



# 2021 Storage Onion Variety Trial Report

Crystal Stewart-Courtens and Natasha Field

**Cornell Cooperative Extension**

Eastern NY Commercial Horticulture Program

## Trial Information

Onions were seeded on March 16th with 4 seeds per cell in 72 cell trays. They were transplanted into raised beds with black plastic mulch at 9 inch in-row spacing, 3 rows to a bed about 6 inches apart. Onions were harvested as they were ready from July to August. They were cured in a high tunnel covered with shade cloth for 3 weeks prior to data collection.

## Notable Varieties

‘Sedona’ (yellow) was the highest yielding onion overall with 58,312 lbs per acre extrapolated yield. It also had the largest bulbs with an average of 8.4 ounces per bulb. Our sample size for this variety was low, but in our limited sample the cull rate was nearly zero. ‘Sedona’ will be grown again in the replicated trial in 2022.

‘Powell’ (yellow) was the second highest yielding with 50,065 lbs per acre. It was harder to clean than ‘Sedona’, but did have a good size and shape.

‘Red Mountain’ (red) was the highest yielding red onion and had overall excellent quality. It yielded 48,903 lbs per acre and had a consistent nice round shape. Average bulb size was 7.4 ounces per bulb.

‘Cortland’ (yellow) performed well on yield but and had the highest germination rate of the varieties.

Most of the varieties were hybrids but we did include some open pollinated varieties such as ‘Rossa di Milano’, ‘Trapps Downing Yellow Globe’, ‘New York Early’ and ‘Yellow of Parma’. Highest yielding OP was ‘Rossa di Milano’ maintained by High Mowing Seeds and the highest yielding yellow was ‘Yellow of Parma’. If you are focusing on open pollinated varieties, try seed from several different sources as the quality, shape and size may vary.



# Red Onions

## Blush



- From Johnny's Selected Seeds, breeder is Bejo Seeds
- DTM Direct Seeding—107
- Yield: 38,565 lbs/acre
- Nice color
- Round shape
- On small side but very uniform
- Nice skin

## Red Carpet

- From Johnny's Selected Seeds, breeder is Bejo Seeds
- DTM Direct Seeding—116
- Yield: 34,500 lbs/acre
- Moderate size
- Nice shape and skin color
- Some of the necks were oddly floppy



# Red Onions

## Red Globe



- From Fedco Seeds
- DTM Direct Seeding—110
- Yield: 19,399 lbs/acre
- Huge variation in size and shape, from round to almost Cipollini shape
- Pretty color
- Easy to clean

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## Red Mountain

- From Bejo Seeds
- DTM Direct Seeding—107
- Yield: 48,903 lbs/acre
- Large bulbs
- Consistent size
- Nice round shape
- Overall, very nice

