

# RAINBOW

Corn



# GROWING GLASS GEMS

- Glass Gem Corn is an intriguing varietal that produces rows of glimmering, opalescent kernels that seem to bloom like heirloom jewels.
- Like many heirloom treasures, “Glass Gem” corn has a name, a place, and a story. Its origin traces back to “Carl Barnes”, a part-Cherokee farmer living in Oklahoma. Barnes had an uncanny knack for corn breeding. More specifically, he excelled at selecting and saving seed from those cobs that exhibited vivid, translucent colors. Exactly how long Barnes worked on Glass Gem—how many



When you peel back the husk from a freshly harvested ear to reveal the rainbow of colors inside, it's like unwrapping a magical present. And this is a gift that is meant to be shared far and wide.”



Seedsman Greg Schoen of the Seeds Trust got this “Glass Gems” corn from his “corn-teacher,” Carl Barnes. He planted the seeds, had a gorgeous harvest last fall, and posted the posts on Seeds Trust’s in October. The kernel color is a fascinating—dare we say, colorful—topic in the annals of genetics research. For one, why are there so many vibrant colors in a single ear of corn? You don’t usually see flowers of different colors on a single tree. Each kernel is actually a different corn plant (or the seed of one) with a unique mix of genes inherited from its parents. That’s why counting up kernels of different colors in the more familiar purple and yellow corn cobs is a common way.



## **The Origins and Journey of 'Carl's Glass Gems' Rainbow Corn**

By Greg Schoen

The beginnings of maize, or corn as it is commonly called, go back to the indigenous farmers of south central Mexico who worked with its ancestral grasses to bring forth a usable grain. Over thousands of years the Native peoples of the Americas adopted maize into their agricultural and ceremonial life ways, and developed it into the diverse forms that we see today.

That little ear of corn with the translucent, jewel-colored kernels, whose picture has recently received attention around the world, has a story. And its kinfolk from a remarkably colorful gene pool share this story. Because of this exposure, I find it appropriate to personally share how this corn originated and its journey to this day.

The original seed was obtained from Carl L. Barnes of Oklahoma

## **Reconnecting With a Lost Heritage Through Rare Corn**

As a youth, Carl began to seek out his Cherokee roots, exploring the knowledge of his own ancestors and of Native American traditions in general, by learning from his grandfather. Much of this quest centered on the ceremonies surrounding planting, harvesting, and honoring seeds.

In the course of growing some of the older corn varieties still being farmed at that time, Carl began noticing ancestral types of corn re-appearing in his crops. As he isolated these, he found many of the variants to match up with traditional corns that had been lost to many of the Native tribes – particularly those peoples who had been relocated during the 1800s to what is now Oklahoma. Thus, he was able to re-introduce specific corn types to the elders of those tribes, and this helped their people in reclaiming their cultural identities. The corn is, to them, literally the same as their blood line, their language, and their sense of who they are.





**“The Seed Remembers, in every cell is the seed of everything.  
The Mystery of energy is the magic of a miracle.  
Mystery resolves itself”**

**Carl White Eagle Barnes, Cherokee Corn Elder 8-4-11**

**There are hundreds of varieties of Corn. They can stop you right in your tracks. The beauty is unbelievable. The tastes are profound. Your body is hungry for the nutrition of these Old Ones. Your spirit is hungry for them too. If you get an opportunity to grow one that calls , you will never again see corn the same. It has changed my life profoundly. Dianna Henry**





POP  
Selected out of  
Rainbow Popcorn

PRIMARY  
MAIZE/CORN  
TYPES  
SWEET

Pawnee & Navajo's  
FLOUR  
StarFive's Light  
Flour

PRIMARY  
MAIZE/CORN  
TYPES  
FLINT

PRIMARY  
MAIZE/CORN  
TYPES  
POD  
Grandmother's  
Grandmother's

# PRIMARY CORN TYPES





***And Yet, and still,***



***In the hands of a few  
Like brilliant gems'  
The sacred seed,  
Still respected***



# **Rainbow Corn (Maize) Growing Instructions**

## **Sent to us, April 2013 by Greg Schoen**

This Rainbow corn is a genetically diverse type of popcorn and flint corn developed by crossing traditional Native American miniature popcorns with other traditional flint and flour corns.

