



A Walk through the Heirloom Apple Orchard

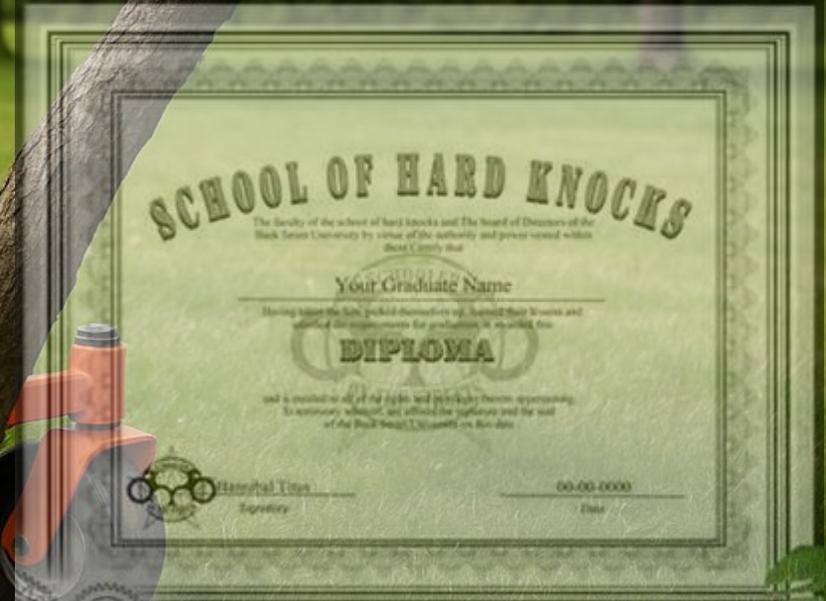
Regina Donald





A woman with long brown hair, wearing a maroon t-shirt and blue jeans, is driving a red riding lawn mower. She has a shocked expression on her face, with wide eyes and an open mouth. The mower is positioned against the trunk of a tree with green leaves and red apples. The background is a grassy field with more trees under a blue sky with light clouds.

Honorary graduate from School of Hard Knocks













Inspire



FOOD CITY
FOOD CITY

PICK YOUR APPLES FROM
SWEET TO TART

FRESH
PRODUCE
STAYS
FRESH

Gold Delicious Apples
1.99

2.49

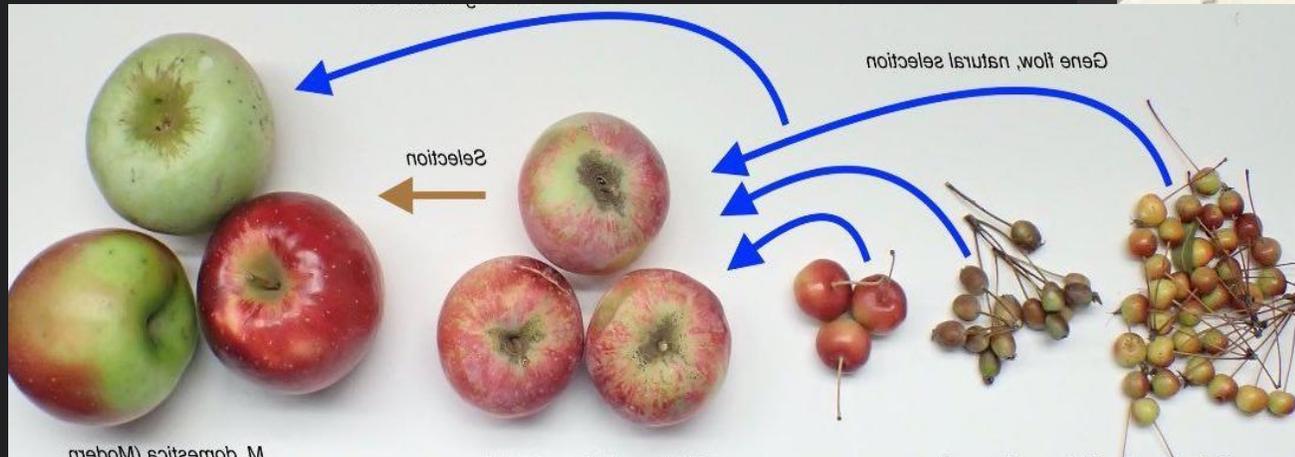
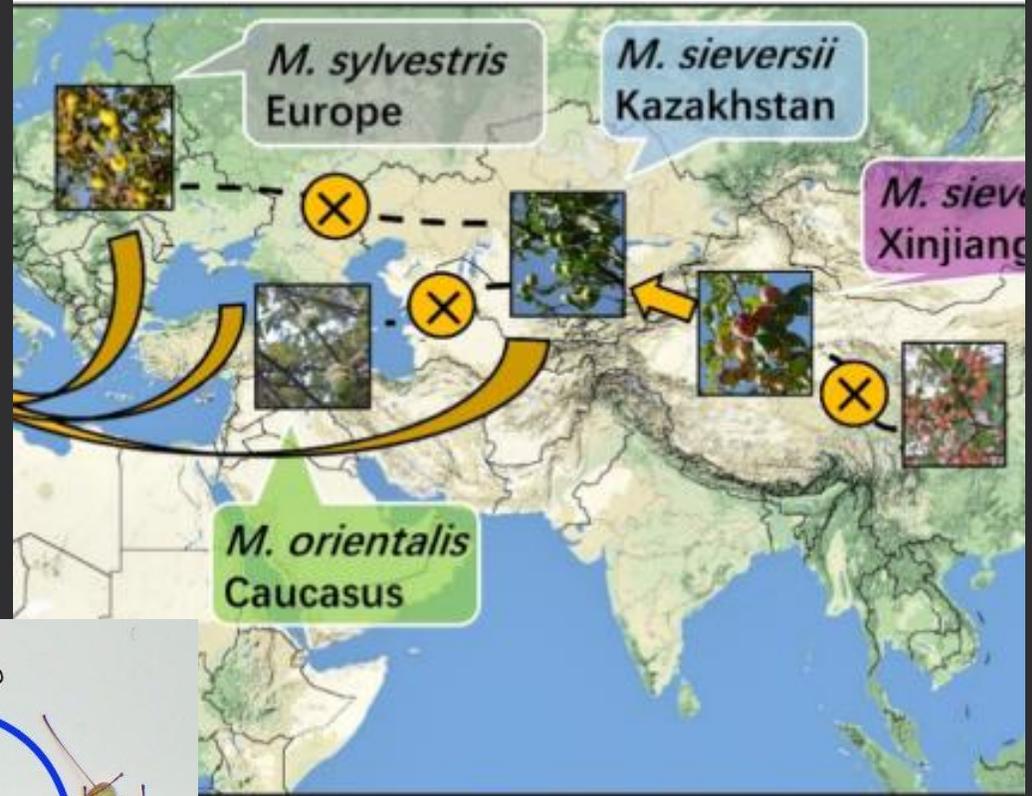
\$5

LOOK

In remote Kazakhstan, wild apple forests, known as *Malus sieversii*, flourished in the Tian Shan mountains of Central Asia.

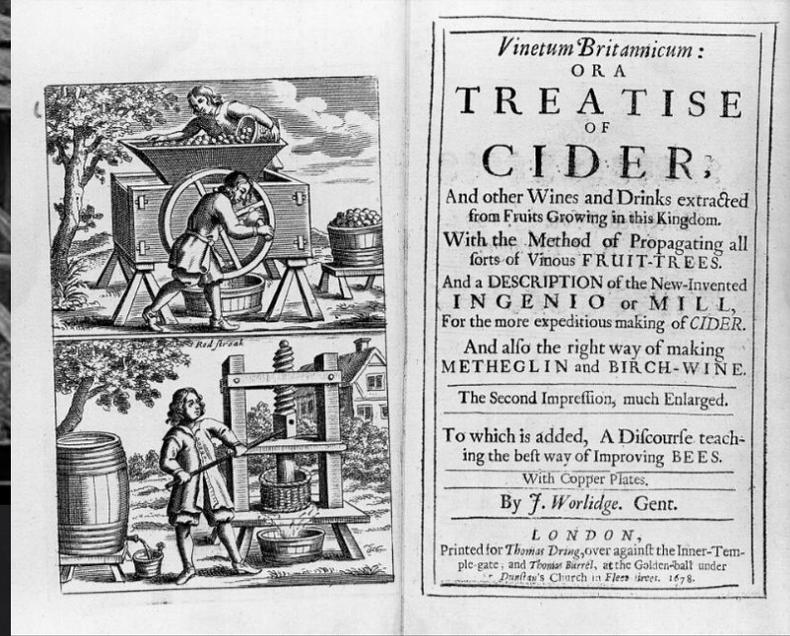
(Tee – EN - shaan)

(MAL-us see-VER-see-eye)



Slide reversed from original

Fried
Stewed
Canned
Dried
Apple butter
Raw cider
Hard cider
Apple brandy



“Apples sneaked into America in a glass of cider”



Unique Colors and Sizes



Red Delicious



Cathead



Glockenapfel



Epi Etoile



Knobbed Russet

unique
shapes



pear



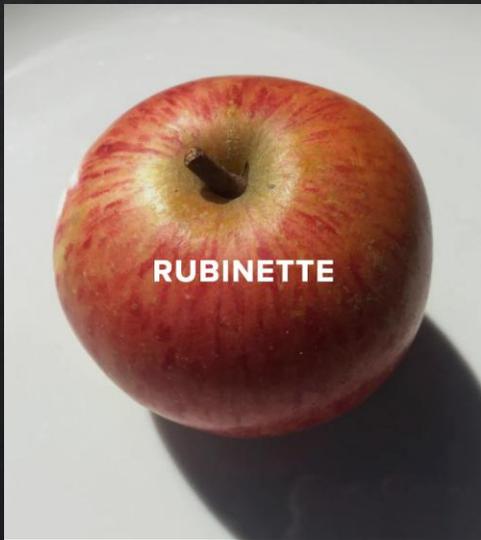
pear and nuts



cherry and anise



cinnamon

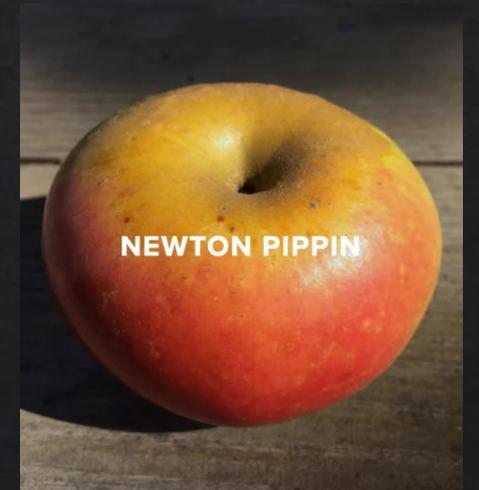


orange, lemon and vanilla



tangerine

Flavors



pineapple

Russets characterized by a dull, rough, brown, or russeted skin, which gives them a "potato-like" appearance. Their texture is often denser, drier, and chewier than other apples, and the flesh may have a more pronounced, often nutty or sweet-tart flavor.

