



American Ginseng: A Folk Culture Tradition

By Phyllis D. Light, MA, Herbalist

Ginseng



*The Cherokees speak of the plant as a
sentient being ... able to make itself
invisible to those unworthy to gather
it. — William Bartram, naturalist,
Philadelphia, 1791*

The two ginsengs

Southern Appalachia, Korean, and northeastern China (Manchuria) use to be part of the same continent known as Laurasia. This created a shared botany.

More stimulating

Korean ginseng – *Panax*



Contains more calmative ginsenosides

American ginseng – *P. quinquefolius*



The two ginsengs

Korean



Introduced into Europe by Marco Polo in 13th century

American Began exporting to China in 1748



Introduced into England in 17th century

American Ginseng

- ▶ *Panax quinquefolius*
- ▶ A member of the Araliaceae family. Other plants in the family include spikenard, toothache tree/prickly ash, devil's club)
- ▶ Panax is Greek for cure-all.
- ▶ Quinquefolius means 5 leaves.
- ▶ A much-under-utilized Native American plant by Western Herbalists.
- ▶ Has become one of the most widely used herbs in history after colonization.
- ▶ It's traditionally eaten raw or used in tea.
- ▶ Called the King of all Tonics.



American Ginseng

- ▶ It was called Little Man or Whole Man by the Appalachian settlers which was taken from a Cherokee word.
- ▶ According to the Doctrine of Signatures, ginseng is considered a plant for the whole body because the root looks like a person.
- ▶ Gathering and selling ginseng was the source of Daniel Boone's wealth.



The two ginsengs

- ▶ The Chinese called it ginseng, a corruption of ren shen (plant root).
- ▶ The Chinese word for ginseng is Jin-chen, meaning “in the image of a man”
- ▶ The current Korean word for wild ginseng is sansam, meaning “mountain jin seng.” The Korean word for cultivated ginseng is insam. In older texts, the cultivated is called shim.
- ▶ The Cherokee ceremonial word for ginseng is Yunwi Usdi which means “little man.” Native Americans believed that the plant was imbued with spirits that helped humans.
- ▶ In every day language, the Cherokee called ginseng “atale-kule” which means “climbs the mountain.”



Digging “Seng”

- ▶ The Appalachians called it “sang or seng.”
- ▶ Seng is both a verb and a noun.
- ▶ Seng or senging is the action of hunting the plant.
- ▶ You go senging to gather the seng.
- ▶ Seng is hunted and then dug.
- ▶ Ginseng wildcrafters might be called “diggers” or “hunters.”



Folklore and History

- Ginseng leaves glow florescent under full moon.
- Ginseng can move around the forest floor.
- Ginseng can hide.
- Ginseng can run away.
- Ginseng can disguise itself to look like other plants.
- Because ginseng is so wily, you have to stalk up on it.
- Plants can go dormant, for years at a time, and you think the ginseng has died.
- Ginseng is sentient and a whole being.
- It can make itself invisible to those unworthy of knowing it.
- It was considered Chief of the White Medicine to the Creeks.



Folklore and History

- Rattlesnakes are the protector of ginseng.
- Never take more than 1 in 4 plants.
- You should always be appreciative of the find.
- In the South, originally, only women and children gathered American ginseng. Once, the men found out how much money could be made, they pushed the women out.
- Plants in the South are stronger than those in the north.
- It's considered a potentiator for formulas in SFM.
- It has power used as a simple or single herb.



"I'm not sure ginseng is any better for you or me than a carrot, but just in case the Chinese are right, I grow it in my garden. I stick a root in a jug of gin and call it Old Duke's Gin and Ginseng."

