요 T워P 아더 아니기에 DCW가 TOAG 4M 역 ORO 사용가.
"No Self-Respecting Cherokee Would Ever Be Without
A Cornpatch."

CHEROKEE PROVERB

The preceding is more than a simple statement; it is a metaphor for being "Cherokee". Cherokees were among the first botanists and agronomists on the planet. Many have stated that one cannot be Cherokee without Cherokee plants, and without our Cherokee plants, one cannot be Cherokee.

The Cherokee Nation SeedBank Garden & Native Plant Site was established in 2006 as a means to identify and preserve Cherokee heirloom crops. Today, the site is home to hundreds of different crops and native plants, and distributes thousands of plant products to Cherokees across the world. The Cherokee Nation SeedBank Garden and Native Plant Site provides a great opportunity

for Cherokees to continue the traditions of our ancestors, educate our youth, and become better Cherokees.

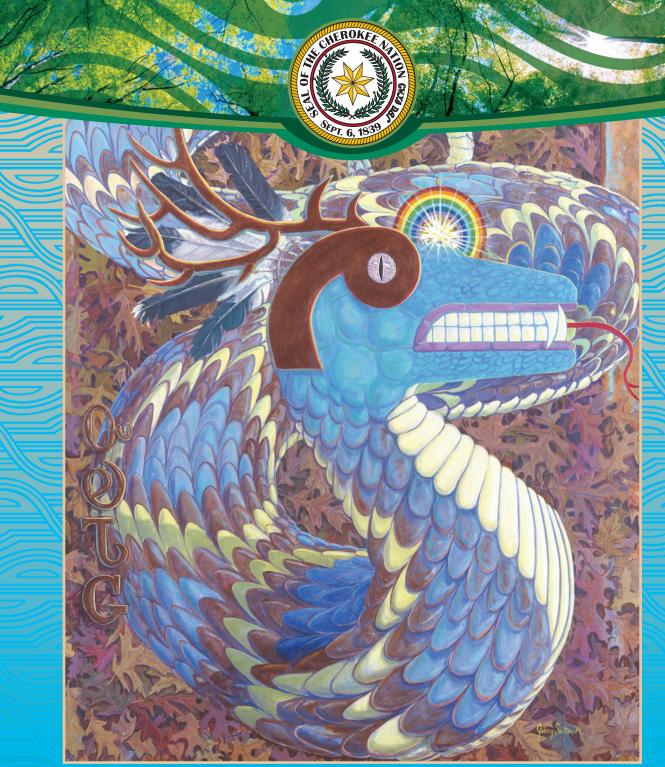
#### A Word to the Wise

It is the Tribe's pleasure to provide Cherokee plants and seeds. Please note the Seed Bank contains rare cultivars that are not commercially available and represent centuries of Cherokee culture and agriculture. It is important to preserve these rare genetics, so please be mindful of the directions denoted in this planting guide. Any divergence from these instructions could result in hybridization and loss of the plants' genetic integrity. These seeds have been produced in the Cherokee Nation by trained staff and are made available to Cherokee Nation citizens for cultural uses. This seed stock is not to be sold or offered for sale. The propagation and cultivation of these rare plants is the only way to assure their genetic preservation and the continuation of a vital component of Cherokee history. GV; Thank you.

For more information, email seedbank@cherokee.org or call 918-453-5336.

CHEROKEE NATION® P.O. Box 948

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**Cherokee Nation** 

SeedBank Garden & Native Plant Site



(Heirloom Crops):

4M Corn

### **Native Plants**



- 1. Cherokee Colored Flour A large flour variety, multiple kernel colors (often used in making cornmeal).
- 2. Cherokee White Flour A large flour variety, white kernels (often used in making hominy).
- 3. Cherokee Yellow Flour A large flour variety, yellow kernels (often used in making cornmeal).
- 4. Cherokee White Eagle A large dent variety, blue and white kernels with a silhouette of a flying eagle (pictured, often used ceremonially).

#### Planting and growing instructions:

All of our corn varieties are warm season crops. These heirlooms require 4-inch soil temperatures of 65° or above to vgerminate; planting before such temperatures will usually result in total crop failure. Seed germination rates are based mainly upon adequate soil temperature and available moisture.