This corn produces ears ranging from four to six inches (10-15 cm) in length, generally with 12 rows of kernels, with some ears having 16 rows. The kernels exhibit a full range of colors, with some ears having all colors of the spectrum, with a translucent quality and many variations of hue.

Kernels for the popcorn types will be smaller and more rounded, and the larger flint types tend to have kernels of similar 'glassy' density but flattened on each side. Plants will produce two or three ears per plant

This rainbow corn responds well to planting in rows 30 inches (90 cm) apart, with a final spacing between plants within the rows of 8 to 12 inches (20 to 30 cm). Plant the seeds (kernels) to a depth of about  $\frac{1}{2}$  to  $\frac{3}{4}$  inch (about 2 cm).

Other planting patterns can be done, according to local practices, such as the Native American traditional planting of 3 to 6 seeds per hole and a larger spacing of 4 to 5 feet (1.5 meters) between the clusters of plants.

Depending on climate conditions this corn will mature in approximately 110 days. Ears are harvested when the husks have turned brown and dry. The husk can be removed or left on the ears for storage. After picking, the ears should be allowed to dry for several days in open air before storing, to allow residual moisture to dissipate and thus prevent mold growth. Initial storage should still allow some air circulation if possible. The colors seem most intense when newly harvested; however they keep their luster and brilliance rather well even for a few years if not left in direct sunlight.



Separation of kernels from the ears can be done for storage of bulk seed. Seed of this corn, stored in cool and dry conditions will retain its viability for several years. Although this corn is grown for ornamental and ceremonial purposes, it is completely edible. It can be ground into flour and used as any other cornmeal in cooking. The popcorn types will pop to some degree but this is not reliable.

For seed saving, it is advisable to grow a sufficient number of plants to ensure that the genetic diversity of your original seed sample is retained from generation to generation. For corn (maize) this requires a minimum of 200 plants. For seed stock and distribution to others, seed from as many ears as possible should be blended together. If selecting for a specific characteristic, try to save seed from as many similar ears you find that have the desired characteristic.

This rainbow corn is particularly suited for children, to learn about growing corn, and gardening in general. Every ear is unique and is a surprise when it is opened to reveal the colors.

## Guidelines for Keeping Primary Corn Pure

- 1.) Always Plant with Loving intent
- 2.) Plant where NO other corns are grown for 1 mile, - plant 1 variety per garden
- 3.) Plant in groups- not in rows
- 4.) Do Not use commercial fertilizers and herbicides  
Water only when absolutely necessary: at planting and pollination times.  
Mulch to conserve garden moisture
- 5.) Of your Good Crop of Seed,  
SAVE 1/3 for your seed next year  
SAVE 1/3 back for redistribution to others  
Eat 1/3 for yourself
- 6.) Always Protect from Genetically Modified Corns

## Seed Saving Tips

- Gather Seeds from Mature plants Only. Thrash, clean, cure them out properly, and dry them down
- Treat to kill insect and lava...in an airtight glass container, use the Freeze—Thaw—Freeze method. 0 degrees for 4 days in, 4 days out, 4 in. This will usually keep them bug free for about a year. Some seeds require only the first freezing.
- Store seeds Dry, Clean, Dark, Cool and Air tight, in a labeled paper envelop or glass jar. Avoid Plastic
- Label your seeds inside jar & out, Name, Year, Grower, Original source, & any special conditions like: wet year.
- Keep good records for what you grow



# Primary/Heirloom Seeds



## *Message from Dianna Henry –Seed Grower*

Our food plants are on loan to us from thousands of years of safekeeping through the hands of our ancestors. These seeds are their living gift to us, a living legacy.

What we do with them affects our Grandchildren’s Grandchildren. Our vegetable and fruit heritage comes from the whole world. The way we feed our bodies determines our overall health. When you plant a Primary seed you get back seeds like its parent in wholeness, nutrition, and taste. Hybrids and GM plants seeds are not designed to be replanted. Their offspring are often very different from the parent seed. These must be brought anew each year of planting. They are created for monetary reasons. Primary seeds were and are grown for nutritional and sometimes ceremonial reasons. As our cultures have evolved, so too, have our food plants—keeping up with immense climate and human body changes. HEIRLOOM means it has had to be handed forward for at least 50 years. It has gone through the tests of time and climate. Primary means basic, of original form, indigenous. **PLAN T Primary seeds this YEAR!**





# WISDOM OF THE CORN