James Duke, USDA botanist, as quoted in 'The Wall Street Journal'



Am. Ginseng – Properties

- ▶ Expectorant
- ▶ Nervine
- ▶ Immuno–stimulant
- ▶ Increases stamina
- ▶ Cardiac tonic
- ▶ Circulatory aid
- ▶ Hepatic tonic
- ▶ Alterative
- ▶ Adrenal stimulate
- ▶ Adaptogen
- ▶ Lowers blood sugar
- ▶ Mild diuretic



Am. Ginseng – Uses

- ▶ Stress
- ▶ Reduces risk of heart attack
- ▶ May protect against cancers of the breast, cervix, bladder, and thyroid
- ▶ Lifts fatigue
- ▶ Whole body tonic
- ▶ Improves concentration
- ▶ Lifts depression and improves mood
- ▶ Helps balance hormones
- ▶ Sexual stimulant
- ▶ Endocrine stimulant
- ▶ Useful for type 2 diabetes
- ▶ Anti-oxidant activity



American Ginseng

- ▶ Helps lower cholesterol
- ▶ May inhibit growth of some cancerous tumors particularly colon cancer
- ▶ Helps normalize body functions
- ▶ Aids in weight loss
- ▶ Improves sexual activity in older adults
- ▶ Improves impotency in men of any age
- ▶ Improves symptoms of ADHD
- ▶ Studies found that with regular use, older adults have reduced flu and respiratory infections.

American Ginseng – Uses

- ▶ May slow progression of Alzheimer's
- ▶ Improves insomnia
- ▶ Reduces hot flashes; menopausal symptoms
- ▶ Improves depression
- ▶ Reduces inflammation



Ginseng Phytochemicals

- ▶ Several compounds are involved in adaptogenic properties
- ▶ Phytosterols: reduce cholesterol by competing with receptors; also involved in stimulating immune system
- ▶ Immunomodulating polysaccharides
- ▶ Ginsenosides, saponins, glycosides
- ▶ Pharmacological activities of American ginseng different from those of Korean ginseng
- ▶ 60 ginsenosides have been isolated in roots, leaves, stems, flower buds and berries
- ▶ Research indicates that ginsenosides may affect the hypothalamus–pituitary–adrenal axis and the immune system



Ginseng – Research

- Enhances learning ability
- Fermented may improve ischemic brain injury
- Protects skeletal muscles from oxidative stress
- Hypersensitizes multi-drug tumor cells to chemo
- Anti-stress action for the prevention of disease
- Reduce blood glucose levels
- Increased antibacterial activity and shorter recovery times from infection
- Reduced bacterial load of *Pseudomonas aeruginosa*
- Improved inflammation in colon



Ginseng – Research

- Improves erectile dysfunction and premature ejaculation
- Supports immune system
- Helps manage cholesterol
- Helps manage blood sugar
- Improves cognitive functioning and memory
- Increases strength and endurance
- Reduces overall cancer risk
- Reduces stress and anxiety
- Improves mild depression
- Relieves fatigue
- Removes excess water from the body (slight diuretic activity)
- Reduces length of common cold



Ginseng – Research

- ▶ Helps regulate the microbiome balance
- ▶ Protects skin from UVB-induced photodamage
- ▶ May reduce risk of Alzheimer's disease
- ▶ May have radioprotective effects (may protect tissue from radiation damage)
- ▶ Antioxidant and anti-inflammatory activity



Ginseng – Cautions

- ▶ Ginseng abuse syndrome (after 2 years), nervousness, excitation
- ▶ Inflammation, high fever, excessive menstrual flow, MAO inhibitors, concurrent with caffeine use.
- ▶ Avoid concurrent use with warfarin, during pregnancy or breastfeeding, or with liver or kidney failure.



Trade



“Its true value lies, as we know, in its curious rootstock, long famed as being a cure for almost every sort of ill, and an antidote for every poison. Even the word panacea is believed by many to have been derived from its generic name. In China, where it has been largely cultivated and also exported from that country in immense quantities, it is still regarded as being possessed of properties more powerfully stimulating to the human system than those of any other drug.” Alice Lounsberry, *Southern Wildflowers and Trees*

Trade

- ◉ In 1784, 30 metric tons of American ginseng was the first trade item with China.
- ◉ Jesuit priests had identified that American ginseng and Korean ginseng looked similar.
- ◉ 90% of grown or harvested ginseng is sold to Hong Kong.
- ◉ 95% of wild or wild-simulated ginseng goes to China
- ◉ From Hong Kong, it's sorted, graded and shipped to Korea, China, and other areas of Asia.
- ◉ Native wild ginseng is a rarity in China and Korea.
- ◉ In 2023, the United States legally exported about 562 metric ton or 1,238,689.27 pounds of ginseng roots. (wild and cultivated)
- ◉ This equates to approximately 247,737,600 ginseng plants
- ◉ Due to tariffs, China is now turning to Canada for American ginseng. The number of ginseng farms in the US have greatly declined over the last few years.



