

All About Onions



What is an onion?

- The amazing onion provides layers of flavor, color and texture to a wide variety of dishes
- Onions are believed to be one of the earliest cultivated crops, going back 5,000 years or more
- Onions are the third most consumed fresh vegetable in the U.S.
- Onions range in size from less than one-inch in diameter to over 4.5 inches
- Consumed raw, sautéed, caramelized, grilled and roasted



Two Categories for Onions

Spring/Summer Fresh Onions

- Available in yellow, red and white
- Their season is March-August
- Fresh onions have thin, light-colored skins
- Typically sweeter and milder due to higher water content
- The higher water content also makes them more susceptible to bruising
- An ideal choice for salads and other fresh or lightly-cooked dishes

Fall/Winter Storage Onions

- Available in yellow, red and white
- Their season is August-April
- Storage onions have multiple layers of thick, dark, papery skins
- Have a more intense flavor due to a higher percentage of solids
- An ideal choice for savory dishes that require longer cooking times or more flavor

Onion Types

87%

of the onions produced in the U.S. are yellow; 8% are red; 5% are white.



Yellow Onions

- Full-flavored
- Reliable standby for cooking almost anything
- Turn a rich, dark brown when cooked
- Give French Onion Soup its tangy sweet flavor



Red Onions

- Wonderful color
- Great for lots of fresh uses and for grilling, charbroiling, roasting



White Onions

- Often used in prepared salads, white sauces
- Traditional onion for classic Mexican cuisine
- When sautéed, have a golden color and sweet flavor

The Sweet Onion

- Sweet onions are available in both yellow and red
- Sweet onions are gaining in popularity
- Mild in flavor, usually leaves little to no aftertaste; perfect for using raw in salads or relishes
- Sweet onions have less sulfur than other onions, making them taste sweeter
- Specialty sweet onions are typically sold under a specific trade name or label
 - Vidalia
 - Walla Walla
 - Peruvian



Onion Sizing

- Onions range in size from less than one-inch in diameter to more than 4.5-inches in diameter
- Most common sizes sold in U.S. are between 2 to 3-3/4 inches in diameter

