

**New Hampshire
Agricultural Experiment Station**

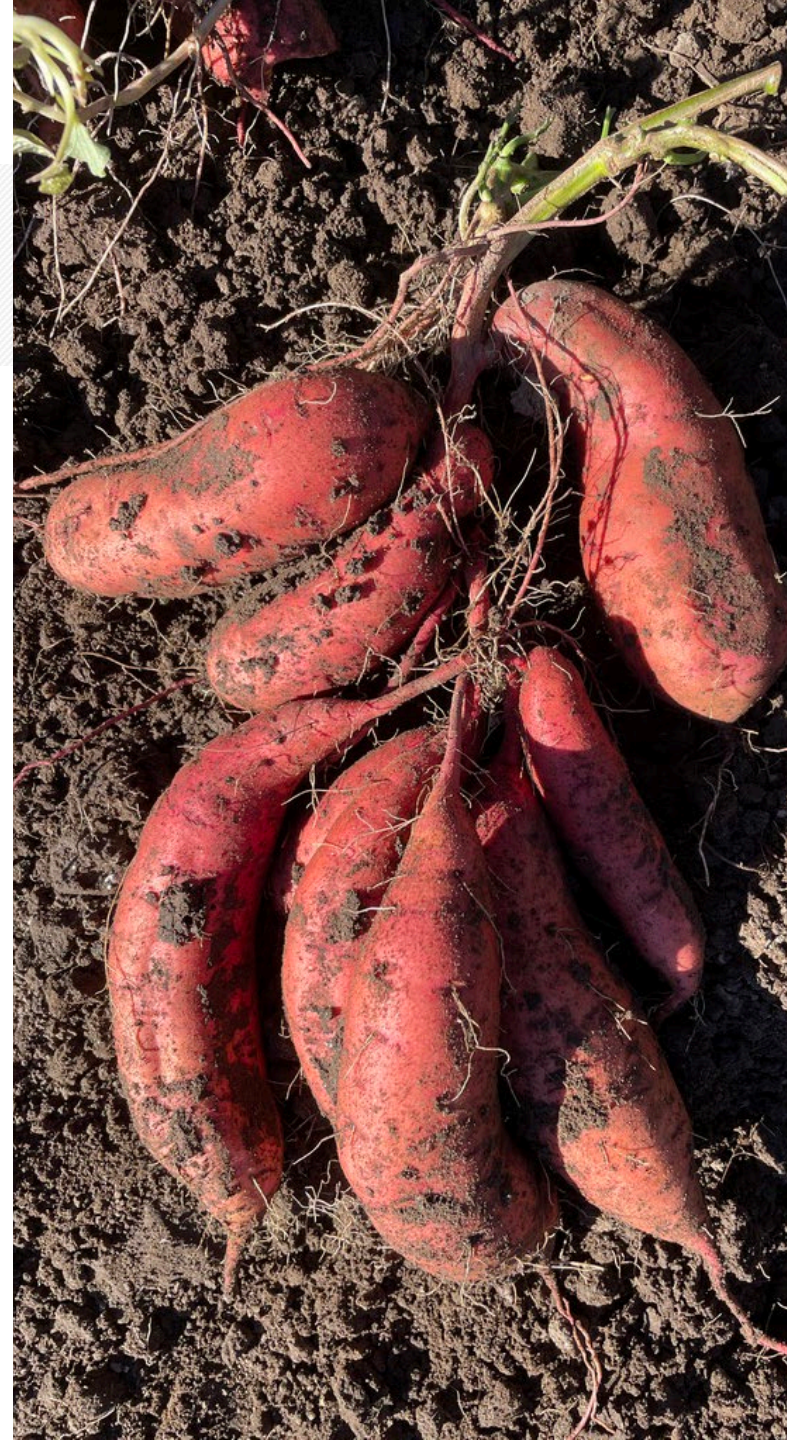
Science for the Public Good: Locally Inspired, Globally Important



Bringing
sweetpotato variety
recommendations
up to date: new
options to consider
for the North

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Raised beds, 9" spacing, 6' between rows

Slips: Jones Farms (NC), Sprout Mtn (TN), NCSU, LSU, USDA

Plant first week of June; Harvest late Sept/early Oct



Beauregard (LSU, 1987)

