

# Know, Sow, Grow! Heirlooms, Organics, and GE's

## Digging Deep with Cynthia Brian

*"As is the garden such is the gardener."* Francis Bacon

By Cynthia Brian



*Azaleas in many colors with red camellia trees highlight this serene shade garden.* Photos Cynthia Brian

During my freshman and sophomore years at UCLA, one of my jobs was managing a popular health food store, Nature's Health Cove, at the time a brand new concept in healthy eating. I vividly remember customers paying as much as ten times the price for small, worm-eaten apples, and limp, shriveled greens that had traveled hundreds of miles to be ingested by wealthy Beverly Hills residents on their new "organic" kick. I'm not sure anyone understood what 'organic' really meant as I repeated my script of "grown without synthetic pesticides, insecticides, fertilizers, colorants, or sewage sludge." Genetically engineered had not yet been invented. But one thing was for sure... these early adopters had climbed onto the bandwagon to nutritious sowing and growing.

It wasn't until the 1960s that agriculture turned into agri-business with large corporations buying farms and science genetically modifying the seeds we plant. Before that time, farmers saved, exchanged, traded, and sold seeds that had been in their families for generations. (I still plant, harvest, save, gift, and sell heirloom Hollyhock seeds that are

over 100 years old brought over on "the boat" by my grandparents from Italy.) Varieties that have been cultivated and passed down through the ages via human and natural selection are termed "heirlooms." Most people believe that tomatoes are the only heirlooms when actually there are thousands of varieties of produce that are heirlooms including beets, cauliflower, squash, melons, beans, eggplants, peppers, lettuces, and flower specimens. (You've heard of heirloom roses, right?)

As a gardener, if you want to save seed from year to year, you need a glossary of understandable terms. To help you sow and grow, I have created a simple guide help you make informed decisions for buying, planting, and consuming.

Organic: "Certified organic" is a legal term that may be used only by growers who are in strict compliance with all the detailed rules and regulations of the USDA's National Organic Program. In the United States, this means that the soil in which the crops are grown must not have had any prohibited substances in it for the three years prior to harvest. The operation must be managed according to an approved Organic System Plan and the parcel must be inspected by a USDA accredited certifier. The words I used in my college script to describe the meaning of "organic" while working at the health food store are still true today for anything deemed to be organic with the addition of "not genetically engineered."

GMO: Genetically modified organisms are any plants produced through genetic modification either by engineering or long time plant breeding methods that could happen naturally. Even an organically grown plant that has been manipulated to improve production, quality, color, or performance, may be considered genetically modified because these changes could occur in nature. A great example of a popular GMO is the seedless watermelon.

GE: Although the terms GE and GMO are frequently used interchangeably in the media, their meanings are very different. GE refers to genetic engineering using high-tech methods that change the DNA of the plant in a way that would never occur without human intervention. GE plants are not found growing naturally. Big agri-business farms use corn, cotton, soybeans, and other crops that have been genetically engineered. The issues of GE food sources are controversial as the benefits or harm to our health have not been accurately quantified.

Cultivar: This is a variety of a plant that has been selected through cultivation. It maintains its characteristics through propagation. A cultivar can be either a hybrid or open-pollinated variety. In catalogs, when you see the genus and species listed with a Latin name and a common name, the cultivar is usually the common name. For example, *Alstroemeria's* common name is Peruvian Lily.

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*The cotton ball puffs of the Queen Anne - cheery bode for a bountiful crop.*



*Blue and yellow Dutch iris sprout up beneath the first buds of Angel Face roses.*