A Hortícultural and Ethnobotanícal Perspectíve Bart Schutzman, Ph.D.



According to legend, servants of the Chinese emperor Shen Nong were boiling water to cleanse it, but dried leaves from a nearby bush fell into it. Tea resulted.



The famous philosopher Lao Tze (604-520 B.C.E.) proclaimed tea to be the elixir of immortality





Buddhist philosopher Lu Yu wrote Ch'a Ching, "The Classic of Tea" between 760 and 780 A.D.

Names of Tea Botany Culture, Tradition & Ceremony Hortículture Flavor Health Herbal Teas/Tisanes



The Caj is HAN CHAN CHAN CHAN CHAN CHAN Free Sta Çay chq JEA

Root of tea and cha from two different Chinese dialects:

"Te" from Hokkien dialect, Fujian Province (yellow)

"Cha" from Mandarín & Cantonese díalects, Guangdong Provínce (green) et al.



The Botany of lea

# Camellia sinensis (formerly Thea sinensis) Family Theaceae

Camellía - Genus name after Rev. George Kamel a Jesuit brother, pharmacist and missionary to the Philippines - Originally not named Camellia, but Thea, the Latin name for tea

sínensís

Latin for "from China"

### Originally native to China, Tibet and northern India



Family Theaceae Genus *Camellía* Section Thea (3 spp.) *C. sínensís, taliensís, írrawadiensis* 

- Evergreen shrubs
- Simple, alternate, serrate leaves with Theoid teeth
- Parts generally in fives: five or more petals, five sepals, many stamens
- Fruit a loculicidal capsule

**Curvarieties** (\*two widely used for tea):

Camellía sínensís var. assamíca\* C. sínensís var. pubílímba C. sínensís var. sínensís\* C. sínensís var. dehungensís





















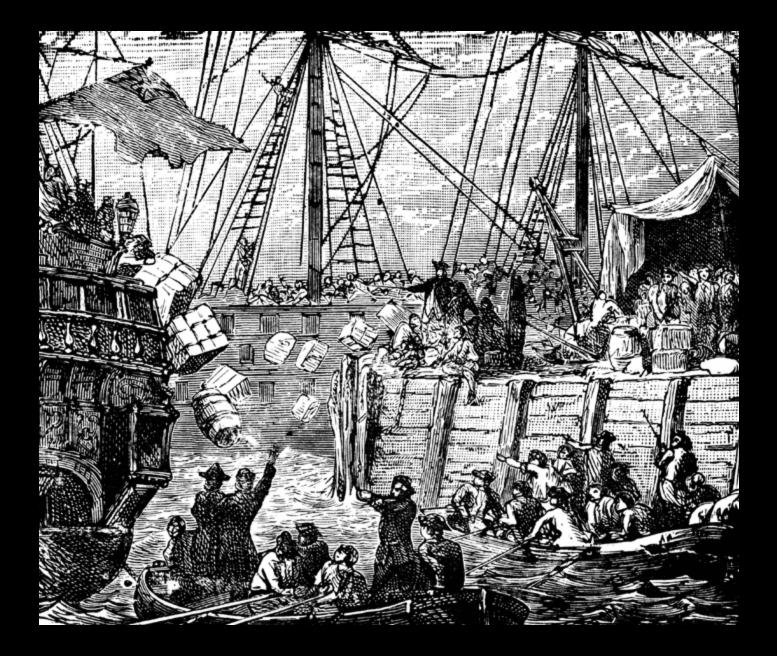
#### Tea making accessories from Tang Dynasty (618-907AD)



























Japanese Furo and Kama (Brazier and Kettle)





# Tea Growing Facts

Plant grows 3-6 ft tall or taller if unpruned Cold-hardy to USDA Zone 8 and can be grown in most of the southeastern USA. Cooler temperatures at higher altitudes may allow leaves to develop better flavors, but we can still grow the plants here Plants like well-drained, fertile, acidic, sandy, moist soils



### Terraced Tea in China



## Hangzhou, China



Darjeeling, India



### Malaysian Tea Plantation





Variety/Cultivar Provenance - soil, altitude Age at harvest Tow dried - additives How prepared





## Green (& White) Oolong Black



Help to normalize blood pressure Germicidal activities & improving beneficial íntestínal flora Enhance the immune system [ower] D[ ("bad") cholesterol Lower lípíds to help prevent díabetes Fluorídes benefít tooth enamel Reduce cognitive decline in aging





## Herbal Teas, or Tisanes







## Kava Kava Piper methysticum



Kava kava is known for its sedative and anesthetic properties. The root of this plant is traditionally used by the South Pacific cultures for its sedating effect, achieved without the loss of mental clarity. There has been some controversy about liver toxicity, but this is only when leaves and stems were used to prepare the infusion.

# Mint *Mentha* spp.



Consumed for centuries in the middle east, mint tea is credited with relieving gastric distress, stimulating digestion, and acting as a sedative.

### Mint Juleps DO NOT count!



Chamomile Matricaría chamomilla



Chamomile tea is said to have anticancer and antibacterial properties, to be helpful in halting the progression of diabetes, aiding with menstrual cramps, hemorrhoids, and fighting colds.



Ginger Zingiber officinale

gold kill

20

GINGER

Net Wi Polds Net: 12.602/362~

Ginger tea is said to aid in the digestion process, reduce flatulence, help battle nausea and vomiting, help to combat cold, flu and act as a remedy for migraines. Other ailments ginger "tea" is said to help include heartburn, dizziness, asthma, inflammation, chronic pain and bad breath.

### Yerba Mate *|lex paraguaríensís*









Supposedly more nutritious than green tea, yerba mate was found by the Pasteur Institute in 1964 to be packed with vitamins and minerals and concluded that "it is difficult to find a plant in any area of the world equal to mate in nutritional value."

#### Kombucha

A symbiotic combination of algae and yeast acts on sweetened black tea to produce several acids, making a vinegar-like drink



Mother "Fungus" Touted as nature's detoxifier, Kombucha has not been properly studied. It is credited with prevention and treatment of some cancers, detoxifying the liver and battling anxiety and depression, though none of this has been tested scientifically, but the reputation as a curative has been around since before 200BC. Recorded history of Kombucha dates to the 19th century.

### There are many other tisanes that we don't have time to mention and discuss. Nature's pharmacopoeia is certainly available to us in the form of teas and tisanes; infusions of health-giving secondary plant compounds have been consumed for thousands of years and we are

only beginning to understand their effects and benefits.