Permain apples are a diverse group of old varieties known for their characteristic pear-like, tapering shape and a sweet, aromatic flavor that often includes notes of vanilla or pear. While specific traits vary by type, they generally have firm, yellowish flesh and are popular with gardeners for their natural disease resistance.

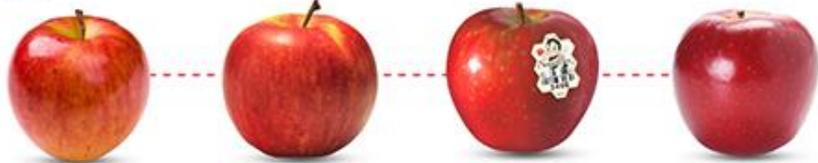
Pippins are known for their crisp, firm, and juicy flesh that is often yellow or cream-colored. Their flavor is typically aromatic, with variations ranging from sweet and tangy to intensely fruity and slightly tart. "Pippin" was derived from the French word "Pepin," meaning "seedling" or the "pip of a fruit."

Limburtwig apples are a family of Southern Appalachian heirloom varieties characterized by their sweet-tart flavor, aromatic quality, and weeping growth habit. They typically have a rough, russeted skin with a yellow base and a red wash. The flesh is often yellow and juicy, and many varieties are good for fresh eating, pies, or cider.

Your Apple Adventure Guide

Be it tart or be it sweet,
each apple here is good to eat!

Sweetest

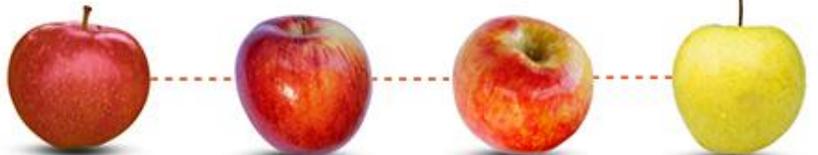


Fuji

Gala

SugarBee®

SnapDragon®

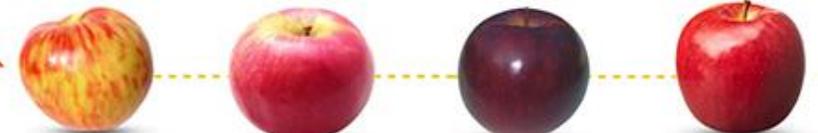


SweeTango®

Braeburn

Honeycrisp

Golden Delicious

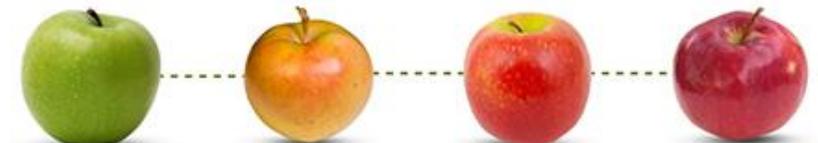


Gravenstein

McIntosh

Arkansas Black

Cosmic Crisp®



Granny Smith

Pink Pearl

Pink Lady®

Rave®

Tartest

Note: This guide is based on the opinions of our fruit experts at The FruitGuys. However, no two apples are alike! On your apple adventure, you might discover a sweet Pink Pearl or a tart Fuji. That's what makes snacking so much fun.

SweeTango® and Rave® are registered trademarks of the Regents of the University of Minnesota.

Want farm-fresh fruit for your office? Reach out today!

MOST
TART



GRANNY SMITH

PACIFIC ROSE

MCINTOSH

EMPIRE



JAZZ

BRAEBURN

LADY

ENVY

CORTLAND



MACOUN

AUTUMN
GLORY

OPAL

SUGARBEE

SMITTEN



JONAGOLD

GOLD
DELICIOUS

RED
DELICIOUS

SNAPDRAGON

HONEYCRISP



JUICI

AMBROSIA

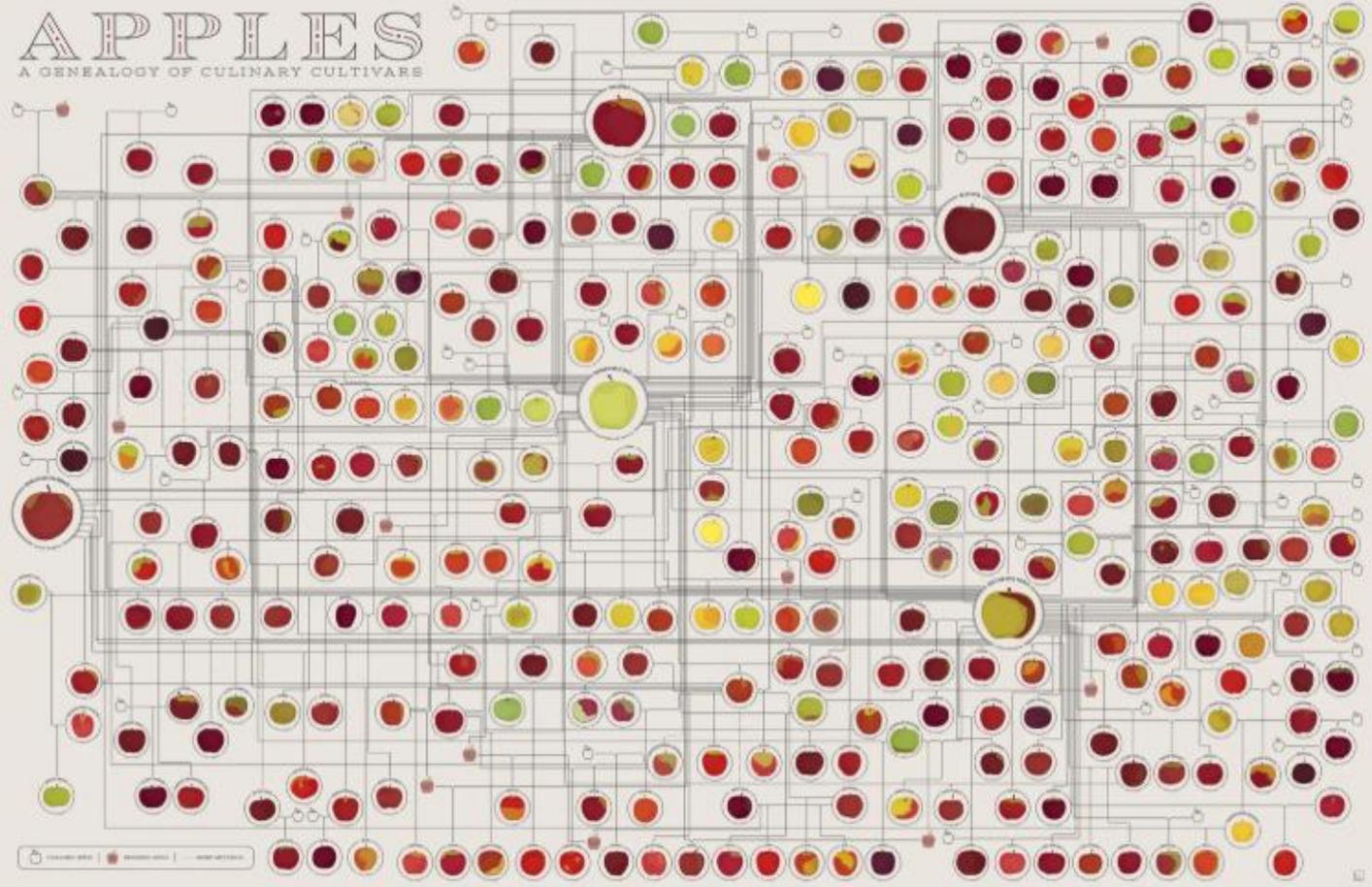
GALA

FUJI

MOST
SWEET

APPLES

A GENEALOGY OF CULINARY CULTIVARS





The **Northern Spy** originated in New York around 1800. The taste is mostly sweet but slightly tart apple that grows best in cooler climates like Michigan and upstate New York



Gravenstein is an apple that originated in Denmark but is popular across the US, especially in California.



Braeburn originated in New Zealand. A mostly sweet but slightly tart apple that had Granny Smith as one of its parents. It has hints of pear and cinnamon.

Cooking Apples



Winesap apples originated in New Jersey during the colonial period. The apples are juicy with a sweet/tart taste. Winesap stays firm when cooked and works well baked into pies.



