

Cole Crops

Presented by:

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SDG Vegetable Garden Committee



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UC Master Gardener Program
El Dorado County

Master Gardener Mission:

To extend research-based knowledge and information on home horticulture, pest management, and sustainable landscape practices to the residents of El Dorado County.



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Cole crops are several vegetables in the mustard family

- ❖ **Broccoli**
- ❖ **Romanesco**
- ❖ **Brussels sprouts**
- ❖ **Cabbage**
- ❖ **Cauliflower**
- ❖ **Collards**
- ❖ **Kale**
- ❖ **Kohlrabi**

Cole crops are cool season vegetables.

Prefer temperatures 60-70°

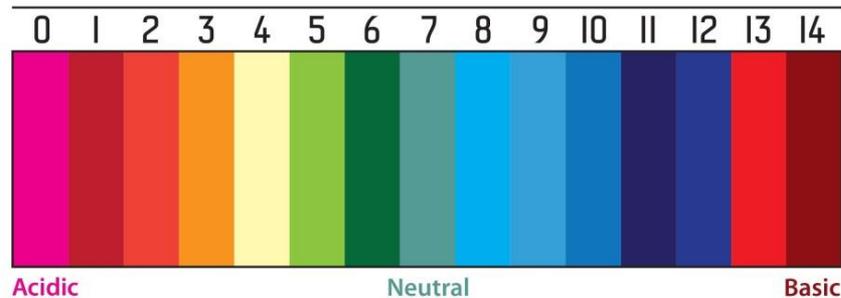
Can take light frost



Starting Cole crops from seed indoors

- ❖ July-September
 - ❖ Plants require full sun
 - ❖ Well drained soil
 - ❖ Crop rotation
 - ❖ Reduces disease problems
- ❖ pH of 6-7

pH scale





Broccoli



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Broccoli (*Brassica oleracea* var. *italica*)

Recommended varieties (Disease resistance)

- ❖ Green Comet (AAS, H)
- ❖ Premium Crop (AAS)
- ❖ Green Goliath
- ❖ Green Valiant
- ❖ Emperor (BR, DM, HS)
- ❖ Packman

- Matures in 60-110 days based on time of year planted and variety
- In warmer locations grow a fall crop
- High temperatures cause broccoli to bolt
- Immature flower heads and 4-8 inches of stem are edible
- Harvest before flower buds open
- May produce as long as 3 months in late fall or winter



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Romanesco



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Romanesco (*Brassica oleracea* var. Romanesco)

Romanesco has flowers that form perfect geometric spiral patterns that repeat called fractals. When you look closely, each spiral bud is composed of a series of smaller buds, all arranged in yet another spiral that continues at smaller levels. The number of spirals on the head of Romanesco is called a **Fibonacci number**.



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Brussels Sprouts



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Brussels Sprouts (*Brassica oleracea* var. *gemmifera*)

Recommended varieties (Disease resistance)

❖ Jade Cross (AAS)

❖ Long Island Improved

❖ Prince Marvel

- Prefer coastal temperatures with a long, cool, growing season
- Require 80-100 days from transplant until first sprouts mature
- Set out transplants when they are 7-8 weeks old
- Sprouts form in the axis of each leaf and are clustered around the main stem
- Harvest mature sprouts from the bottom of the plant upward
- Pick when green and hard, about 1-2 inches in diameter
- Break away the leaf just below the sprout and snap off the sprout
- Harvest upward along the stem until the sprouts are too small



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Cabbage



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Cabbage (*Brassica oleracea* var. *capitata*)

Recommended varieties

- ❖ Katarina Hybrid
 - ❖ Sweet, mild and compact; grow it in a patio tub
 - ❖ Days to Maturity: 45 from transplant
- ❖ Early (<100 days from time of planting to harvest)
 - ❖ Stonehead (AAS, F)
 - ❖ Early Jersey Wakefield (F)
 - ❖ Golden Acre (F)
 - ❖ Copenhagen Market



Cabbage (*Brassica oleracea* var. *capitata*)

Recommended varieties

- ❖ Late (>100 days from time of planting to harvest)
 - ❖ Premium Flat Dutch
 - ❖ Danish Roundhead
- ❖ Red
 - ❖ Ruby Ball Hybrid (AAS)
 - ❖ Red Head (AAS, F)
- ❖ Savoy Ace (AAS, F)
- ❖ Savoy King (AAS, BS)



Cabbage (*Brassica oleracea* var. *capitata*)

- ❖ Does well when plants mature from late fall to early spring
- ❖ Plants started in flats are ready for transplanting in about 8 weeks
- ❖ Harvest when heads are very firm and well filled
- ❖ Over mature cabbage heads may burst





Cauliflower



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Cauliflower (*Brassica oleracea* var. *botrytis*)

- ❖ Recommended varieties
 - ❖ Snow King (AAS)
 - ❖ Snowball “Y”
 - ❖ Snow Crown (AAS)
 - ❖ Cheddar (F1)
- ❖ Cool fairly moist climate
- ❖ Transplant 8 weeks after seeding
- ❖ Can be direct seeded in garden
- ❖ Adequate moisture is essential
- ❖ Good vegetative growth is important for subsequent growth of the cauliflower head
- ❖ Interference with rapid, uniform growth may cause premature development of the head



Cauliflower (*Brassica oleracea* var. *botrytis*)

- ❖ Sensitive to temperature
 - ❖ Cold soil or cold air temperature in the spring
- ❖ Lack of fertility
- ❖ Water stress
- ❖ Insect damage
- ❖ Disease



Cauliflower (*Brassica oleracea* var. *botrytis*)

- ❖ Using transplants with poor root growth or root bound before transplanting might result in buttoning.



Cauliflower (*Brassica oleracea* var. *botrytis*)

- ❖ Exposure to sun causes discoloring
 - ❖ Fold leaves over the head or tie the leaves together to protect the curds from the sun
 - ❖ Some varieties will self protect by growing the leaves over the head
- ❖ Harvest when heads are good size (5-6 inches)
- ❖ Overmature heads tend to segment and surface becomes fuzzy.



Resistant Variety Abbreviations

- ❖ AAS– All America Selections
- ❖ F– Fusarium disease
- ❖ H– Heat
- ❖ BR– Black Rot
- ❖ DM– Downey Mildew
- ❖ HS– Hollow Stem





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