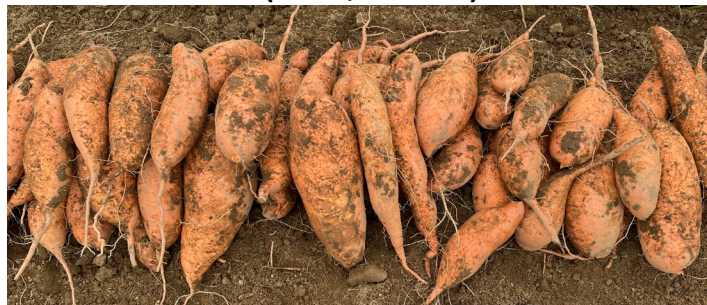


Covington (NCSU, 2005)



Best bets
from earlier
work

Bellevue (LSU, 2015)



Orleans (LSU, 2012)



Bayou Belle (LSU, 2011)



Evangeline (LSU, 2008)



Monaco (NCSU, 2021)



LSU 18-100 (LSU; now *Avoyelles*)

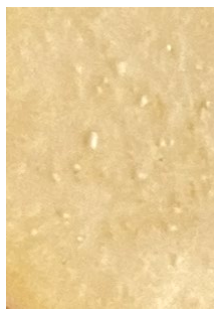




Radiance (2019, Vineland
Research & Innovation
Centre, Ontario)



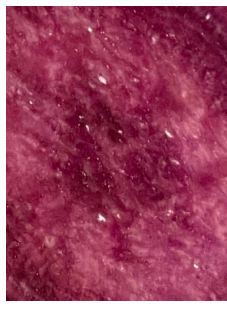
Bonita (LSU, 2011)



Murasaki (LSU, 2008)



Purple Majesty (NCSU, 2021)



Purple Splendor (NCSU, 2021)



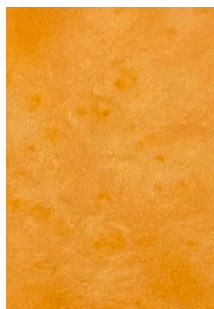
NC15-0078



Vermillion (LSU, 2021)



USDA 05097



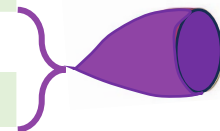
NC17-0452



MARKETABLE YIELD (BU/AC) – 2023

lbs/slip	bu/ac
0.5	97
1	194
1.5	290
2	387
2.5	484
3	581

DURHAM NH			UNITY ME			N HAVERHILL NH		
Bayou Belle	A	563	Bayou Belle	BC	120	Bayou Belle	CDE	216
Beauregard	AB	524	Beauregard	A	294	Beauregard	AB	381
Bellevue	ABC	512				Bellevue	CDE	225
Bonita	ABC	466				Bonita	BCD	239
Covington	ABC	439	Covington	AB	199	Covington	DE	145
Evangeline	BC	317				Evangeline	CDE	221
LSU18-100	A	619						
Monaco	ABCD	444						
Murasaki	C	312	Murasaki	C	30	Murasaki	DE	108
Orleans	A	558	Orleans	A	261	Orleans	ABC	357
Purple Majesty	C	301	P Majesty	C	74	P Majesty	E	90
Purple Splendor	ABC	495				P Splendor	A	388
Vermilion	E	165						



Beauregard, Orleans, Purple Splendor consistently among highest yielding
 LSU 18-100 (*Avoyelles*) high yielding, but only in one site
 Vermilion, Purple Majesty, Murasaki, Evangeline consistently not

MARKETABLE YIELD (BU/AC) – 2024

CONVERSION TABLE	
lbs/slip	bu/ac
0.5	97
1	194
1.5	290
2	387
2.5	484
3	581

DURHAM NH			% CULL
Bayou Belle	ABC	588	40.5%
Beauregard	ABCD	580	44.4%
Bellevue	AB	667	32.2%
Bonita	ABCDE	471	27.2%
Covington	CDE	296	60.1%
Evangeline	BCDE	361	30.7%
LSU 18-100	CDE	293	53.9%
Murasaki	AB	650	24.9%
Orleans	A	696	30.0%
Purple Majesty	ABCDE	462	32.3%
Purple Splendor	ABCDE	421	41.7%
Vermillion	E	151	17.9%