Cortland originated in New York state in 1898 from parents Ben Davis and McIntosh. Cortland has crisp, white flesh that resists browning and is sweeter than its parent McIntosh.



Cripps Pink is a more modern apple from parents Golden Delicious and Lady Williams. It is a juicy, crisp apple that is slow to oxidize and works well with cheese boards. **Pink Lady** is the trademarked name.

Cooking Apples

Cider Apples

Cider apples are characterized by a unique balance of high sugar, high acidity, and high tannins. They are classified into four main types—sweet, sharp, bittersweet, and bittersharp based on their specific flavor contribution. They are often blended to produce a balanced cider.

Harrison and the Hewe's Virginia Crab (sharp to bittersharp): They were rediscovered by Tom Burford who worked closely with pioneer cider makers in Virginia.

Campfield (bittersweet) and Graniwinkle (sweet): used primarily by northern cider makers in the early 1800s.

Smith's cider (sweet and mildly sharp) from Pennsylvania

Taliaferro (bittersharp) cultivated at Monticello

Geneva and Redfield (bittersharp) red fleshed varieties that add color and astringency.



Cathead

Caney Fork Limbertwig

Bald Mountain

Clay Pot

Crow Egg

Eve's Delight

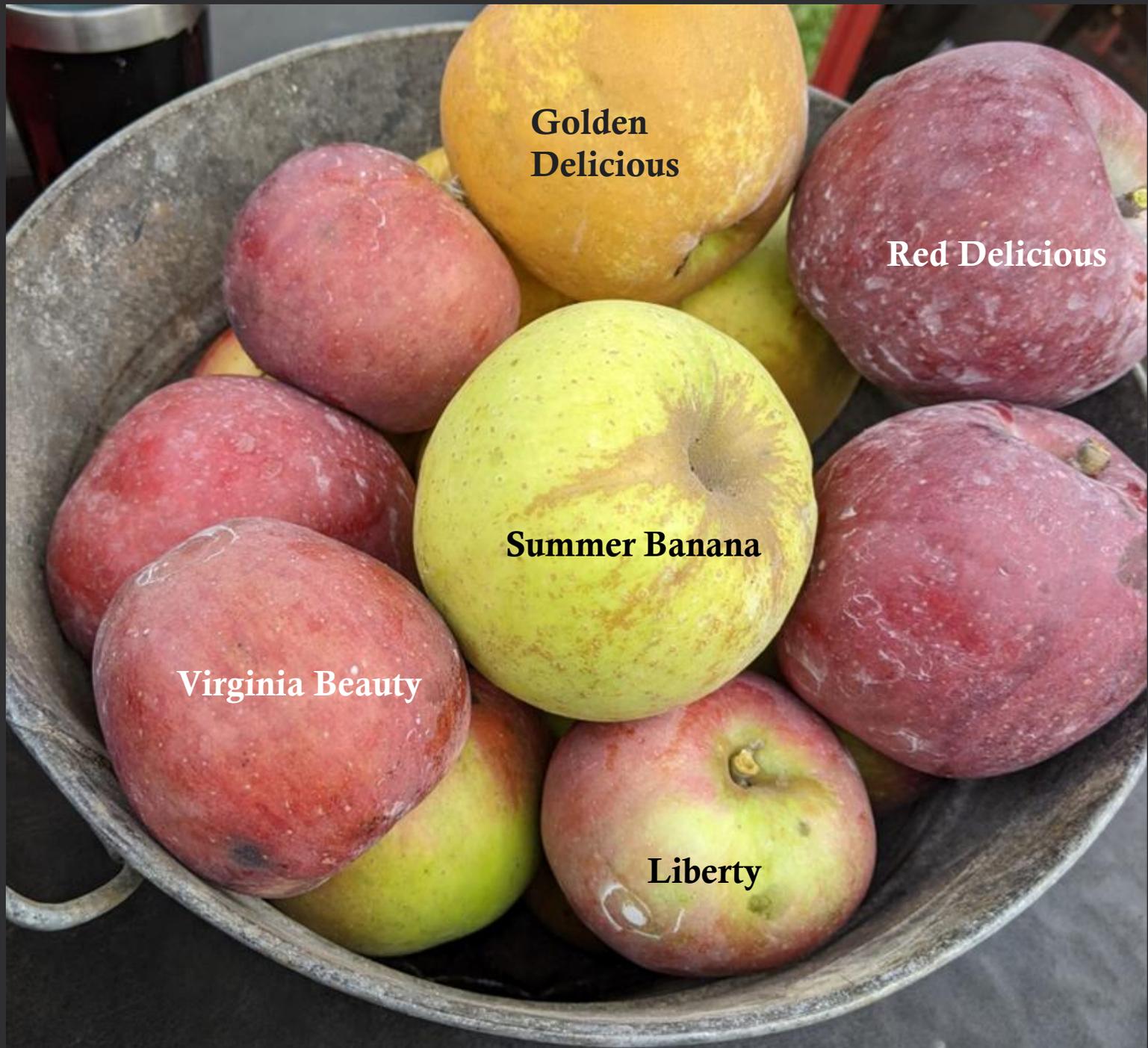
Flat Fall Cheese

Hawkeye

Hollow Log

Horse

Jumbo



**Golden
Delicious**

Red Delicious

Summer Banana

Virginia Beauty

Liberty



mixed varieties
hope you enjoy!
- veg



Drippin' Honey
Asian Pear

Summer Banana

Hubbardston
Non-such

Liberty

Arkansas Black

Indian Blood
Peach

Goldrush

Golden Delicious

Virginia Beauty

Old-fashioned
Limbertwig

King David

Red Delicious

















Red Delicious

Grafted Varieties



Red Delicious: The great ancestor of all Red Delicious apples was first marketed by Jesse Hiatt, a Quaker farmer in Peru, Iowa. Hiatt dubbed the sweet, perfumed apple the Hawkeye, and sold it to Stark Bro's Nursery in 1894. Under its new ownership, the Hawkeye became the Delicious.

In his book *Apples of Uncommon Character*, Rowan Jacobsen notes that “Red Delicious is ‘unmistakable.’ The image of the conical, ribbed, midnight-red Red Delicious, on its five point stand, is burned into every American’s brain...Red Delicious became the most successful apple in the history of the world.”



My Apple Breeding Project to Date

General Fruit Growing



Topics

My Posts

More

Categories

Fruit in the Kitchen

General Fruit Growing

General Gardening

Pictures!

Trading Post

All categories



SkillCult



armyofda12mnkeys

Feb 20

thanks for answering that. All the information is actually in the post. today is 5.00 and up tomorrow 3.00 the next day public.

5



Reply

Feb 16



Rosdonald

Feb 20

You are my mentor and the reason I got into grafting and expanding my orchard. I recommend your grafting series to all those from newbies to experienced folk.

