

CHESTNUT CULTIVAR DISCUSSION

**FEBRUARY 19, 2021, by J. Michael Nave
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What is a cultivar?

A seedling that has been chosen for good qualities, then named and propagated.

Chestnut cultivar qualities to evaluate in trees:

Leaf out early or late?

Bloom early or late?

Produces pollen? Plants are pollenizers. Insects are pollinators.

Do the nuts drop early or late?

Do the nuts drop all at once or is the drop extended?

Do the nuts fall free from the bur, or in the bur? (not "burr")

Size of tree

Size of crop

Cold hardiness

Heat units needed to mature nuts in summer

Blight resistance

Phytophthora resistance

Grafts well or not

Roots well or not

Gall wasp susceptibility

Does it produce good seedlings? Is it good for breeding?

Does it hold leaves in winter? (marcescence is the trait of holding leaves)

Timber or orchard type growth?

Ornamental features-

Heavy flowering

Weeping

Variegated leaves

Reddish leaves or burs

Interesting burs

Lack of spines on burs

Chestnut cultivar qualities to evaluate for nuts

Size of nuts

Variable?

Peel well?

Single or multiple embryos?

More than 3 nuts per bur (not "burr")

Flavor and sweetness?

Do they store well?

Split shells?

Are the nuts attractive to weevils?

Do the nuts have IKB? (internal kernel breakdown) - Colossal is among the worst

Do the nuts have brown rot? *Gnomoniopsis smithogilvyi* - Colossal and Labor Day are among the worst

BER - blossom end rot - BER in chestnuts is caused by a fungus, *Colletotrichum gloeosporioides* (asexual stage) AKA *Glomerella cingulata* (sexual stage). This fungus causes plant disease on a broad array of hosts

Cultivars:

Brownsville, California – The Chestnut Grove

A Five-acre cultivar collection planted from 1916-1920, by E. A. Hoepfner

<https://www.facebook.com/TheChestnutGrove/>

Paragon and Colossal have been identified

Nevada City, California – Barren Hill Nursery/Felix Gillet Nursery

Colossal, Nevada, Long Street, NCC1, NCC6

Torakuri, Gillet, Kaibutsu, Bergantz, Okinakuri,

Eighteen of the best West Coast cultivars:

Bergantz – Sativa/crenata hybrid with large easy-peeling nuts
Boitano/Fife/Black Pearl – Washington state Sativa with large black nuts
Bouche de Betizac – Sativa/crenata hybrid with large easy peeling nuts
Chiusa Pesio – Italian Sativa with very tasty nuts that peel well
Comballe – French Sativa with very large nuts
De Coppi Marrone – Sativa from Australia with large nuts
Gillet – Sativa/crenata hybrid with huge nuts that peel well
Judia – Portuguese Sativa with large nuts that peel well
Long Street – Dentata/sativa hybrid with medium sized nuts that peel well
Marigoule – Sativa/crenata hybrid with large nuts that peel well
Mipung – Korean Crenata with medium-large nuts that peel well
NCC 1 – Dentata/sativa hybrid with medium sized nuts that peel well
Regis Montis – Washington state Sativa with medium sized nuts that peel well
Serenity Ridge – Sativa or Sativa/crenata hybrid with very large nuts
Serr – California Sativa, or Sativa/mollissima hybrid, with med-large nuts
Sweet Surprise – Probably Sativa/crenata/pumila hybrid with medium size nuts
Szego – Crenata/pumila/mollissima hybrid, with large nuts that peel well
Torakuri – Sativa/crenata hybrid with very large nuts that peel well

Discussion:

Grafted trees vs seedlings? Gillet and Bergantz

For Breeding – Any of the top 18 plus:

ACE

Big Euro

Kaibutsu

Luvall's Monster

Marradi

NCC 6

Paragon

Rihei

Schlarbaum

Twenty of the best Eastern cultivars:

