

History of spice notes

[History](#)



History Of Spice Egyptians used a lot of spices for cooking and stuffed mummies Burned cinnamon to hide stench First recorded spice Traded spice with India Spice trade silk road All roads go to fertile crescent Arabs created a monopoly on the spice trade moving toward Europe Arabs Kept Europeans in the dark about the source of spices brought from India Created secrets and Myths Might boil seeds so Europeans couldn't grow it Crusaders brought back new spices when they returned from battle which increased demand in Europe and had also developed a taste for spice increasing demand Spice Obsessions Only attainable by ruling class

Emblems of power, gifts of state, heirlooms, currency Pepper: worth its weight in gold, used as currency Plagued by counterfeiting Dried juniper berries (added to extend pepper) Spice Obsession Theories Theory 1: Used spice as preservative (pepper) Not much evidence (salt works fine, local spices, afford fresh meat) Theory 2: Medicine Theory 3: Medieval palate was dull Theory 4: Trade Route Inflation Middle man increase prices along silk road End of Obsession (17th century) Figure out you could grow spice Markets were saturated Moderate use of spice New groups of flavoring: chili's coffee tea sugar, chocolate Pepper- Piper nigrum

Most important spice economically America is the worlds largest importer Woody, perennial (3 seasons or more), tropical climbing vine No synchrony Monsoon tropical forests of Malabar coats, SW India Heat: Alkaloid irritants: piperine Inner core Aroma: From essential oil Pericarp, outershell Green pepper: comes from unripe berries (least hot) Black pepper: fully grown and dried White pepper: removed skin (hottest) Cinnamon: Cinnamomum verum Small evergreen tree in laurelfamily(true Cinnamon Ceylon) Native to Sri

Lanka light flavor, fine texture, little Coumarin 2 yr old branches cut and fermented for 24 hrs inner bark peeled and dried to form quills Cassia (fake) evergreen native to India, Indonesia and Vietnam Closely related, mostly US Thicker bark, whole tree used Heavy flavor, coarse texture, high coumarin Coumarin: appetite suppressing Medical/ research: antioxidant, antimicrobial, type II diabetes Saffron: *Crocus sativus* Iran major exporter, very expensive Perennial bulb, 2 flowers per bulb, completely domesticated 3 stigmas, manual harvest Egypt: Cleopatra, healers Disappeared with Roman Empire but came back as plague remedy Afghanistan: poppy vs. Saffron Flowers Pollination: the transfer of pollen from anther to stigma

Cross pollination: Chance (pollen in air or water), or animals Mutualism, coevolution (trick or reward animals to pollenate) Egyptians thought divine power, blue lotus Ancient Greece: floral wreaths Ancient Rome: Floralia festival Christian: flowers where "pure" no sex Theophrastus: date palms pollinated by hand, proved reproduction Fall of roman empire, fall of flower, (great suspicion) Gained popularity Europe 600 AD Posies thought to ward off plague Saint Thomas: plants have reproductive virtues Linnaeus: taxonomic system based on flowers Botanophilia Victorian Age: women grew flowers

Sexual repression, low tolerance of crime, and strong social ethic Grew orchids ("a massive man-made extinction event") Epiphytic plant: plant grow on another plant (non-parasitic) Orchidmania Biggest flowering plant family, highly evolved (very guarded against self-pollination), native species on every continent Grow slowly (7 yrs to mature and flower), long lived Catsetum orchid inspired Darwins early book Ghost orchid Tulipmania

Extreme heterozygote First cultivated around turkey then moved to Holland
Tulip breaking potyvirus (suppressed anthocyanin) (weakened plant) Spread
by peach/potato aphid

Mutability, novelty, favored by royalty, bubonic plague era, scarcity/ demand
1635 shift, traded in future promissory notes " Greater Fool Theory" (1637
crash) Smell 1 Of 50 human genes in the human genome are devoted to
smell Olfaction: sense of smell, chemical molecules Olfactory tract transmits
signals to limbic system To smell must have Volatile: must easily evaporate
Water soluble Lipid soluble Essential oils is what makes plants smell (2nd ary
plant metabolite) Isolation of Essential Oils: heat effects the smell
Expression: simplest, squeezed out, citrus