5



Reply

Oct 2

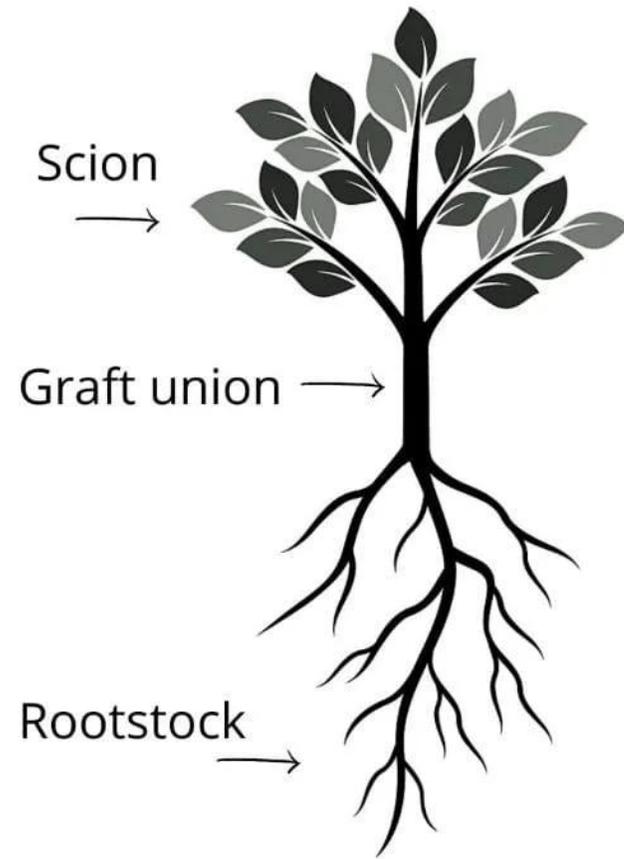
33 / 61

Feb 20

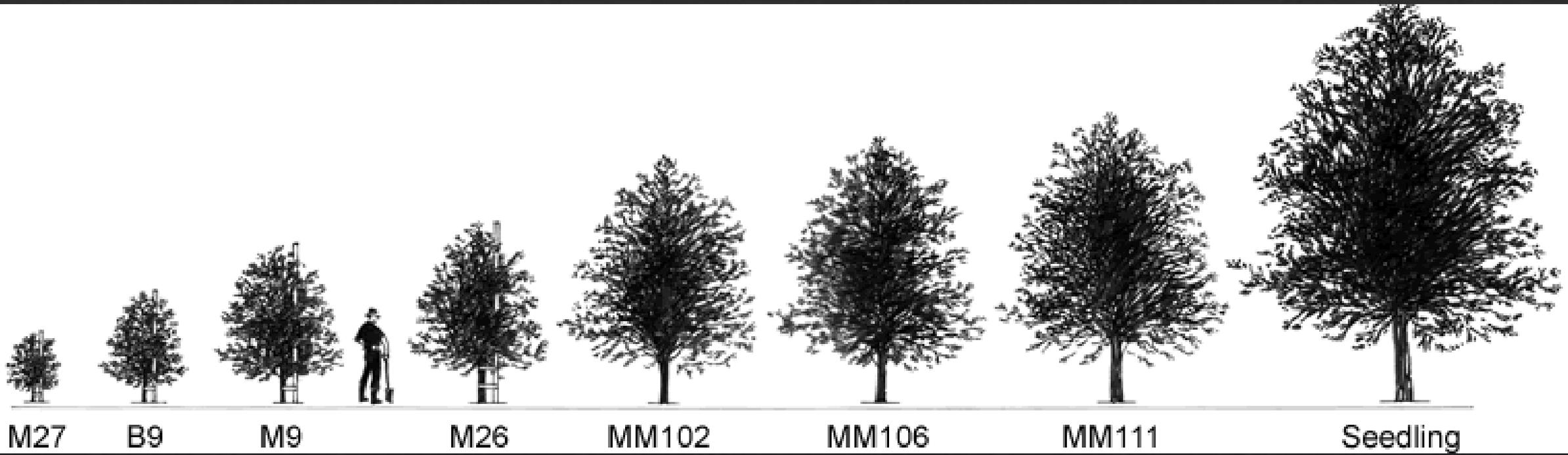
Back

1 Reply

growingfruit.org



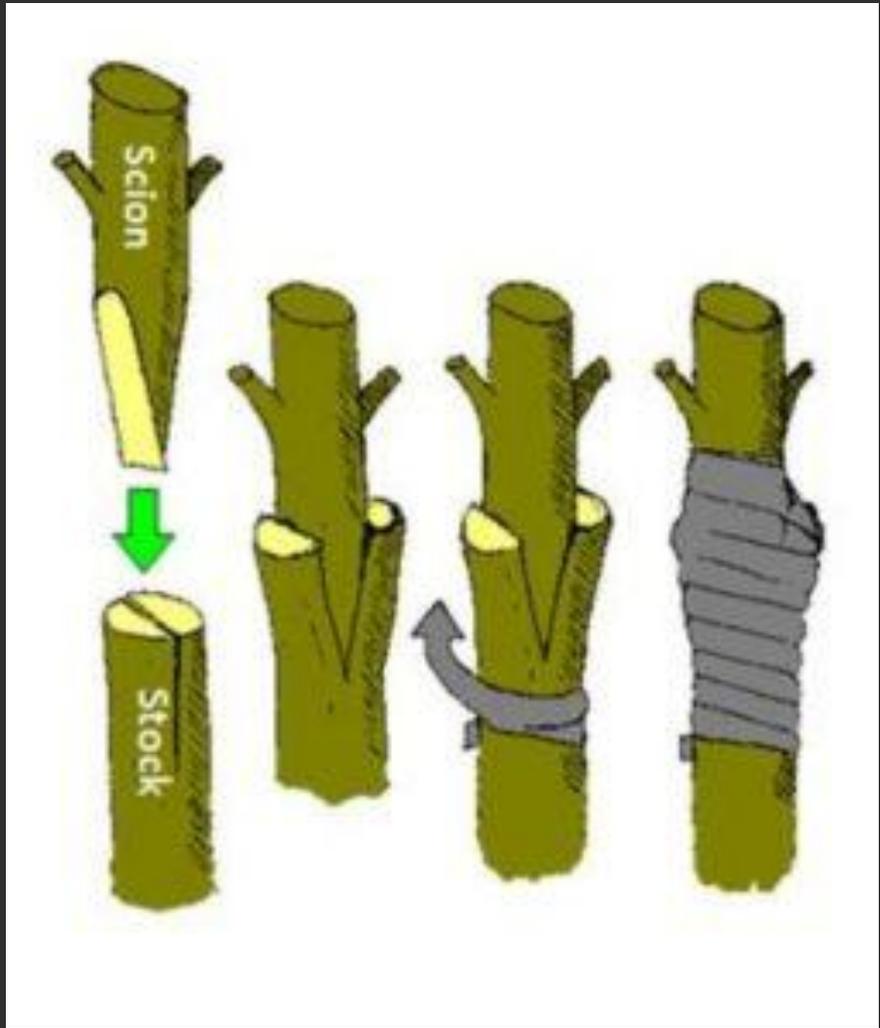
grafting



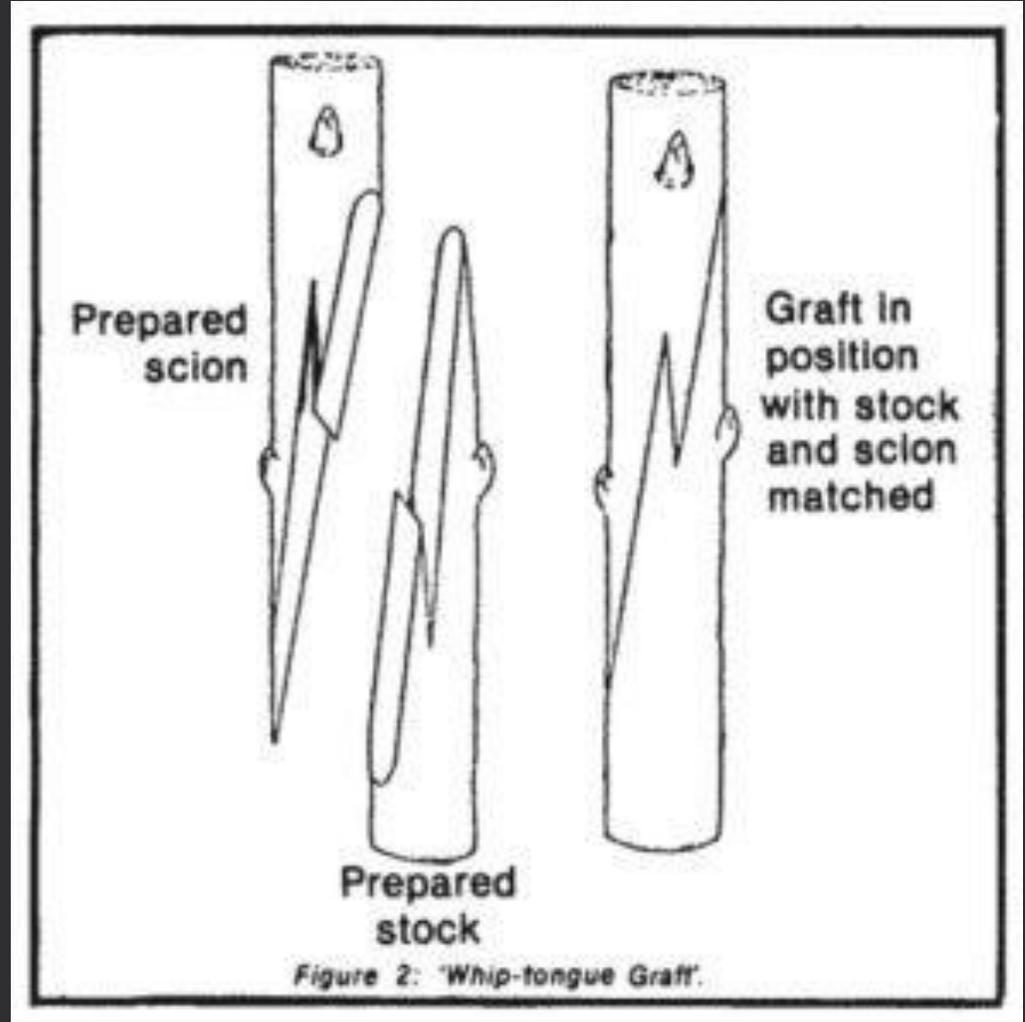
Requires staking
Fastest fruit production
No ladder needed
Requires least space
Shortest lived tree

Apple Rootstock grafting

No staking required
Slowest fruit production
Difficult to reach
Requires more space
Long lived tree



Cleft Graft



Whip and Tongue

grafting



Grafting Products



Parafilm or
Buddy Tape

+



Rubber Band

OR



Temflex Tape

grafting



grafting





grafting



Why Graft Trees?

- provides more variety of apples
- increases pollination and yield
- allows choice of rootstock and tree size
- decreases cost of tree
- space saving
- provides fruit over a larger season
- can decrease time to fruit production
- its FUN!

grafting



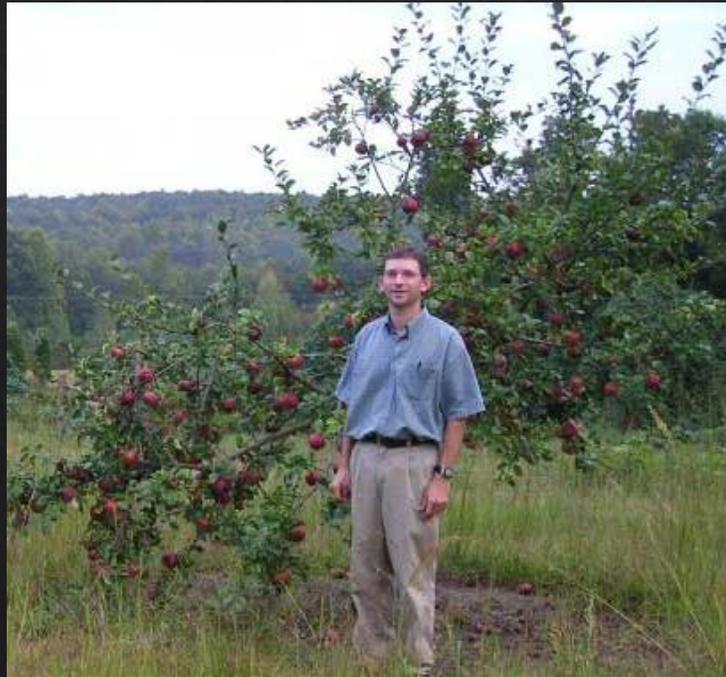
“Virginia Beauty

Preserving Heritage Apples



Virginia Beauty: The original tree grew before 1820 in what is today Carroll County in southwestern Virginia.