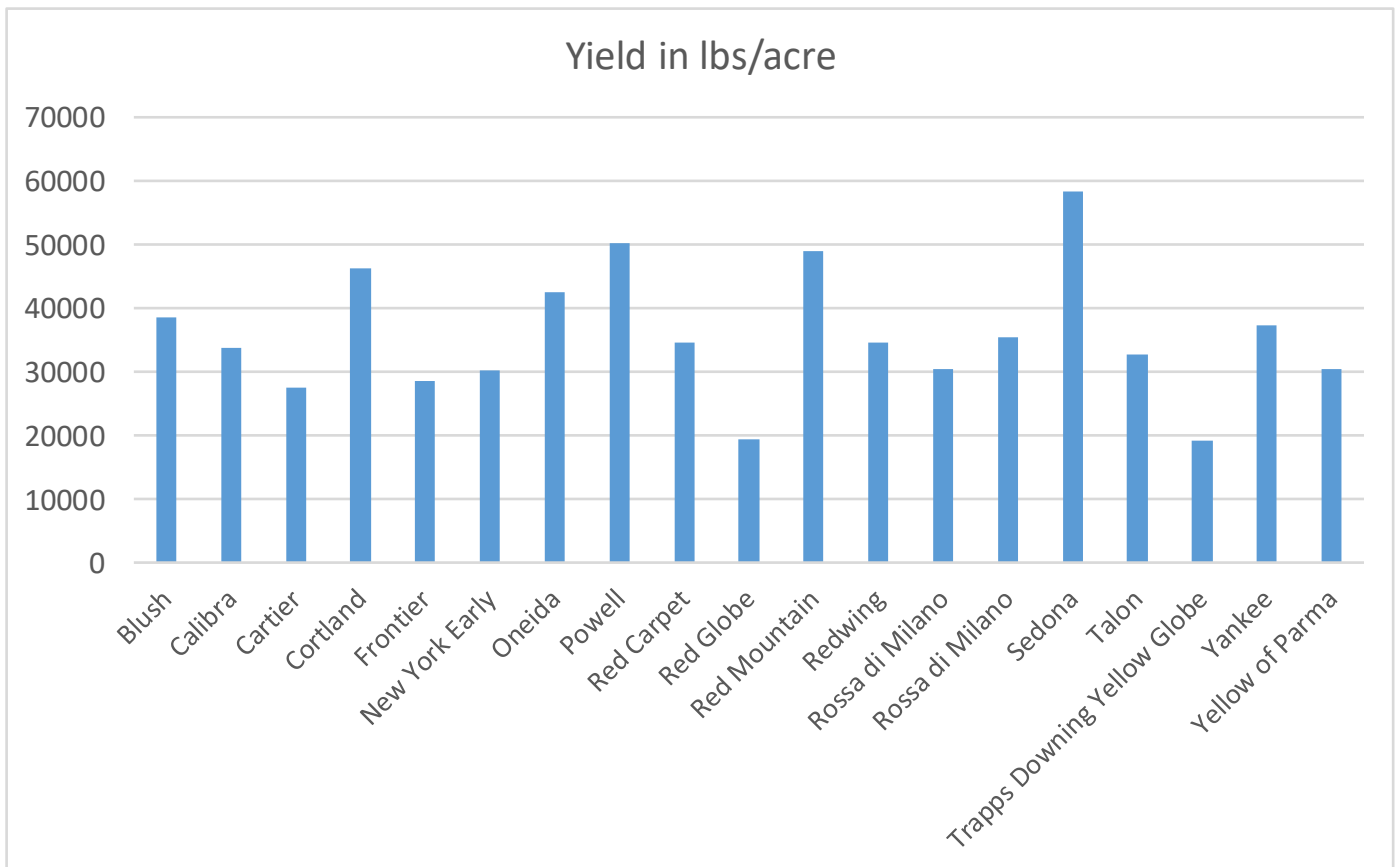


# Red Onions



## Redwing

- From Fedco Seeds
- DTM Direct Seeding—110
- Yield: 34,500 lbs/acre
- Huge variation in size and shape, from round to almost Cipollini shape
- Pretty color
- Easy to clean



# Red Onions

## Rossa di Milano

- From two different sources to compare the maintenance of the variety from two different breeding programs
- DTM Direct Seeding—110
- Yield: Johnny's: 30,434 lbs/acre. High Mowing: 35,313 lbs/acre
- From Johnny's Selected Seeds, it had an interesting shape with a flat top, good color but inconsistent size
- From High Mowing Organic Seeds, overall bulbs were larger but had a huge inconsistency in size

Johnny's



High Mowing



# Yellow Onions

## Calibra



- From Bejo Seeds
- DTM Direct Seeding—110
- Yield: 33,686 lbs/acre
- Nice, thick skin
- Deep color
- Round shape
- Inconsistent size

## Cartier

- From Bejo Seeds
- DTM Direct Seeding—103
- Yield: 27,530 lbs/acre
- Overall, small size
- Nice round shape
- Nice skins



# Yellow Onions



## Cortland

- From High Mowing Seeds, breeder is Bejo Seeds
- DTM Direct Seeding—105
- Yield: 46,232 lbs/acre
- Shape is inconsistent and odd
- Highest germination rate
- This variety had less seed available so yield may vary

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## Frontier

- From Johnny's Selected Seeds, breeder is Takii
- DTM Direct Seeding—100
- Yield: 28,575 lbs/acre
- Overall, small size
- Very pretty with nice skins
- Nice round shape
- Consistent size and shape





