Veggies A - Z

The Crop Groups
- Salad Crops
- Root Crops
- Cole Crops
- Legumes
- Vine Crops
- Solanaceous Crops

Salad Crops

Swiss chard
Head lettuce
Spinach
Mesclun
Leaf lettuce

Salad Crops:
Lettuce

- Cool season crop
- Heat causes bitterness and "bolting"
- Lightly shade
- Types:
  - Leaf
  - Cos or romaine
  - Butterhead
  - Crisphead

Salad Crops:
Spinach

- Cool season crop
  - Heat causes bitterness and "bolting"
- Varieties:
  - Crinkled (savoyed)
    - Bloomsdale Longstanding
    - Melody
    - Tyee
  - Smooth
    - Correnta

Harvesting lettuce

- Outer leaves
- Whole head
- Cut and Come Again

Salad Crops:
Swiss Chard

- Plant in spring; grows all season
- Thick leaf stalks with large leaf blade
  - Stalks and mid ribs:
    - white, red, pink, yellow
    - chop like celery & steam
  - Leaves:
    - green, bronze, purple
    - cook like spinach
- Varieties:
  - Bright Lights
  - Ruby Red
  - Fordhook Giant
- Harvest outer leaves all season
**Leafy Greens:**

- **Swiss Chard**
  - Definition: mixed leafy greens
  - Packaged mixtures
  - Mix your own
  - Sow in blocks and “cut and come again” harvest
  - Sow successive plantings if time allows

**Salad Crops: Miscellaneous Others**

- **Mesclun**
  - Cool season crop
  - Fast growing (25 days)
    - Plant very early and in fall
    - Plant half rows every week
    - Thinning needed
    - Heat and long days cause bolting & no root
    - Sow winter and daikon types in mid-summer to late fall

**Root Crops: Radishes**

- Cool season crop
- Fast growing (25 days)
  - Plant very early and in fall
  - Plant half rows every week
  - Thinning needed
  - Heat and long days cause bolting & no root
  - Sow winter and daikon types in mid-summer to late fall

**Root Crops: Carrots**

- Early season, about 70 days
- Through late August for fall (until 60 - 70 days before frost)
  - Tolerate frost in fall
- Types: many shapes and colors
  - Chantenay
    - Broad shoulders, blunt tip
  - Danvers & Nantes
    - Uniform taper to blunt tip
    - Half longs broader, shorter
  - Imperator
    - Very long (10") and thin
  - Novelties
    - Baby (finger) and small round

**Root Crops: Beets**

- Spring, summer & fall
  - Sow seed every 3 – 4 weeks until mid-summer
  - Thinning needed
  - Harvest when young or full-sized
- Varieties:
  - Detroit Dk. Red
  - Early Wonder
  - Golden
  - Little Ball
  - di Chioggia - striped

- Prepare soil deeply
  - 10” plus
- Remove pebbles & clods
  - causes forking
- Sow shallow
- Avoid washing away
- Takes 2-3 weeks to germinate
  - be patient
- Germinates irregularly
- Thinning critical!
**Root Crops: Onions (family: Allium)**

- Cool season with some frost tolerance
- Grow for dry bulbs or for green bunching onions (scallions)
- 3 methods:
  - Seed (very slow)
  - Transplants
  - Sets (small dry bulbs) – most popular

**Plants Sets:**
- For green onions or scallions
  - Plant touching and 2” deep
- For bulbs
  - Plant at final spacing but shallow

**Cole Crops**

**“Cole” Crops (“Crucifers”): Cabbage**

- Many varieties:
  - Different greens and purple
  - Smooth leaves or “savoyed”
  - Early or late types (63 – 85 days)
  - Late form large heads good for “kraut”
- Grow in spring
  - Transplant young plants
    - early spring
    - mid-summer if available
- Harvest main head
  - Side shoots will form

**“Cole” Crops: Brussels sprouts**

- Sprouts form where leaves attach to stem starting at base of stem
- Hardy, long-season (100 days)
- Plant transplants in June
- “Pinch” out top of stalk 3 wks. before 1st frost
  - allows “buds” to enlarge
- Best flavor after first frost

**“Cole” Crops: Broccoli**

- Harvest main head
- Side shoots will form all season
**“Cole” Crops: Collards**
- Plant early and grow all season
- Varieties:
  - Georgia (75; wavy lvs.)
  - Vates (75; low growing, smooth leaves)
- Direct seed early
  - Thin to 18”
- Or transplant
- Harvest oldest leaves regularly
- Require a lot of space