Lee Calhoun, noted apple historian, writes that if Red Delicious had not come along when it did, Virginia Beauty would have become the most important commercial apple in the south.



It is known for its mild sweet flavor, glossy brick red color, and a splash or “bonnet” of green russet color at the stem.

Heirloom or Heritage Apples



Preserving diversity: Growing heirloom apples helps preserve genetic diversity, which acts as a safeguard against diseases that could devastate a monoculture of modern commercial varieties.

Living history: Many heirloom apples have a rich history, with some being documented for hundreds of years and their origins sometimes tied to historical events or figures.

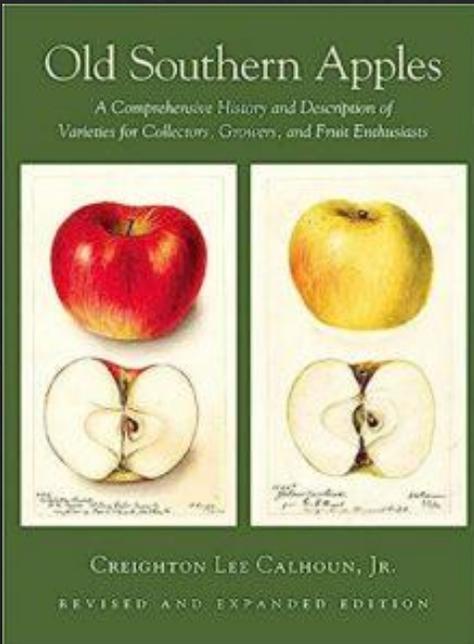
Connecting with the past: They offer a way to connect with the past, as many were enjoyed by people in previous generations.



To Regina Donald
who likes to hold
apples for
Your friend
Lee Calhoun
2 November 2019

Lee Calhoun

Lee made Southern Heritage Apple Orchard at Horne Creek Farm possible by establishing it as a repository for 400+ varieties of old southern apple varieties



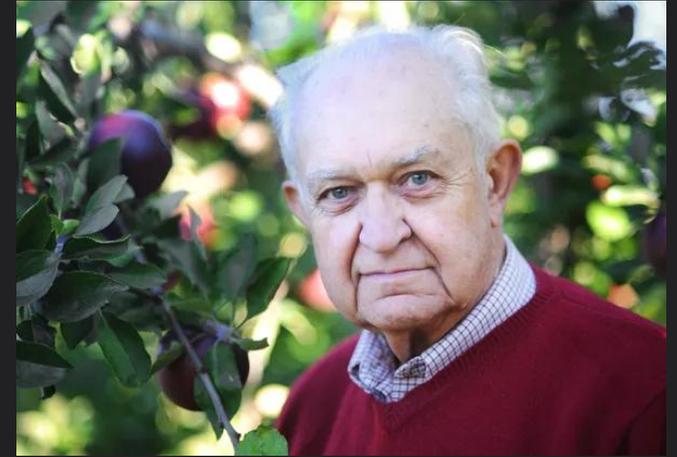


Tom Brown

A "modern day Johnny Appleseed." He has discovered more than 1,200 lost apple varieties.

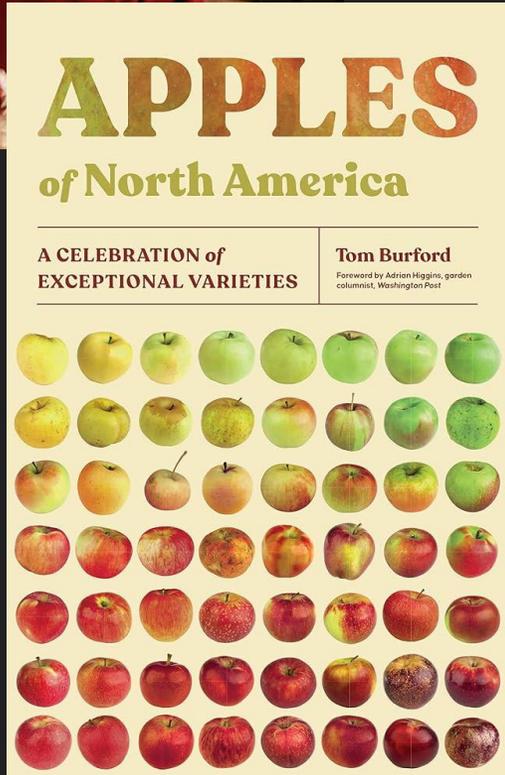


Tom Burford



“Professor
Apple”
and father of the
Virginia cider
movement

Orchard was
In Amherst
County





Razor Russet sport of Golden Delicious

- [G

Keys to Successful Harvest



“A properly grown golden delicious has a lovely breaking quality. Each chunk eagerly separates from the mother ship and hurls itself into your mouth where your teeth can have their way with it”

Golden Delicious (sport) Razor Russet: Golden Delicious originated in Clay County West Virginia around 1890. It was spotted as a chance seedling on Andrew Mullins farm. After accepting an invitation to visit the tree, Stark paid \$5,000 for the propagation rights to the apple, and promptly built a wood and wire cage around the tree complete with alarm.

In 1916 it was introduced to the world and went on to sire many of our favorite apples of today: Ozark Gold, Goldrush, Mutsu, Gala, and Pink Lady, among others.

Apples off the tree are large, crisp, and spicy

Jacobsen, R. (2014). *Apples of uncommon character: Heirlooms, modern classics, and little-known wonders*. Bloomsbury USA.

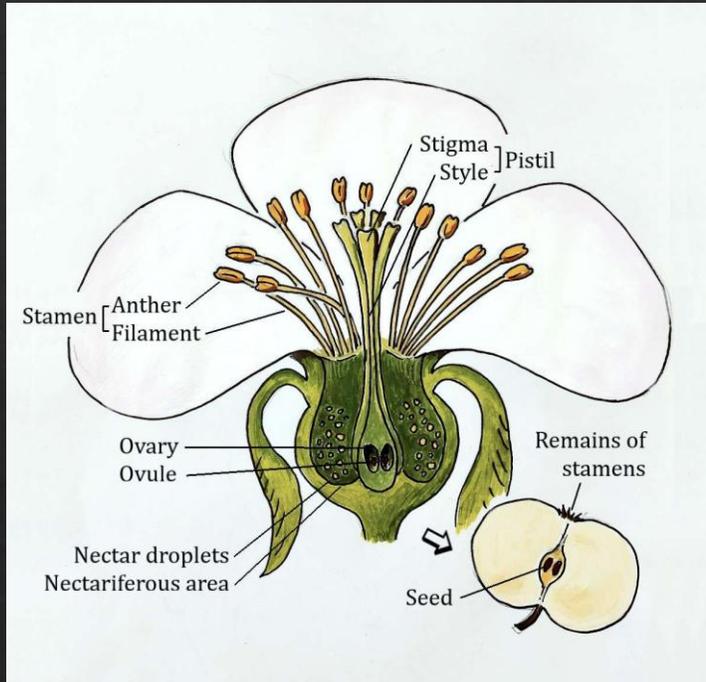
Golden Delicious has a secret power



Q: How many trees does it take to make an apple?

A: You will need at least two **different** varieties for successful cross-pollination and fruit to develop.

Exceptions: Self pollinating trees and triploids



Pollination

Self-pollinating apple trees



Granny Smith

Self-pollinating apple tree known for its tart green apples and adaptability to warm climates



Golden Delicious

Partially self-fertile apple tree with extended flowering periods and good pollination capabilities



Gala

Partially self-fertile apple tree that thrives in cool climates and offers better yields with cross-pollination



Cortland

Partially self-fertile apple tree known for its reliable heavy harvests and ease of growth



Grimes Golden

Self-fertile apple tree that serves as an excellent pollinator for other varieties



Braeburn

Partially self-fertile apple tree popular for commercial production and suited to warm climates



Thinning





**Good
Scaffold
Placement**



**Branches 12-
18” apart**

**Scaffold in all
directions**

**No scaffold
starting from
same location
on trunk**



Animal Deterrents

Dula Beauty

Triploid





Dula Beauty

- Triploid
- Very large fruit
up to 2 pounds
- Large leaves
- Vigorous
- Pollen is sterile



Although the pollination requirements might be inconvenient, triploid varieties have several advantages which make them desirable for the home or community orchard:

They usually produce vigorous trees, which can support large crops.

The apples are often quite large.

They usually display a good degree of natural disease resistance.

They can often survive in difficult conditions.

Triploidy

Some of the best-known triploid varieties are:

Ashmead's Kernel

Belle de Boskoop

Blenheim Orange

Bramley's Seedling

Dula Beauty

Gravenstein

Jonagold

Crispin / Mutsu

Ribston Pippin

Newtown Pippin

Roxbury Russet

Winesap

Zabergau Reinette

“Bevan’s Favorite”



Early Harvest





Like many early apples it does not keep well. It goes soft within a few days of picking.

Bevans Favorite: First described in 1859, this apple was originally from Salem County, New Jersey. It later disappeared but was rediscovered in 1985 by Lee Calhoun in Alavance County, North Carolina. The tree is vigorous and productive. The fruit's size is medium, its skin yellow with many red stripes and possibly a red blush on the side facing the sun. The flesh is juicy, crisp, and fine-grained. The apples ripen in early to mid July.

Early ripening allows this apple to avoid many of the late summer diseases that plague other trees.

FISHKILL FARMS



APPLE RIPENING CHART

We grow over 100 varieties of apples!

These are just a selection of some favorites available for pick-your-own.

We usually have even more heriloom varieties available in our farm store!