# Yellow Onions



## New York Early

- From Johnny's Selected Seeds, open pollinated and maintained variety
- DTM Direct Seeding—98
- Yield: 30,202 lbs/acre
- Inconsistent size
- Hard to peel and layers came off oddly

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## Oneida

- From Bejo Seeds
- DTM Direct Seeding—102
- Yield: 42,515 lbs/acre
- Nice round shape
- Good color
- Easy to clean
- Good size



# Yellow Onions

## Powell



- From Bejo Seeds
- DTM Direct Seeding—108
- Yield: 50,065 lbs/acre
- Round shape
- Good size
- Pretty consistent
- Hard to clean
- Second highest yielding

## Sedona

- From High Mowing Seeds, breeder is Bejo Seeds
- DTM Direct Seeding—108
- Yield: 58,312 lbs/acre
- Huge, consistent size
- Round shape
- No culls
- Highest yielding variety and largest average bulbs
- Yield may vary due to less seed being available for planting



# Yellow Onions

## Talon



- From Johnny's Selected Seeds, breeder is Bejo Seeds
- DTM Direct Seeding—110
- Yield: 32,757 lbs/acre
- Lots of small bulbs
- Hard to clean

## Trapps Downing Yellow Globe

- From Seed Savers Exchange, open pollinated variety
- DTM Direct Seeding—N/A
- Yield: 19,166 lbs/acre
- Variable shape, round to teardrop shaped
- Lots of culls
- Had issues with dry down



# Yellow Onions



## Yankee

- From Johnny's Selected Seeds, breeder is Bejo Seeds
- DTM Direct Seeding—108
- Yield: 37,171 lbs/acre
- Pretty uniform in size and shape
- Thick skins
- Small necks
- Nice round shape

## Yellow of Parma

- From Seed Savers Exchange, open pollinated variety
- DTM Direct Seeding—110
- Yield: 30,318 lbs/acre
- On the smaller side
- Decent skins
- Round to oblong shape
- Inconsistent size



Thank you to Philia Farm for hosting the trial



Thank you to High Mowing  
Seeds, Seed Savers  
Exchange, Bejo Seeds,  
Fedco Seeds, and Johnny's  
Selected Seeds for providing  
seed for the trial

The Eastern New York Commercial Horticulture Program is a Cornell Cooperative Extension Partnership between Cornell University and the CCE Associations in the 17 Eastern New York counties.



**Table 1: Onion Information (Highest to Lowest Yield)**

Variety	Source	Color	Yield (lbs/acre)	Average Onion Weight	Average Onions per Planted Cell
Sedona	High Mowing/Bejo Seeds	Yellow	58312	8.4	3.2
Powell	Bejo Seeds	Yellow	50065	6.6	3.5
Red Mountain	Bejo Seeds	Red	48903	7.4	3.0
Cortland	High Mowing/Bejo Seeds	Yellow	46232	5.6	3.8
Oneida	Bejo Seeds	Yellow	42515	5.5	3.6
Blush	Johnny's/Bejo Seeds	Red	38565	5.5	3.2
Yankee	Johnny's/Bejo Seeds	Yellow	37171	5.4	3.1
Rossa di Milano	High Mowing Seeds	Red	35313	5.0	3.3
Redwing	Fedco Seeds	Red	34500	5.1	3.1
Red Carpet	Johnny's/Bejo Seeds	Red	34500	5.0	3.2
Calibra	Bejo Seeds	Yellow	33686	4.7	3.3
Talon	Johnny's/Bejo Seeds	Yellow	32757	4.3	3.5
Rossa di Milano	Johnny's Selected Seeds	Red	30434	3.8	3.6
Yellow of Parma	Seed Savers Exchange	Yellow	30318	4.6	3.0
New York Early	Johnny's Selected Seeds	Yellow	30202	4.3	3.2
Frontier	Johnny's/Takii	Yellow	28575	5.0	2.6
Cartier	Bejo Seeds	Yellow	27530	4.6	2.8
Red Globe	Fedco Seeds	Red	19399	2.9	3.1
Trapps Downing Yellow Globe	Seed Savers Exchange	Yellow	19166	3.3	2.6