Super Colossal

4-1/2" and Up Yellow, Red, and White

Colossal

3-3/4" and Up Yellow, Red, and White

Large/Jumbo

3" and Up Yellow, Red, and White

Medium

2" to 3-1/4" Yellow, Red, and White

Pre-Pack

1-3/4" to 3" Yellow and White

Small

1" to 2-1/4" Yellow, Red, and White

Boiler

1" to 1-7/8" Yellow and White

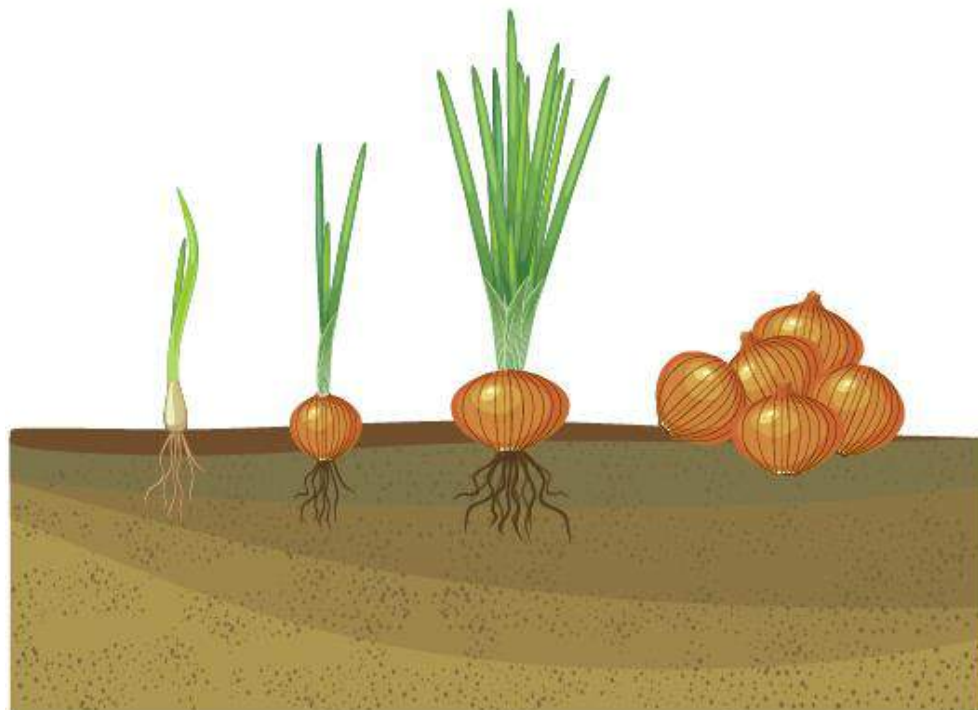
Creamer

Under 1" Yellow and White



Life of an Onion

- 5-6 month growing cycle
- 2/3 of the onion grows on top of the soil
- Bulbing triggered by day length and latitude
- Tops naturally go down when mature
- Onions are lifted to breakup root system
- Curing is critical for storage onions



Planting: Transplants

- Planted by hand or with specialized machinery
- Actual plants, about the size of a pencil, placed in the ground
- Started in seedbeds until they become seedlings
- Then transferred to precise rows
- Transplants require more labor, but less susceptible to dangers like cold weather



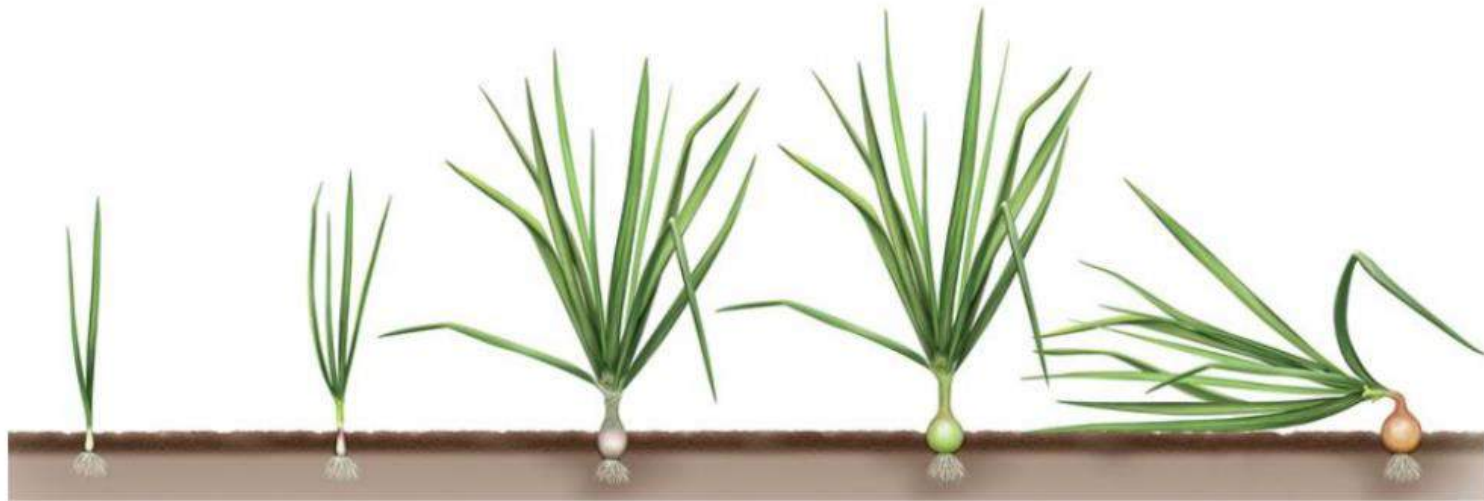
Planting: Direct Seed

- Planted by tractor
- Custom equipment places a single seed in the ground spaced exactly the same distance apart from the next seed
- Pressurized air 'puffs' the seed into the soil and the seed is instantly covered up



Growing

Did you know? Each hollow, green leaf represents a ring in the onion.