- Moisture Do not plant seeds in waterlogged soil. Too dry is better than too wet.
- Seed depth 1 1½ inches. Too shallow is better than too deep.
- Seed spacing 6 inches apart in rows. Rows should be spaced no more than 2 feet apart for best pollination rates.
- Germination 6-14 days (in optimum soil conditions).
- Sun exposure Full sun.
- Growing season 70-110 days (depending upon level of maturity desired).
- Cross-breeding issues Maintain a distance of at least 1,200 feet between different varieties.
- Weeds All crops require aggressive/preventive weed control when young. A garden without weeds will produce better crops. Mulching is a great tool to prevent weeds and maintain moisture levels.
- Both excessive heat and unseasonably cool temps will curtail the growth/production rates (as will saturated soil conditions).

From alleviating poison ivy rash to preparing culturally appropriate meals, the Cherokee Nation SeedBank Garden & Native Plant Site provides a variety of seeds for many uses. Today, our list of species eclipses the century mark and grows yearly. Below is a list of examples of these species:

- Alleghany Chinkapin 00 日 タ 日
- American Basket Flower WMC Dk จือัง
- American Hazelnut TGyし
- Blackberry ∂95C
- Buckbrush EZHのス
- Buttonbush SWJP RW โม
- Cutleaf Coneflower ⊕C⊖
- False Indigo 아ᆔ서 동G엔서
- Green Dragon TVTGのJ
- · Hearts-a-bustin JEWGWJ
- Honey Locust ਹਿ 4ਮਾ
- Huckleberry JG@
- · Jewelweed C국가 국인기
- Osage Orange SG&J しWOト
- · Ozark Chinkapin О°ҺУӨ
- New Jersey Tea DVC b O SGS DAЛ
- Northern Catalpa JSGSRI

- Northern Spicebush ZLC
- Paw Paw JRY
- Possum Grape 0008
- Purple Coneflower TOL SOS
- Rattlesnake Master 4W ₩ @
- Red Root УSI OOOSP
- Rivercane T அவ
- Sassafras つりのしか
- Shagbark Hickory トカイトのイ
- · Sumac IGI
- Sunchoke 90 TSWAA
- Trumpet Vine SVの分のJ
- Watercress DhW Dara Oം നി
- Wild Blue Indigo O h ๗ ฦ จิ ป ป ฟ h
- · Wild Potato TOF D A 최 역
- Wild Senna E t l

The list of heirloom crops grows every year. Each of these native plants has unique planting/growing/harvesting requirements, far too many to list here. Site staff are always available to answer your questions and assist you in growing your Cherokee plants. Please contact the SeedBank for assistance and growing/harvesting tips.

seedbank@cherokee.org





## Rക KW Native Tobacco

(Nicotiana rustica)

## Sa Beans



Native Tobacco – One of the most important plants of the Cherokee (one of the Seven Sacred Plants of the Cherokee: Eastern Red Cedar, Native Tobacco, Wild Ginseng, Goldenseal, Red Root, Native New Jersey Tea, & Rattlesnake Master). Aside from the innumerable uses in Cherokee culture and medicine, tobacco is a great addition to any garden due to its ability to attract pollinators, deter pests, and produce a seemingly never-ending supply of beautiful, yellow flowers. This IS NOT smoking tobacco. Using this plant for recreational smoking would be an affront to Cherokee culture and a very dangerous endeavor as well, as its nicotine content is nine times greater than that of smoking commercial tobacco.

#### Planting and growing instructions:

Native Tobacco is a warm season plant, needing 4-inch soil temperatures of 65°F or above for successful germination. These seeds are SMALL and germination times are often measured in hours, not days. Germination is easy, establishment of the seedling is not; these plants take a lot of care in their early stages. Unlike many of our crops, a successfully established Native Tobacco garden will often re-seed and perpetuate itself year after year with only minimal care, but starting a bed of this plant can be challenging.