N HAVERHILL NH			% CULL
Bayou Belle	ABC	356	32.6%
Beauregard	AB	575	35.8%
Bellevue	A	647	30.0%
Bonita	ABC	385	39.5%
Covington	BC	273	30.7%
LSU 18-100	BC	309	55.6%
Murasaki	BC	268	21.2%
Orleans	AB	551	34.8%
P Majesty	ABC	372	25.0%
Vermillion	C	144	22.9%



Beauregard, Orleans, Purple Splendor consistently among highest yielding
 Also: Bayou Belle, Bellevue, Bonita, *and* Purple Majesty (!)
 Vermillion, LSU18-100 (*Avoyelles*), Covington not.

Cull = cracking, breakage, fork damage, vole damage, rot, grub feeding injury



Photo: H. Bryant



Photo: L. Hartman

Postharvest storage – Percent Marketable on April 18, 2023

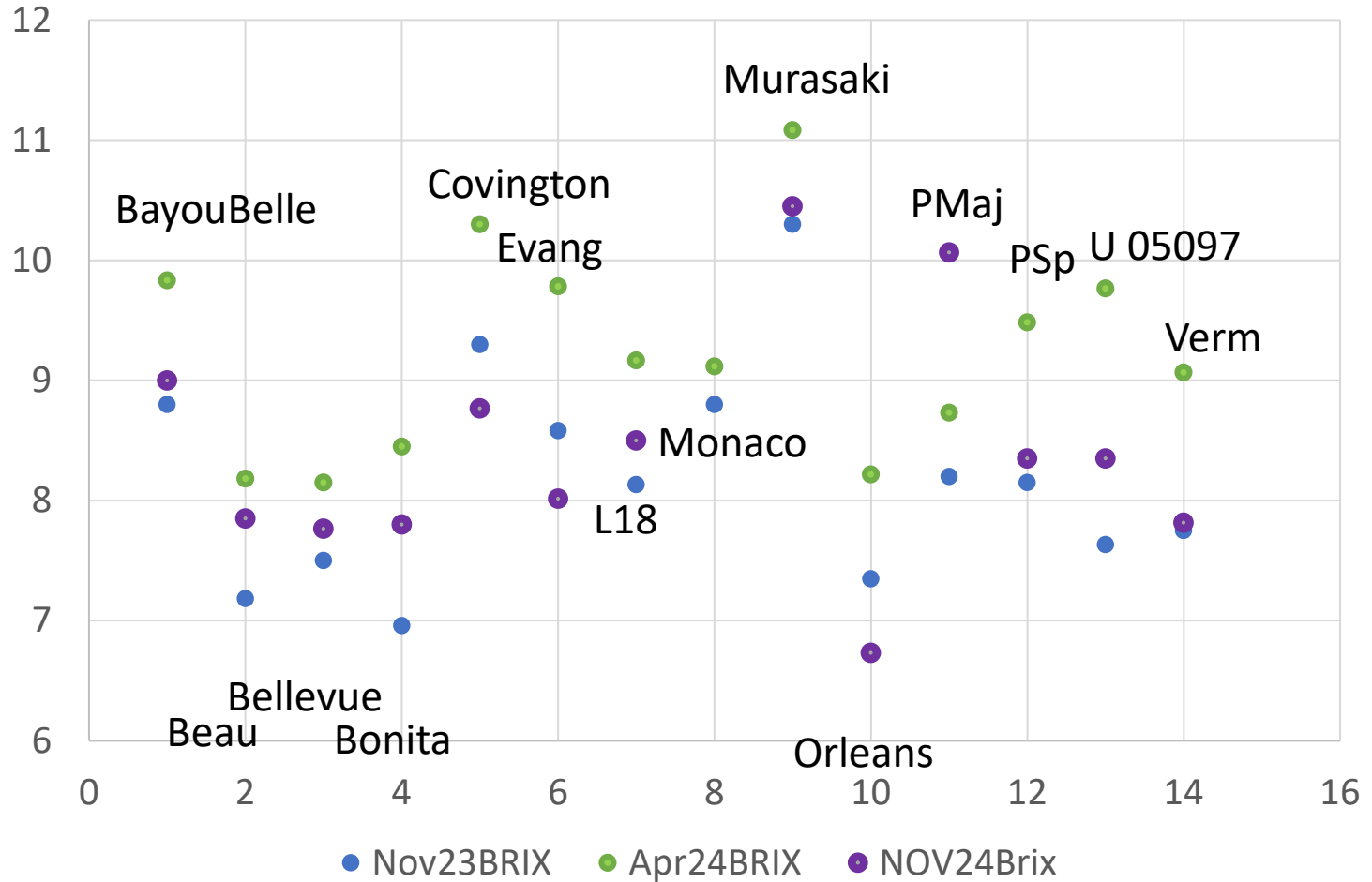
Cultivar	Mean %
Bayou Belle	100.000
Beauregard (B-14)	98.611
Bellevue	98.150
Bonita	100.000
Covington	99.390
Evangeline	96.467
LSU18-100	91.916
LSU Bellevue	100.000
LSU Bonita	100.000
Monaco	33.880
Murasaki	66.719
NC15-0728	40.886
NC17-0452	53.425
NCP16-0046	99.457
NCPurple Splendor	95.572
Orleans	98.276
Purple Majesty	98.729
Purple Splendor	90.248
Radiance	75.000
USDA 05097	61.698
Vermillion	100.000