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**Legumes**

**Legumes: Peas**
- Cool season
  - Very early and late summer
- Types:
  - Snap peas
    - edible pod and full-sized seeds
  - Snow peas
    - Flat; eat pod only
  - Garden peas
    - (English or shelling peas)

**Legumes: Beans**
- Tender, warm season
  - Seeds rot if planted in cold soil
- Snap beans bred to be stringless
- Pods – green, yellow (wax), purple, round, flat (Romano)
- Seeds – white, speckled, pink, red, black, green
- Types:
  - Bush beans
  - Pole beans
  - Dry beans
  - Soybeans

- Can plant in very cold soil (45 degrees!)
- Some support needed
  - Garden peas are taller
  - Snow and Snap types are shorter
  - Plant in double rows to support themselves

**Bush**
- Green
  - Contender
  - Blue Lake 274
  - Bush Kentucky Wonder
  - Dandy (filet type)
  - Roma II (flat)
- Yellow
  - Yellow pencil pod
  - Slenderwax
- Purple
  - Royal Burgundy
• Harvesting
  – For “green beans”
    • when pods are full sized but seeds inside are small
  – For fresh beans like lima
    • Seeds are full-sized but not starchy
  – For dry beans
    • Harvest after seeds are completely dry.

Vine Crops:

Vine Crops: Cucumbers

• Warm season
• Types:
  – Pickling
  – Slicing
  – Salad or European
  – Burpless
  – Vining or bush

Vine Crops: Summer Squash

• Warm season
  – frost sensitive
• Harvested young
  – Soft rind
• Bush-type plants
  – VERY large plants
  – 4’ x 4’
• Very productive
  – harvest small; 3-4 days after flowering

Flowering:
  – Male flowers first
  – Females produce fruit
• If stressed, only male flowers are produced
  – Cold
  – Heat
  – Dry
• Pollination
  – Self or insect
  – Affected by temperature, wind, rain, pesticides, etc.
  – Poor pollination causes misshapen fruit
  – Cross pollination with other vine crops does NOT effect this year’s fruit

Varieties:
  – Green zucchini
  – Golden zucchini
  – Yellow Crookneck
  – Yellow Straightneck
  – Scallop
Vine Crops: Winter Squash

- Warm season, frost sensitive
- Long season crop
- Hard rind (mature fruit)
  - Stores well for winter
- Requires large amount of space
  - 6-10’ x 6-10’

- Water during drought
- Only use insecticides late in the day
  - to protect bees
- Harvest
  - When tendril nearest the squash is brown and dried
  - When color is good
  - Rind is hard & glossy
  - Portion touching soil changes to cream to orange
  - Avoid bruising
  - Before frost if storing otherwise ok after frost

Vine Crops: Melons

- Warm season, long season, frost sensitive
- Require large space
- Muskmelon-Cantaloupe
  - Netted rinds with deep sutures
  - Orange flesh
  - Musky aroma
- “Winter melons” Honeydew, Crenshaw, Casaba
  - Smooth rind
  - Longer season
  - No musky aroma
- Watermelon
  - Very long season

- Types:
  - Acorn
  - Delcata
  - Spaghetti
  - Butternut
  - Pumpkin (several spp. & types)
  - True Winter type
    - Including Buttercup and Turk’s Turban types

- Ornamental gourds
  - 3 genera used
  - C. pepo is the cucurbit
    - Bitter tasting

- Pests:
  - Powdery mildew
  - Squash vine borer
  - Cucumber beetle
    - Transmits bacterial wilt
  - Squash bug

- Watermelon
  - Warm season
  - Very long growing season
  - Best to start indoors 6 weeks before planting outside
  - Or purchase transplants
  - Plant outside early June
  - Must be mature and harvested before the first frost.
Solanaceous Crops

Favorite homegrown vegetable
- So. American perennial
- "love apple"

Warm season, long season
- Prefers warm soil

Hundreds of varieties
- All colors, shapes, sizes, dates to maturity

Types:
- Determinate - bush type
- Indeterminate - vining
- "patio" types = dwarf

Varieties:
- Early - ‘Early Girl’, ‘Early Boy’
- Medium early
- Main crop
- Extra large - ‘Beefsteak’ types
- Yellow or orange - Low acid
- Pink
- Paste - ‘Roma’
- Small fruited
  - Cherry, pear, grape, spoon, currant
- Heirlooms (i.e. ‘Brandywine’)

Transplant into garden late May or early July.
- Earlier with protection such as Wall ‘o Water

Plant in a trench.