- Moisture Plant seeds in SATURATED soil...commercial potting soil is best.
- Seed depth Simply press the seeds into the top of the soil, do not bury. Generally, these plants are started indoors in small peat pots with controlled temps, saturated potting soils, and very humid environments (like a greenhouse). 3-5 seeds per pot.
- Germination 1-2 days (in optimum soil conditions). Once the seeds sprout, the seedlings grow rapidly, often too rapidly for their stems to support the weight of the leaves above. This can result in the seedling's stem breaking, thus, killing the plant. To strenghten stems, once the seed sprouts, apply a bit of wind/breeze to the seedling. This method ensures the stem is properly strengthened as it grows (NOT TOO MUCH wind/breeze, just enough to induce a gentle swaying of the stems). The introduction of wind/breeze must be done in conjunction with the maintenance of near 100% humidity. Many accomplish this by using a small fan inside a miniature greenhouse-type setting. In a few days the plant will begin putting on numerous leaves. At this point, it can be transplanted in its final location. Place the seedlings approximately 10-12 inches apart.
- Sun exposure Full sun.
- Growing season 40-80 days (depending upon level of maturity desired).
- Cross-breeding issues Native Tobacco should not be grown in the presence of other tobacco species.
- Weeds All crops require aggressive/preventive weed control when young. The more weed free your garden is kept, the better your plants will perform and produce. Mulching is a great tool to prevent weeds and maintain moisture levels.
- Pests Native Tobacco is often planted next to tomato plants as it is the host of the Tobacco Hornworm (often
  mistakenly called the "Tomato Hornworm"). While Tobacco Hornworms generally kill tomato plants, they do not
  kill the tobacco plants (and since they prefer them, tomato plants are left hornworm free). Tobacco can be susceptible
  to aphid and mite infestations. In such instances, it is best to consult a "specialist" in your area for defense
  and treatment strategies.

- 1. Cherokee Long Greasy A pole variety which bears a small white bean. "Greasy" comes from the glossy sheen of the mature pods. Allow to mature in the pod and shell for use in soups and stews.
- 2. Cherokee Trail of Tears A pole variety which bears a small black bean (pictured). Allow to mature in the pod and shell for use in soups and stews.
- 3. Turkey Gizzard, Black A pole variety which bears a striking black and white bean. Made famous in the Cherokee tale about "magic" beans (retrieved from the gizzard of a turkey). Allow to mature in the pod and shell for use in soups and stews.
- 4. Turkey Gizzard, Brown A pole variety which bears a large brown and white bean. Made famous in the Cherokee tale about "magic" beans (retrieved from the gizzard of a turkey). Allow to mature in the pod and shell for use in soups and stews. Our easiest bean to grow.

#### **Planting and growing instructions:**

Although all of the tribe's bean varieties are warm season crops, they will generally not pollinate when ambient temperatures exceed 88°F. Thus, with 4 inch soil temperature requirements of 65°F or above for successful germination, there is often insufficient time for these plants to make a crop before hot temps begin inhibiting pollination in Cherokee Nation Reservation. It is for these reasons that early spring plantings (beware of late frosts) or planting as a fall crop yields better results. Additionally, excessive moisture during germination and sprouting periods often results in fungal infections which will usually result in total crop failure.

- Moisture Do not plant seeds in waterlogged soil...too dry is better than too wet.
- Seed depth 1- 1½ inches...too shallow is better than too deep.
- Seed spacing 6 inches apart in rows, row spacing is not a critical factor.
- Germination 6-14 days (in optimum soil conditions).
- Sun exposure Mostly sun 8+ hrs/day.
- All of our beans are "pole" varieties...they will require a trellis or some type of support for them to grow up/upon.
- Growing season 60-80 days (depending upon level of maturity desired).
- Cross-breeding issues Generally not a major concern.
- Weeds All crops require aggressive/preventive weed control when young. The more weed free your garden is kept, the better your crops will perform and produce. Mulching is a great tool to prevent weeds and maintain moisture levels.
- Both excessive heat and unseasonably cool temps will curtail the growth/production rates (as will saturated soil conditions).



