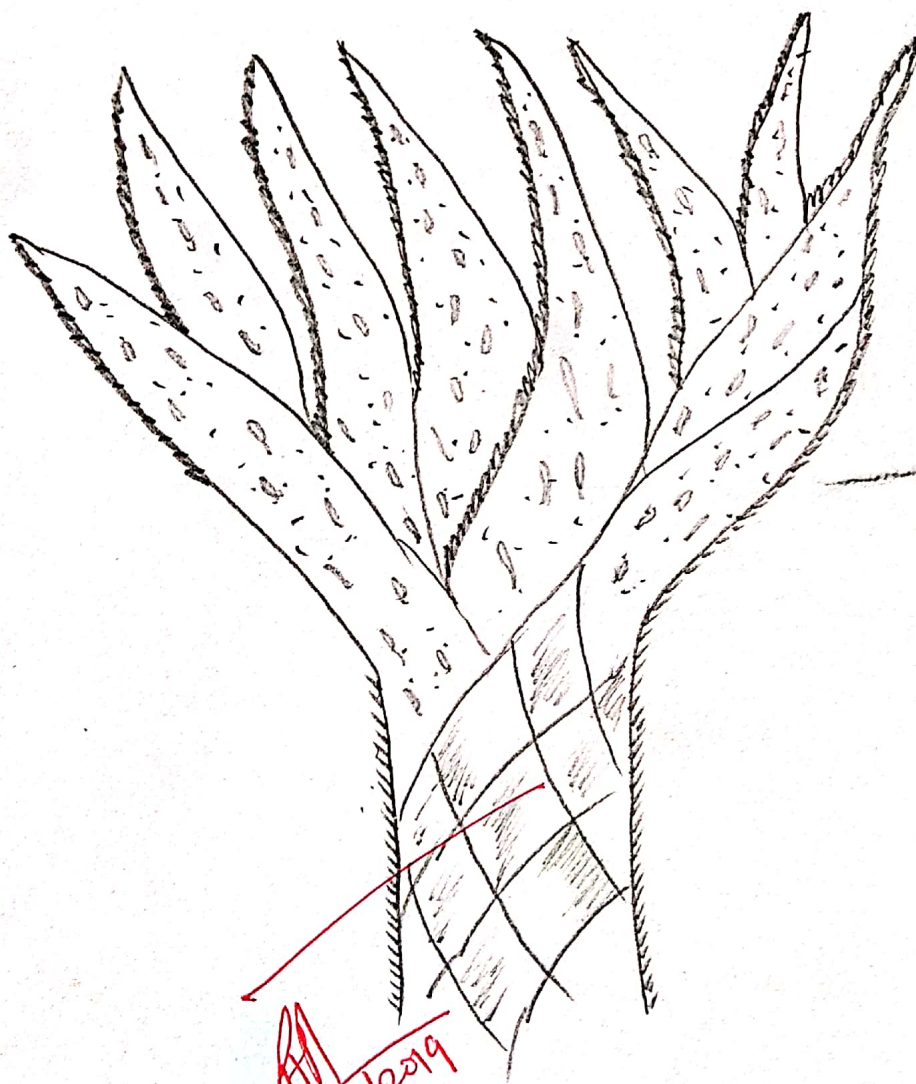
Family - Liliaceae

Vernacular name - Ghigvar OR Ghigvar

Sanskrit - Ghrita - Kumari

Comments :-

- 1- Juice aid in digestion
- 2- Help in detoxifying in body.
- 3- Lowering blood cholesterol, stabilizes blood sugar levels.
- 4- Prevent kidney disease OR kidney stones.
- 5- Help in High blood pressure cases.



02/01/2019

Aloe vera