Apples	Qualities	Aug.	Sept.	Oct.	Nov.
--------	-----------	------	-------	------	------

Earligold					
Ginger Gold					
Gala					
McIntosh					
Fuji					
Cortland					
Macoun					
Spartan					
Empire					
Jonagold					
Red Delicious					
Golden Delicious					
Liberty					
Mutsu					
Goldrush					
Crimson Crisp					
Rome					
Winesap					
Pink Lady					
Granny Smith					

Key: =Fresh Eating =Baking/Cooking =Cider

Please note that availability and timing can change due to many factors including the weather.

Apple Ripening Chart | Fishkill Farms. (n.d.).

www.google.com.

<https://share.google/images/GD71Nn8e3Mpkj>

XkSi



APPLE FLOWERING GROUPS

Flowering Group 1	Flowering Group 2
Anna	Dolgo
Dorsett Golden	Liberty
Ein-Shemer	McIntosh
Gravenstein	Williams' Pride
Zestar!	Yellow Transparent
Flowering Group 3	Flowering Group 4
Antonovka	Ambrosia
Arkansas Black	Enterprise
Cortland	Florina
Discovery	Gala
Empire	Golden Delicious
Freedom	GoldRush
Fuji	Honeycrisp
Granny Smith	Jonagold
Haralson	Keepsake
Jonathan	Pristine
Mutsu	Red Delicious
Regent	Roxbury Russet
Winesap	Sansa
Wolf River	Stayman Winesap



Red Delicious



McIntosh



Honeycrisp



Golden Delicious



Granny Smith



Fuji



Cortland



Cosmic Crisp



Gala



Braeburn



Macoun



Gold Rush



Jonagold



Lady Williams



Empire



Suncrisp



Ginger Gold



Spencer



Pink Lady

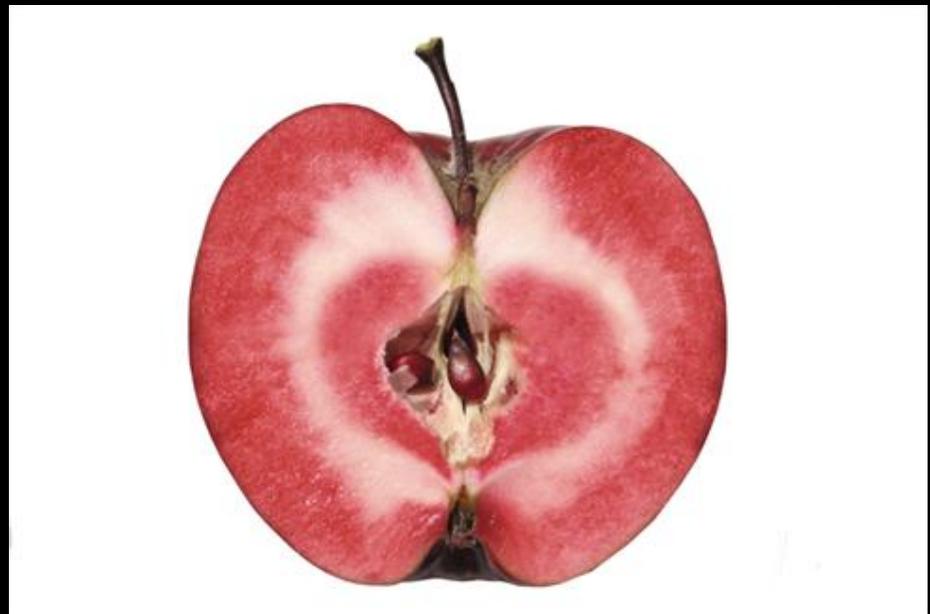
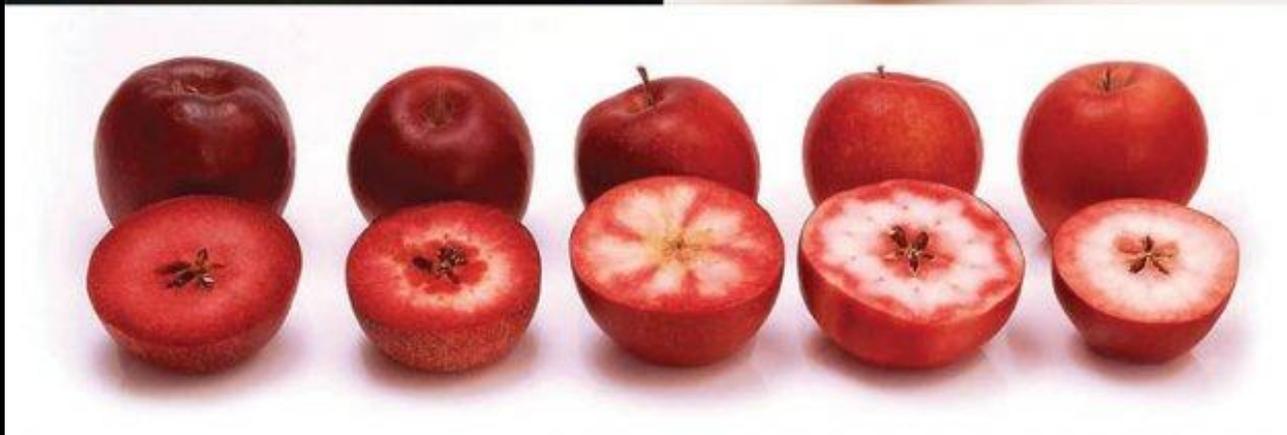


Evercrisp



Pollination requirements

1. At least two varieties old enough to bloom
2. Compatible bloom times
3. Triploid trees can't pollinate other trees
4. Self-fruitful varieties enhance pollination
5. Avoid direct descendant trees



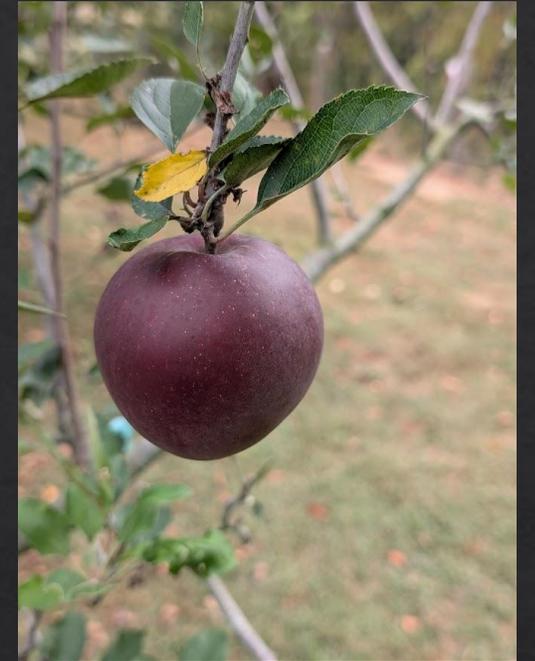
Red flesh and sometimes red leaves
and stem. Dark red blooms
Fruity taste “berries”
Usually tart
Often disease resistant
Adds color to food or cider
“Surprize”

Almata
Winekist
Redlove Era
Redlove Odyso
Watermelon
Airlee Red Flesh
Suprize

Pink Pearl
Mott’s Pink
Baja Marisa
Grenadine
Niedzewetzkyana
Pink Sparkle
Redfield

Firecracker
Burford RF
Christmas Pink
Pink Parfait
Red Devil
Rubaiyat

Arkansas Black





Arkansas Black: it was discovered in 1870 in Arkansas as a chance seedling from a Winesap apple. Picked off the tree, it was so hard and late ripening that it could be stored in the ice house until late spring.

Powerfully astringent at first, after a few months in storage it becomes lightly sweet and juicy. We refer to this kind of apple as a “keeper.”



Thick skin

Tart

Late harvest

Blemish free

Stem intact

Store close to 32 degrees

Do not wash

Single layer

Removed damaged apples

Crisper or opened bag

Keepers

Apple varieties that store well

Granny Smith: Known for thick skin and tartness.

Fuji: A modern variety with excellent keeping qualities.

Honeycrisp: A newer, very popular variety that stores well.

Pink Lady (Cripps Pink): A good keeper that lasts for months.

Northern Spy: An old heirloom variety that is an excellent storage apple.

Cosmic Crisp: Stores well for months.

Winesap: A classic storage apple.

Gold Rush: Stores extremely well, with some sources saying it can last up to a year.

EverCrisp: A hybrid of Honeycrisp and Fuji that was specifically bred for storage.