Trade

- Wild ginseng fetches the highest price with the highest market demand.
- Wild-simulated fetches the next highest price.
- Shade-grown ginseng sells for the lowest price with the lowest market demand.
- American ginseng is sold as either green (wet) or dry poundage.
- Wild green roots are currently running about \$450 a wet pound.
- Dry roots are selling for about \$1250 a pound.
- Ginseng markets varies by the state.



Trade

- In Asia, ginseng is agribusiness. It's used medicinally and put into various foods and beverages.
- Asian Panax ginseng has a well-developed and documented long-history of use for improving health and increasing longevity.
- It's been documented for medicinal use for about 2,000 years and used for food for about 5,000 years.
- It is impossible to accurately determine how long the Indigenous peoples of North American have used American ginseng. Evidence points to thousands of years.



Trade

- Both Korea and China have developed cultivars of Panax to adapt to different climates.
- There are now 12 cultivars registered in South Korea and 9 registered in China.
- Shade grown ginseng is susceptible to fungus and rust rot. Some cultivars have been developed to grow a healthier, more resistant ginseng under shade.
- Other cultivars were developed for a prettier root, higher ginsenoside content, or increased bioactivity.
- The global ginseng market in 2023 was \$710.5 million with the majority of sales in Asian. That's 1/5 of the global herb market.
- China is the largest producer of ginseng followed by South Korea, Canada, and North America.



Growing and Protecting



Why is it considered endangered?

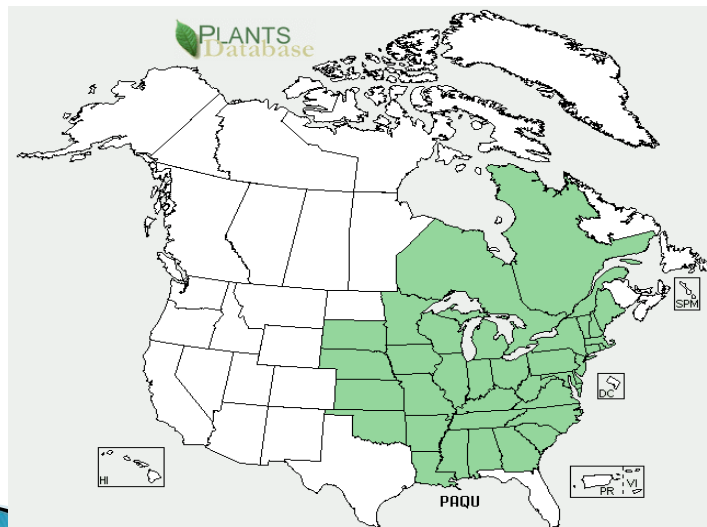
- ◉ Slow growing
- ◉ Most commonly reproduces by seed in the wild
- ◉ Can also reproduce by root and neck divisions
- ◉ Poaching occurs in National Parks where harvesting is illegal which diminishes wild stands
- ◉ Loss of habitat due to development and mountain top removal
- ◉ Over-harvesting for the Asian market
- ◉ Invasive plants stealing habitat
- ◉ Changes in rural culture and increased economic incentives have increased the price of wild roots
- ◉ Unethical wild harvesting before the berry is ripe and can be replanted
- ◉ Food source for deer

American Ginseng

- Grows only in deep shade
- Too much light will kill it or send it into remission
- Needs rich, moist, well-drained soil
- Wild-simulated plants can be harvested after 5–8 years
- Prefers north and east sides of slopes but will grow on any slope
- Grows in mixed hardwoods with oak, hickory and sweet gum
- ½ acre of cultivated seng yields about 200 pounds of dried root