Stage:	Establishment	Vegetative growth	Bulb initiation	Bulb development	Maturation
Stage duration:	30 Days	30 Days	30 Days	45 Days	15 Days
Description:	1 to 2 true leaves	From 4 to 7 true leaves. 'leek' stage, the fourth leaf appears and the neck of the plant starts to thicken	Bulb diameter is twice that of the neck, 8 to 12 true leaves. The second and third leaves fell. The plant reaches maximum height	Leaves continue to grow and elongate but the total leaf area and number of leaves stay about the same	Bulb enlargement near completion; more than 50 percent tops down.

Harvest

- Onions are finished growing once the tops begin to flop over
- The mature onions are then lifted to break-up the root system
- Onions are then cured
 - Curing allows the outer layers to dry out and tighten, forming a protective wrapping around the bulb
- Mechanization is then used to harvest the onions and move them to storages; some harvest is done by hand



Onion Yield-Per-Acre

- Crop yield-per-acre refers to the output or measure of a crop per unit, or acre, of land cultivation
- Onion yields vary across the United States due to changes in climate and soil type and variety of onion grown
- Example: Washington yields are far greater due to longer growing season and more controlled weather patterns; average yield in Washington is about 40 tons per acre



Storage

- Onions have a retail shelf-life of 30 days or less
- Ideal storage conditions are room temperature, dry storage, in a dry, well-ventilated place
- Spring/Summer onions:
 - Typically not stored, unless under controlled atmosphere or refrigeration
 - Storage shelf-life: 30-60 days
- Fall/Winter onions:
 - Designed specifically to withstand long periods of storage
 - Storage shelf-life: 30-180 days



Availability

Onion Availability		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Spring/ Summer Onions	TEXAS												
	CALIFORNIA												
	GEORGIA												
	ARIZONA												
	NEW MEXICO												
	WASHINGTON												
	NEW YORK												
	COLORADO												
	MEXICO												
Fall/Winter Onions	IDAHO												
	OREGON												
	UTAH												
	NEW YORK												
	WASHINGTON												
	COLORADO												
	MICHIGAN												
	MINNESOTA												
	NORTH DAKOTA												
	WISCONSIN												
	CALIFORNIA												
	ILLINOIS												
	INDIANA												
	IOWA												
	OHIO												
	NEVADA												
	PERU												

Common Pack Sizes

- 2,000 lb. super sack
- 50 lb. mesh bag
- 25 lb. mesh bag
- 40 lb. carton
- 10/5 lb. master bag
- 5/10 lb. master bag
- 16/3 lb. master bag
- 12/2 lb. master bag



Common Defects



Decay



Mold



Peelers



Translucent



Mechanical Damage



Sprouting

Onion Best Practices (At Store Level)

- Always handle onions with care; dropping can cause bruising and internal decay
- Onions do best with proper ventilation and air flow: store away from walls, do not wrap in plastic or store in plastic bags
- Store in cool, dry, well-ventilated area
- Maintain storage temperature of 45-55°F
- Onions should feel firm and dry, be free of gray or black mold, should have no visible sprouting; some loose skins are normal
- Do not store onions with potatoes or other produce that releases moisture
- Keep out of direct sunlight or other heat sources



Onion Best Practices (For Consumers)

- How to select an onion:
 - Should be firm for their size
 - Should have little to no scent
 - Avoid onions with cuts, bruises or blemishes
- Once home:
 - Onions should be kept in a cool, dry, dark place with plenty of air movement
 - Refrigerate whole peeled onions
 - Store cut onions in a sealed container for up to 7 days



Health Benefits of Onions

- Onions are high in vitamin C
- A good source of fiber and other key nutrients
- Sodium, fat and cholesterol free
- Only 64 calories per one-cup serving





Thank you!



8550 Central Sands Rd., Bancroft, WI 54921 | RPEProduce.com | 800-678-2789