“Wolf River

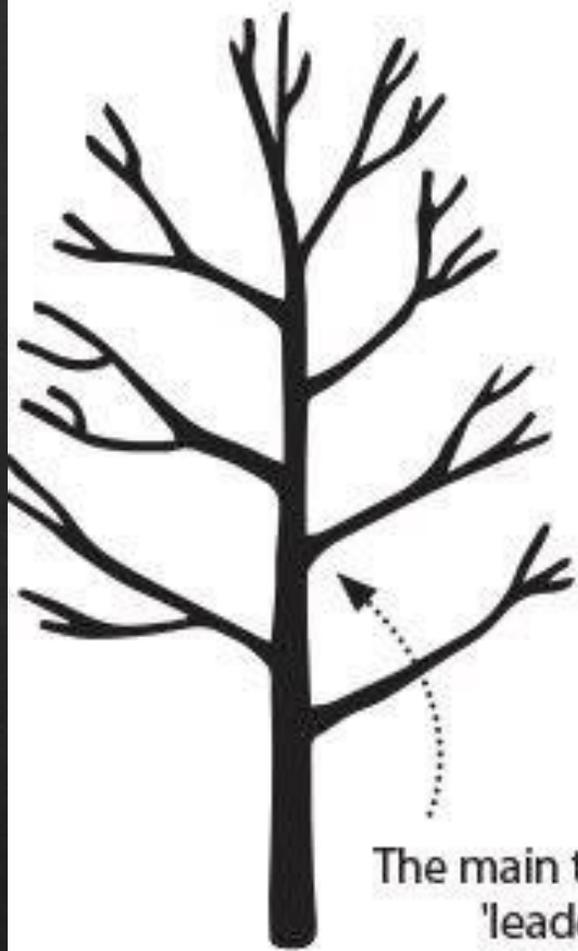
Tree Shape
Open center

R



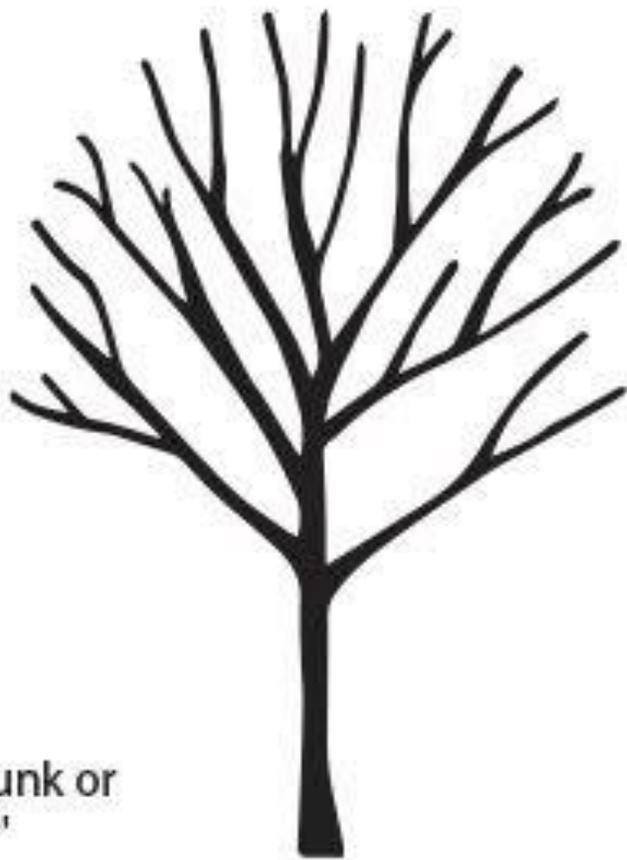
Wolf River: In 1856, seeds from an apple sold at a stand in Quebec were saved by a family and replanted at their new farm along the banks of the Wisconsin Wolf River.

Off the tree, the immense fruit is “hardly sweet, mildly acid, and profoundly uninteresting.” Baked into a pie or dried as apple rings, it is delightful.

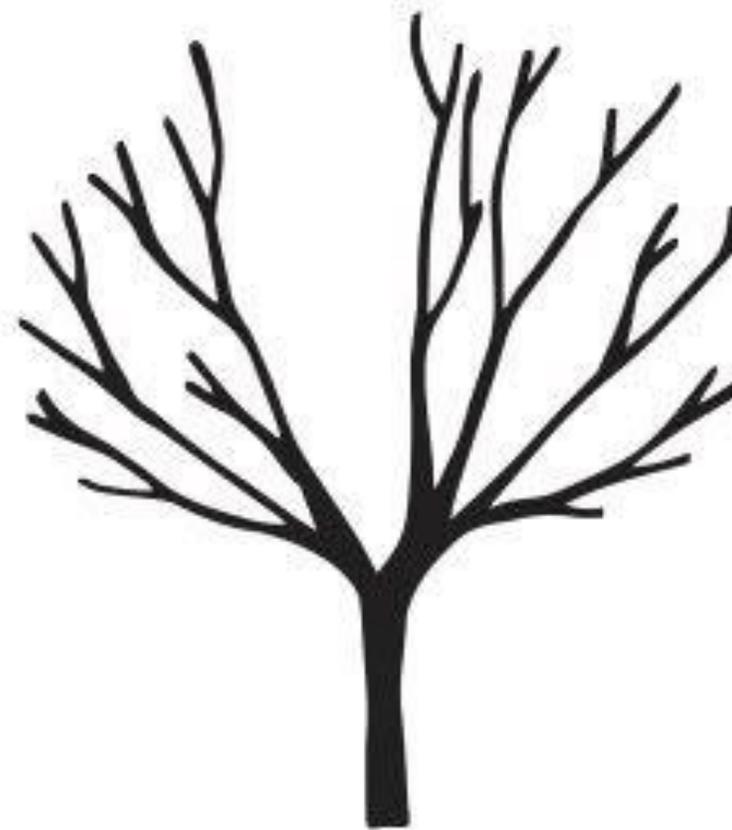


The main trunk or
'leader'

A-shape (central leader)



Modified central leader



V-shape (open centre or vase shape)

Pruning

Remove

dead or dying

Suckers

Crossing branches

Growing toward
center

Hanging down

Prune to outside bud
to encourage sunlight
and air flow

Remove tight crotch
angles



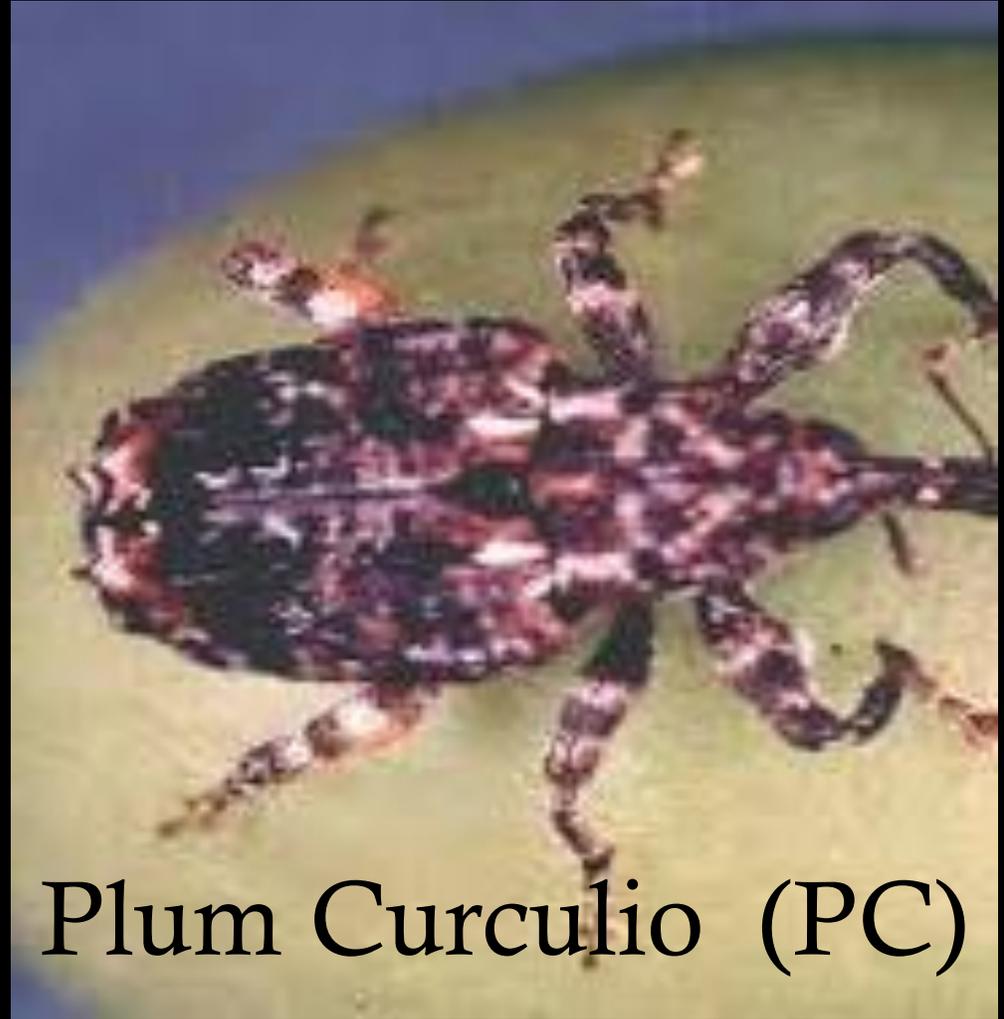
Liberty





Liberty: Developed in 1955 and released in 1978, it is known for its resistance to scab, fireblight, and cedar apple rust.

It is medium sized, sweet tart, with a crisp flavor making it excellent for fresh eating. It was developed at the New York State Agricultural Experiment Station by crossing a Macoun apple with a crab apple.



Plum Curculio (PC)



Cedar Apple Rust
CAR





Fly Speck

Sooty blotch



Apple Scab

Fungus

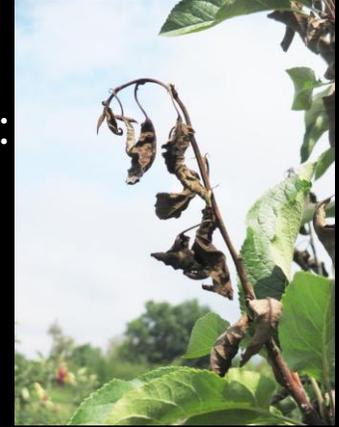
Fireblight



- Remove affected branch as soon as possible
- Disinfect pruners
- Copper or sulfur
- Streptomycin
- Don't prune when rain is in the forecast



- "Shepherd's Crook" Shoots: Young shoots will wilt and curve downwards, resembling a shepherd's crook.
- Blackened Leaves: Leaves on the affected shoots turn black, shrivel, and remain attached to the branch.
- Burnt Appearance: The overall effect is a burnt or scorched look, giving the disease its name.
- Bacterial Ooze: During warm, wet periods, droplets of bacterium *Erwinia amylovora*



Disease Resistance

Apple trees with disease resistance include:

Scab Resistant: Liberty, Enterprise, William's Pride, and Gold Rush.