# <sub>S</sub>৭৮ Squash

(Cucurbita maxima)

### GJY Gourds

(Lagenaria siceraria & Cucurbita foetidissima)



- 1. Buffalo Gourd (C. foetidissima) A gourd native to North America (most other gourds are of Mediterranean origins). Called by many names, including stinking gourd, this plant is unlike others in our SeedBank as it is native to Oklahoma and not our eastern homelands. The "fruit" becomes so bitter that "even a buffalo would not eat it." Generally used culturally in arts and crafts endeavors.
- 2. Gourd, Basket, Dipper, Jewel, etc. (Lagenaria siceraria) Native to Mediterranean areas, its arrival in North America is a bit of a mystery (predating European contact). Still, these "fruits" played a major utilitarian role in North America. With a bit of experimental breeding, virtually any shape or size gourd can be grown (from smaller than a golf ball to larger than a soap kettle). Generally used in arts, crafts, and utilitarian endeavors.
- 3. Georgia Candy Roaster Squash (Cucurbita maxima) Quite possibly the tribe's most desired seed because the fruit is simply delicious any way it is prepared. This winter squash can be used in any recipe that requires pumpkin, squash or sweet potato (from main course to dessert). Mature "fruits" can weigh in excess of 20lbs. Additionally, when properly stored, it can keep for months sans refrigeration.

### Planting and growing instructions:

Remember, all of our gourd and squash varieties are hot season crops, planting in early spring generally results in zero pollination success. While most of our crops need 4-inch soil temperatures of 65°F or above for successful germination, these plants do better with much higher temps. Furthermore, germination can take weeks, which increases risks of seed rot, especially when temps are low and moisture levels are high. Thus, planting later is much better than planting sooner. Except for the Jewel Gourd, all of these plants need a lot of space...10 feet X 10 feet is the bare minimum, 20 feet X 20 feet is better; when left untrimmed, these plants can easily take over an entire garden. With squash, larger plants generally mean more fruit; With gourds, more fruit per vine generally equates to smaller fruit size (so thin excess fruit from vines to ensure big gourds).

- Moisture Do not plant seeds in waterlogged soil...too dry is better than too wet.
- Seed depth 1 1½ inches...too shallow is better than too deep. Placing seeds in a mound is a good way to ensure temps stay high and the soil does not become saturated.
- Seed spacing Gourds and squash are usually planted in mounds. A good mound size is 2' diameter with a height of 6 inches. Plant 3-4 seeds in the mound about 2 inches apart. Space mounds at least 10 inches apart (except for Jewel Gourds...these are small plants and mounds can be as little as 2 feet apart).
- Germination Up to 14 days (in optimum soil conditions), sometimes longer.
- Unseasonably cool temps will curtail the growth/production rates (as will saturated soil conditions).
- Sun exposure Full sun.

- Growing season 70-100 days (depending upon level of maturity desired).
- Cross-breeding issues Maintain a distance of at least 1000 feet between different varieties.
- Weeds All crops require aggressive/preventive weed control when young. The more weed free your garden
  is kept, the better your crops will perform and produce. Mulching is a great tool to prevent weeds and
  maintain moisture levels.
- Pests Gourds are generally trouble-free once started. Unfortunately, it seems "all bugs love squash". To ensure a good harvest:
  - o Squash Bug...keep plants free from infestations. Hand picking the bugs daily generally works as good as any chemical treatment.
  - o Squash Vine Borer...even one insect can kill the entire plant. Thus, if your garden is located in an area known to harbor these pests, please consult a "specialist" in your area for defense and treatment strategies.
  - o Cucumber Beetles...while these insects generally do not kill the plants directly, they are vectors for a bacteria that causes a deadly wilting disease. Much like the Borers mentioned above, treatment is more a broad spectrum of combative strategies (both direct and indirect). If your garden is located in an area known to harbor these pests, please consult a "specialist" in your area for defense and treatment strategies.

**TIP:** Squash Vine Borers and Cucumber Beetles can and do kill plants, even in the gardens of seasoned pros. Thus, it is always a good idea to plant mounds in a few different locations and at different time intervals to ensure a successful harvest.