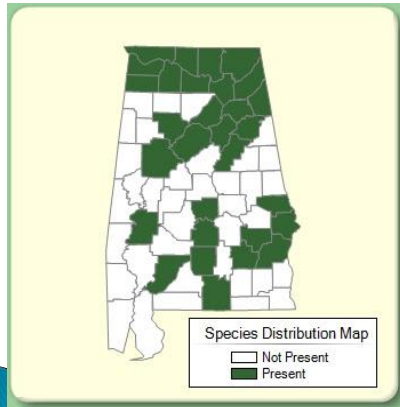


Grows in 34 states; Harvested in 19



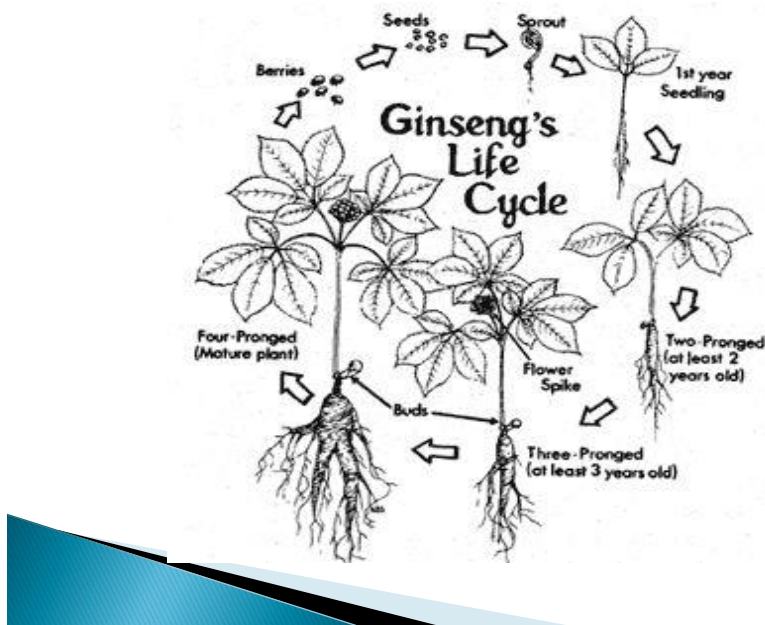
Where does it grow in Alabama

Alabama Plant Atlas
<http://www.floraofalabama.org/Plant.aspx?id=438>



Traditional Harvesting

- Harvest only in season which is Sept. 1– Dec. 13
- Must have 3 five-leaf prongs and be 5 years old
- The older the plant, the more it's worth
- Break off and replant the arm and shoulder
- Replant the tip of root and rootlets
- Plant mature, red berries (seeds) upon harvesting



\$588,000 for root that grew 65 years in wild



CITES

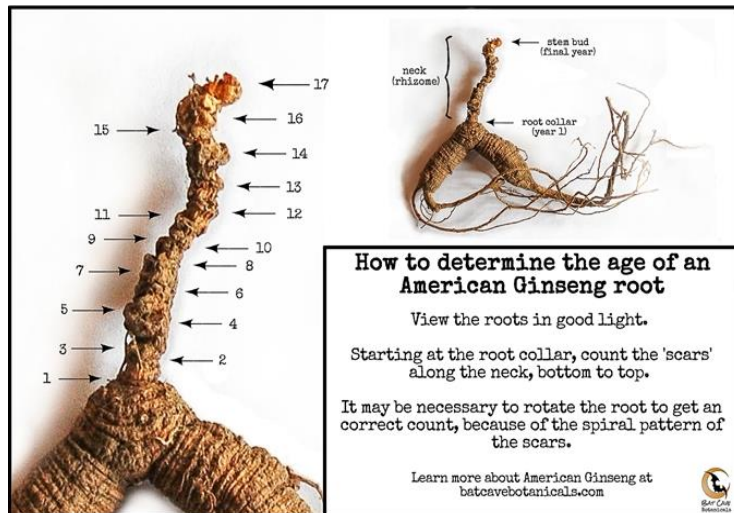
- ▶ International treaty known as CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)
- ▶ Export regulated by the U.S. Fish & Wildlife Service (FWS)
- ▶ Monitors the status of American ginseng and other species in commercial trade among countries
- ▶ Export of wild American ginseng falls under CITES treaty



Counting the Rings

- ▶ Wild America ginseng produces stress rings on the neck.
- ▶ A ring is produced for each year much like a tree produces a ring for each year.
- ▶ It's produced by the force it takes to push through the wild soils. Farmed ginseng doesn't produce rings.