Fire Blight Resistant: Liberty, Enterprise, Pristine, and Arkansas Black.

Cedar Apple Rust Resistant: Liberty, Enterprise, Gold Rush, and Novamac.

Powdery Mildew Resistant: Liberty, Enterprise, Pristine, and Honeycrisp.

Other Disease Resistant: Dwarf apple trees (generally more resistant to diseases), Freedom, Elstar, and Crimson Crisp.

Note: No apple tree is completely resistant to all diseases. It's important to follow proper care and maintenance practices to prevent disease outbreaks.



Select disease resistant varieties
AT PURCHASE

Liberty, Freedom



Copper or sulfur spray during dormancy for anti-fungal and fire-blight prevention
DORMANCY



Bagging fruit
NICKEL STAGE



All seasons oil
Or dormant oil (mineral oil)
For over wintering
Insects
DORMANCY



Spinosad derived from soil bacteria as insecticide or miticide
COVER SPRAY



Neem oil spray from Neem tree as
Insecticide, miticide,
Or antifungal (good On mites)
DORMANCY or
SELECTED TIMING



Kaolin clay/
Surround from minerals as insect deterrent/irritant
COVER SPRAY

Organic Pest and Disease Control

Why grow heirloom apples?

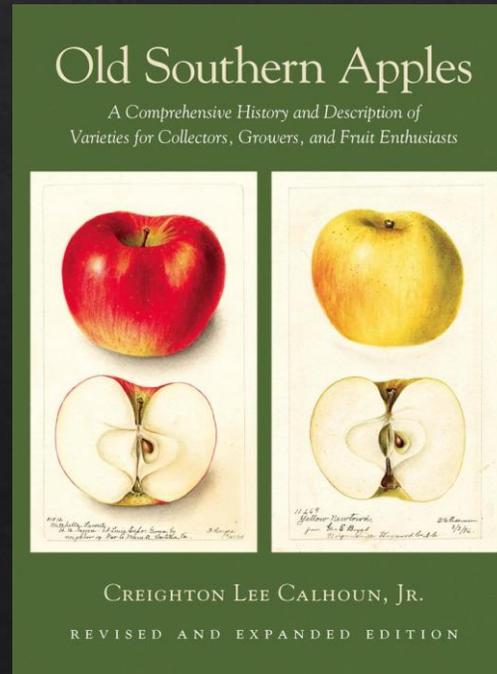


- Heirloom apples have a range of flavors that range from spicy to floral to nutty
- Many heirloom varieties are firm and tart, making them ideal for cooking
- They have a rich history, often passed down for generations
- They support biodiversity in an age of agricultural conformity
- They are available in a wide variety of shapes and colors, with varying storage and ripening times
- Apples bred for grocery store shelves tend to have a much higher sugar profile and lower levels of antioxidants, polyphenols, and vitamins than older apple varieties

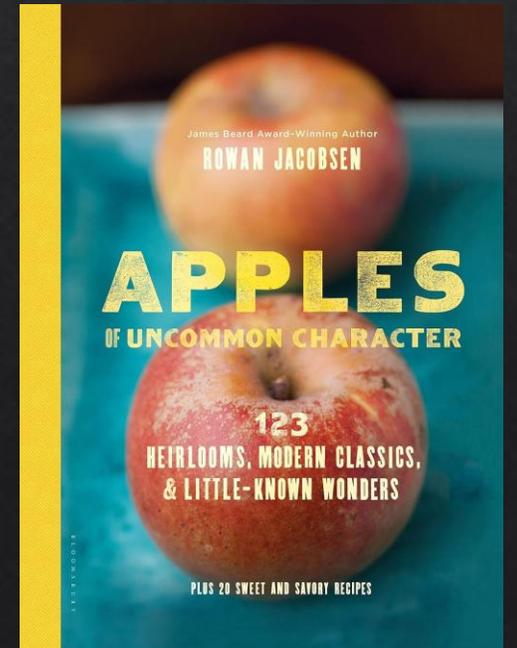
“Finding the Best Heirloom Apples for the Small Home Orchard” from a blog entitled “This Inspired Life”

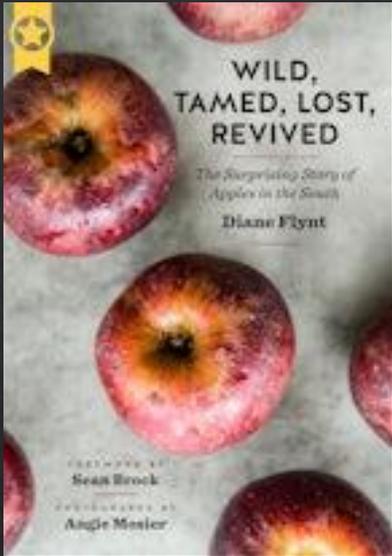
“Growing Apples in Virginia” published by the Virginia Cooperative Extension

“Old Southern Apples” by Creighton Lee Calhoun

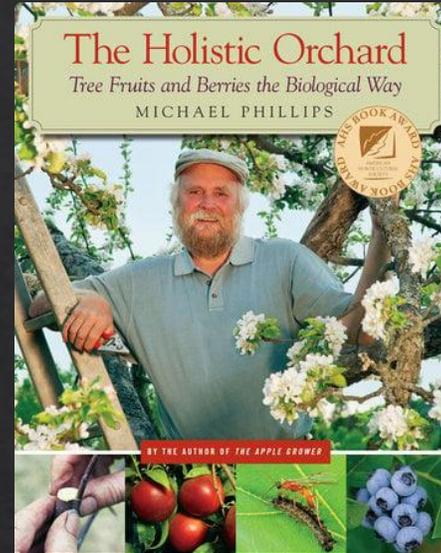


“Apples of Uncommon Character” by Rowan Jacobsen

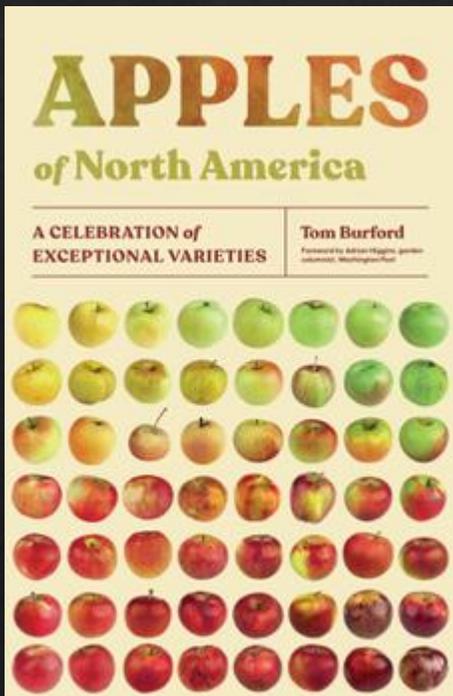




“Wild, Tamed, Lost, Revived” By Diane Flint



“The Holistic Orchard” by Michael Phillips



“Apples of North America” by Tom Burford



Keepers Nursery
Kent, United
Kingdom,
YouTube

growingfruit.org

site for like minded fruit growers

Skillcult on YouTube

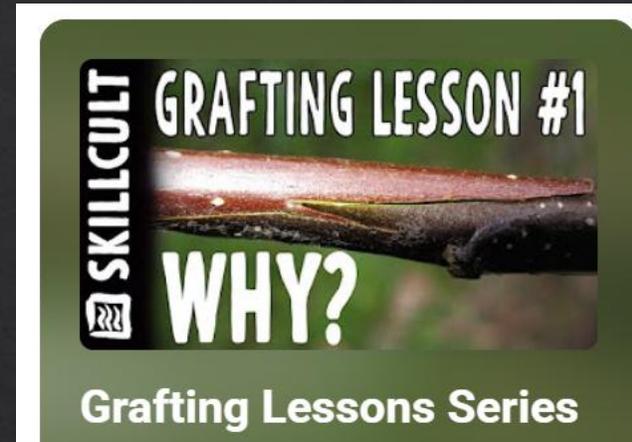
multiple videos on pruning and grafting

Century Farms Orchard

Wide variety of heirloom trees,
Fair prices, excellent size & shipping

Purchasing Scions

39th parallel, Fedco, Maple Valley,
Hocking Hills Nursery, Cummins



Century Farm Orchards
Family Farm and Nursery
Specializing in Old Southern and Disease-Resistant Apple and Pear Trees

Over 100 Years of Continuous Agricultural Heritage

We sell apple and pear trees!

Century Farm Orchards
David C. Vernon
1614 Rice Rd Reidsville, NC 27320....not open to public
except **Open House Days**
telephone: 336.349.5709
email: david@centuryfarmorchards.com (we reply)

The screenshot shows a website layout with a green navigation menu on the left containing links like Home, Fruit Trees, Ordering/Prices/Inventory, Announcements/Open House, Demonstrations, Library-Helpful Resources, Wildlife Planting, Warm Climates, and Rootstocks. The main content area features a header with the business name and tagline, a heritage statement, a promotional banner for apple and pear trees, a row of five different apple varieties, a large image of many small apples, and contact information.

Grafting Classes each spring

- Variety of class dates Saturdays in March or April
- Dwarf, semi-dwarf, or semi-standard rootstock, pencil size
- 50-70 varieties of scions sorted by main usage with information on each variety
- 2 gallon pot
- Education prior to grafting
- All tools and materials provided \$30
- Results guaranteed or we regraft or your choice of available grafted tree
- New cabin location for grafting!



We would love to have you!

www.wilbournhouseorchard.com



wilbournhouseorchard@gmail.com



Questions?