Training methods:
- Cage
  - Easier
  - More fruit
  - More leaves
  - Less air circulation so more leaf disease
  - Outgrow cage
  - Cages fall over = stake at planting
- Stake
  - Saves space
  - More sun, pruning
  - Better air circulation
  - Fewer fruits
  - Can ripen indoors
- Spread
  - easiest
  - Lots of space required
  - Must to keep fruit off soil
  - Easier and faster
  - Poor air circulation means more leaf disease

Harvesting
- Once fully colored, leave 5-8 days longer to sweeten
- Store at room temperature
- Refrigerate only damaged ones
- In fall when nights are cool
  - Protect from frost
  - Harvest full-sized ones green
  - Can ripen indoors

Tomato

Determinate
Indeterminate
'Beefsteak'
Yellow Pear
'Patio'
Brandywine

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- Determinate = bush type
- Indeterminate = vining
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Problems (See brochure “Trouble-Free Tomatoes”)

- Diseases
  - Fusarium
  - Verticillium
  - Black walnut toxicity
  - Septoria
  - Early blight
  - Late blight
  - Anthracnose (post harvest)
  - Viruses
  - Bacterial speck and spot

- Insects
  - Tomato hornworms
  - Whiteflies
  - Slugs

Problems (cont’d)

- Physiological
  - Fruit not setting/blossoms dropping
    - Below 55 degrees
    - Above 95 with dry winds
  - Leaves pointed and stretched
    - Vapor drift from phenoxy herbicide
  - Blossom end rot
  - Immobility of calcium
  - Physiological leaf roll
  - Cracking – uneven moisture
  - Catfacing - cold temperatures
  - Sunburning - leaf loss

Solanaceous Crops: Pepper

- Warm season, long season
  - Prefers warm soil
  - Sets fruit between 60 – 86 degrees
    - Below 55, flowers drop, leaves yellow, stunted
  - Peppers are “Hot” due to capsaicin
    - Hot dry conditions make even hotter
  - Scoville Heat Units
    - 0 – 300,000
    - Scotch Bonnet or Habanero some of the hottest

Types:

- Bell or sweet
  - Many colors
  - Bell shaped or elongated
- Sweet frying or salad types
  - Sweet Banana
  - Gypsy
- Hot (chile)
  - Many colors and shapes

Start indoors 7 – 10 weeks before setting out
- Large plants transplant better

Plant outdoors June 1st
- Earlier not advised

Plant
- Same level as in pot
- 2’ apart
- Starter fertilizer

Fertilize after first flush of peppers set

Moisture important
- Hot, dry may cause abortion of small immature fruits
Harvesting
- any size
- Full sized, green, firm
- Fully ripe to colors
  - Some varieties color while immature and turn red when mature
- Hot peppers
  - Usually at red-ripe
  - Green chiles are immature hot peppers
Store
- Cool, moist
- Hot peppers
  - Dry and crush
  - Wear gloves

Types:
- Traditional large oval fruit
- Elongated
  - Ichiban
  - Slim Jim
  - Hansel
  - Gretel (white)
- Novelty (decorative)
  - Easter Egg – white turning yellow at maturity
  - Small orange – like little “pumpkins on a stick”
  - Bambino – mini purple

Solanaceous Crops: Eggplant
- Very warm season, very frost sensitive
  - Requires warm soil
  - Plant late
  - Protect if weather cools
  - Plant transplants 2-3’ apart
  - Use a starter fertilizer
  - Again when half grown & after harvest of first fruit
  - Tolerates dry but not drought

Solanaceous Crops: Eggplant
- Store
  - Cool, moist
  - Hot peppers
  - Dry and crush
  - Wear gloves

Sweet Corn
(family: Poaceae)
- Warm season plant
- Requires space
  - Only 1-2 ears per plant
- Plant in blocks to aid pollination
  - All silks must receive pollen
- High nitrogen feeder
  - Pre-plant
  - At 8” and 18”

Raccoons
ALWAYS find it!