Growing Wild Simulated

- ▶ Plants stay as seedlings for one to two years and then begin to progress through one-leaf, two-leaf, three-leaf, etc. stages of development over time
- ▶ They can stay in seedling stage for several years depending upon environmental conditions
- ▶ Must have 3 leaves before they can reproduce but 5 leaves is mature
- ▶ Blooms in July–August
- ▶ Plants can self-pollinate or cross-pollinate
- ▶ Red berries develop after pollination and are ripe August – October
- ▶ Deer, birds, and other animals love the berries and help disperse the seeds

Growing Wild Simulated

- ▶ Collect red berries and immediately plant them into the ground
- ▶ Plant seeds in the fall before the leaves start dropping
- ▶ Seeds planted will not come up for about 2 –3 years
- ▶ Seeds can be dried and kept for one year. They will keep longer frozen at 0 degrees.
- ▶ Remove the pulp from the seed by soaking about 24 hours. Rinse well and blast with water hose or agitate to remove last of pulp. They can now be stratified or germinated.
- ▶ Seeds can be stratified for better germination numbers
- ▶ To stratify, place seeds in a box with sand and bury for 1 year. Water needs to be able to move through the box but rodents should be kept out.



Growing Wild Simulated

- ▶ The neck can also be replanted
- ▶ The root tip and rootlets can be replanted
- ▶ The arm can also be replanted
- ▶ A stem bent over and replanted will sometimes grow
- ▶ Plant in the shade and in mixed hardwoods
- ▶ Seed can be purchased from a commercial grower



Preparing the site

- ▶ Ginseng needs good airflow
- ▶ Clear away any fallen branches, large rocks, etc
- ▶ May need to remove small shrubs, trees, and undergrowth
- ▶ Rake deep leaf litter to clear site for beds. Take a garden rake and scuff up the soil. Plant the seeds and cover with the leaf litter.
- ▶ Once the plants are up and thriving, may need to thin to maintain good air flow and to remove diseased plants. 1–2 plants per sq. ft.
- ▶ Poaching could be an issue. Deer, mice, and voles love ginseng.



Harvesting the plants

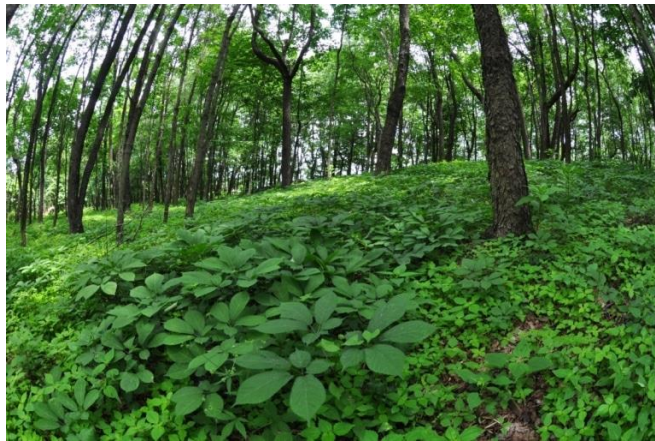
- ▶ Wild simulated plants are subject to the same laws as wild plants and must have a permit
- ▶ Can only be harvested from August 1 – December 1
- ▶ Must have 3 leaves with 5 leaflets and 4 or more stem scars on the neck
- ▶ Must be at least 5 years old; 8-year-old plants have much, much better market value
- ▶ Dig the roots and slightly wash or brush clean. If the roots are too clean, the market value is lower.
- ▶ Dry on a screen in a well-ventilated area between 85–95 degrees. If the humidity is high, you might need 100 degrees.





Too close.







Shade grown

Thanks for coming!!!!!!