Black Satin – Mollissima, seedling of Peach, has large nuts that drop late in Missouri
Chandler – Mollissima with large nuts that drop midseason in South Carolina
Emalyn’s Purple – Mollissima with large nuts that drop early in California
Gideon – Mollissima with medium sized nuts, tree is cold hardy and drought tolerant.
Jenny – Mollissima with large nuts that drop very early. Upright growth
Mipung – Crenata with medium-large nuts
Nanjing Special #1 – Mollissima with small nuts and exceptional eating quality
Nanjing Special #2 - Mollissima with small nuts and exceptional eating quality
Ness - Mollissima with large nuts that drop midseason in California
Pandora – Mollissima/seguin x Burbank Stump Sprout
Payne – Mollissima that is very productive with medium-large nuts
Peach – Mollissima that has large nuts
Qing – Mollissima/pumila hybrid that has medium-large very sweet nuts
Revival – Mostly mollissima hybrid that is very vigorous
Royalmark – Probable Crenata/mollissima hybrid
Sleeping Giant – Dentata/crenata/mollissima hybrid
WC – Possible sibling of Qing with similar nuts on a larger spreading tree
Yixian Good Flavor (YGF) – Mollissima with very good nuts
Yixian Large – Mollissima with very large nuts that drop early
Yixian Orange – Mollissima with small-medium size nuts that drop midseason

Discussion:

Grafted trees vs seedlings? Jenny and Payne

For Breeding – Any of the Top 20 plus:

ACE

Big Euro

Layeroka

Liu

Luvall’s Monster

Rihei

Schlarbaum

Sheng

Skioka

Skookum

Longer list of cultivars suitable for selected areas of the West coast:

Bergantz
Big Euro
Bisalta #2
Bisalta #3
Blake
Bouche de Betizac
Burbank Stump Sprout
Campbell #1
Colfax Gold
Colossal
De Coppi Marrone
Fife/Boitano/Black Pearl
Gillet
Honey
Ishizuchi
Kaibutsu
Kruk Trail
Layeroka
Maraval
Marigoule
Marissard
Marki
Marrone Comballe
Marrone di Chiusa Pesio
Marrone di Marradi
Marsol
Mipung
NCC 1
NCC 6
NC Long Street
Nevada
Okei
Okinakuri
Paragon
Regis Montis
Rihei

Western cultivars continued:

Samjoseng
Schlarbaum
Serenity Ridge
Serr aka Yolo Grande
Silverleaf
Skioka
Skookum
Sloane
Szego
Tanzawa
Torakuri
Tsukuba

Longer list of cultivars suitable for selected areas of the Eastern US:

ABC Red
ACE
Amy
AU Buck I
AU Buck II
AU Buck III
AU Buck IV
AU Cropper
AU Homestead
AU Leader
AU Super
AU 1-11
Benton Harbor

Eastern cultivars continued:

Black Satin

Campbell #1

Carolina

Carpenter

Chandler

Chushuhong

Duanza

Dunstan - not a cultivar

Eaton

Eaton River

Emalyn's Purple

Gideon

Hong Kong

Honglizi

Ishizuchi

Jenny

Jersey Gem

Jiaoza

Jiujiazhong

King Arthur

Kintzel

Kohr

Kuling

Kyoung

Layeroka

Little Giant

Liu

Luvall's Monster

Madison

Mahogany

Marsol

Meiling

Miller's Hope

Mipung

Mossbarger

Eastern cultivars continued:

Nanjing Special 1

Nanjing Special 2

Nanking

Ness

Old Smith

Pandora

Paragon

Patterson

Payne

Peach

Qing

Qingsu

Qingza

Resilient

Revival

Rihei

Royalmark

Sadie Hunter

Samjoseng

Schlarbaum

Shing

Shotgun

Skioka

Skookum

Sleeping Giant

Sweethart - not a cultivar

Szego

WC

Willamette

Yixian Large

Yixian Orange

YGF

Yooma