Primarily black rot (Ceratocystis fimbriatum)

What about eating quality?

Soluble Solids (°brix) of Sweetpotato



Some cultivars have consistently lower (& higher) brix



Rated:
Flesh color (1-5)
Flavor (1-5)
Texture (1-5)
Overall (1-5)
Descriptors



Beauregard



Covington



unlikeothersweetpotatoes notsoldoncolor earthy meh unique
hintofsweet caramel-y
slightly flavorful **bitterskin** notsweet notstarchy
cake-like
transluscentpurple notstickytexture sasparilla delicious
slightlysweet **smooth** okay deeppurple
potatoflavor pretty nutty balanced purple **bland**
mykidsthoughtthesewerepotatoes dry fresh
citrusy squash-like bitter nice sweet great moist average
simple bitter **bright** vibrant preferred pinkishpurple mottled
starchy flavor nottoosweet
offflavor favoritepurple
interesting

Purple
Splendor

Purple
Majesty

notverysweet texturebetterthanwhiteones
mild plump **pretty** herbal dry
verymild badtexture bitter
starchy roundflavor notappealingflavor nutty
grainy goodtexture loamy tasty constant undercooked
tasteslikepeas **bland** notmuchflavor sarsaparilla goodflavor
notmuchgrainy **earthy** weptwhencut
moretraditionalsweetpotatoflavor bland verystarchy vividcolor
meh softertexture
greatbakedtexture notmemorable **purple** beautiful
smooth crunchy grassy





Treasure
Island® Series,
Louisiana
State
University



Manihi
Territorial Seed photo

Makatea
Territorial Seed photo



Tahiti
Log Hill Plants photo



Tatakoto
Log Hill Plants photo



Kaukura
Spring Hill Nurseries photo

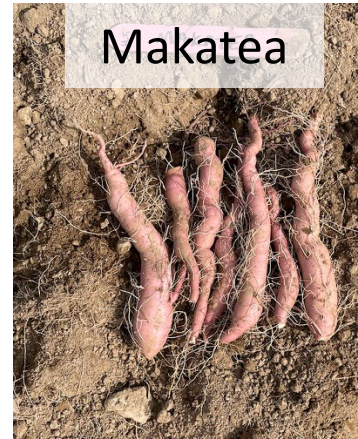
Kaukura



Tahiti



Makatea



Manihi



Tatakoto



bu/ac

Beauregard 580

Covington 296

★ Kaukura 466

Makatea 14

★ Manihi 497

Purple Majesty 462

Purple Splendor 421

Tahiti 64

★ Tatakoto 353



Performance in planters unknown...

Take-home messages

Orange-fleshed

- Beauregard, Orleans, Bayou Belle, Bellevue = excellent yields
- LSU 18-100 (*Avoyelles*), Covington inconsistent
- Covington remains a standout for flavor – but all rated well
- Vermillion: poor yields

Other colors

- Bonita (white skin, white flesh): very high yields
- Murasaki (purple skin, white flesh): extremely high brix and dry matter, but mediocre yields
- Purple Splendor had higher yields than Purple Majesty; both had gorgeous large roots with purple skin and purple flesh

All were well liked by tasters

Questions?