Distillation: most used, boil, collect steam, condense to oil Solvent
extraction: delicate flowers, grind up, steep in chemicals, then evaporate
Effleurage: oldest method, plant material in fat, dissolve out fat Synthetic
molecule Scent and Memory Proustian Effect: smell linked to memories, takes
you back Scent marketing Billboard smell: makes bold statement (popcorn)
Thematic smell: compliments decor (Christmas smell) Ambient smell: cover
foul odor Signature smell Sugar (refers to many groups of carbohydrates)
Monosaccharides: simple sugars, cant be broken down Glucose: basic source
of energy (produced photosynthesis)

Disaccharides: 2 monosacc. Are joined together and H₂O removed Glucose:
can from starch (storage in plants) or glycogen (storage in animals) Honey
was the first sweetener used by humans Sugarcane Native to S/SE Asia,
cultivated in India Large tropical grass, stores sucrose in internodes Stems
crushed, boil sap, separate sugar crystals US 150 lbs/ yr consumed Arab
<https://assignbuster.com/history-of-spice-notes/>

traders brought to Mediterranean, sugar reached Europe after crusades, Columbus to Dominican Republic Labor first from indigenous people and forced labor from Europe Solve labor shortage imported slave British dominant traders in slaves and sugar

Seen as unskilled and replaceable Malnutrition and starvation Triangle trade Sugar, rum to Europe; guns, salt, iron to Africa; slaves to Caribbean Sugar, molasses to America; rum to Africa, slaves to Car. Why so brutal? Very profitable, high demand, triangle trade Occurred in isolation " unskilled labor" abolitionists end in 1834 Chocolate Cacao tree *Theobroma cacao*, native tropical S America, Grows tall, hot climate, lots of rain, understory tree (shaded, damp) Cauliflory: flowers from trunk or large branches Each flower potential fruit, insect that pollinates only in understory Olmec, Mayan, Aztec

Process Fermentation: pulp liquefied, seeds briefly germinate (choc. Flavor) Drying: lose weight, outer shell loosens Roasting: refines flavor Winnowing: removes outer shell Cravings Caffeine and theobromine (humans not very sensitive to) Cannabinoid mimics Phenethylamines: chemicals associated with love Serotonin Coffee *Coffea*, understory tree, tropical evergreen, produc berries 3 yrs old Coffee fruit (drupe) contains 2 coffee " bean" s Center of origin Ethiopia highlands *Coffea Arabica*: 1st cultivated, wimpy (lower caffeine and yield) *Coffea canephora* (robusta): 2x caffeine, greater yield

Shade Grown (traditional) coffee Originally understory trees Diverse habitat Minimal need for pesticides and fertilizers Sun Grown Coffee Monoculture system produced by clear cutting forest Increased fertilizers; herbicides and insecticides Increased soil erosion Coffee berry borer, natural predator ants

Tea Popularity: tea, coffee, beer Camellia sinensis, evergreen tree/shrub
China tea, 1st discovered and cultivated, cool climate, lower yield, lighter
flavor Assam Tea, tree, less resistant to cold, high yields, brisk flavor Center
or origin: china

Oxidation= fermentation Starch to sugar, tannins released Polyphenols:
Antioxidant properties Catechins: 25% Concentrated in fresh, unbroken,
unfermented Tannins 50%: break leaves tannins released Types Tulsi tea:
related to mint, not china tea Medical/religious, India Hinduism Black:
withered, full fermentation, crushed, dries (usually assam tea) brick Oolong:
btw withered, short fermentation, rolled or ball form Green Tea: little
withering, dried, high polyphenols (china tea) White tea: young leaves, no
oxidation, higher catechins, healthiest *