## Growing and Preserving

 Awesome Tomatoes
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Extension

## Tonight's Presentation

- Choosing varieties
- Changing the way you grow tomatoes
- Preserving tomatoes
- Questions


## Choosing A Variety

- Indeterminate vs Determinate
- Heirloom vs Hybrid
- Late vs Early
- Taste
- Variety performance varies by environment (GxE)


## Fruit Color

Carotenoid level


## Disease Resistance

| Tomato | Resistance Codes |
| :--- | :--- |
| (AS) | Alternaria Stem Canker |
| (CRR) | Corky Root Rot |
| (EB) | Early Blight |
| (F) | Fusarium Wilt (Race 1) |
| (F2) | Fusarium Wilt (Races 1 \& 2) |
| (F3) | Fusarium Wilt (Races 1, 2 \& 3) |
| (FOR) | Fusarium Crown and Root Rot |
| (GLS) | Gray Leaf Spot |
| (LB) | Late Blight |
| (LM) | Leaf Mold |
| (N) | Nematodes |
| (PM) | Powdery Mildew |
| (TMV) | Tobacco Mosaic Virus |
| (ToANV) | Tomato Apex Necrosis Virus |
| (ToMV) | Tomato Mosaic Virus |
| (TSWV) | Tomato Spotted Wilt Virus |
| (TYLCV) | Tomato Yellow Leaf Curl Virus |
| (V) | Verticillium Wilt |
| HR: $=$ High Resistance IR: $=$ Intermediate Resistance |  |



BHN 589


BHN 871


BHN 1021


Mountain Fresh Plus


From: Johnny's Seeds

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## CROP SUMMARIES



TOMATOES
Slicers, Heirlooms and breeding lines


CARROTS
Orange Bunching and Storage


PEPPERS
Bell, Corno di Toro, Snack and
Milder Hot.


KALE
Green and Red Curly


SQUASH
Small, Standard and Specialty Butternut


LETTUCE
Little Gem and Butterhead


ONION
Red and Yellow Storage


MELONS
Cantaloupe

## UW-Madison Seed to Kitchen Collaborative

## Changing How You Grow Tomatoes



\#1 Tomato Yields (lbs)

$1.6 \mathrm{lbs} / \mathrm{sq} \mathrm{ft}$




## 1. Shop the diversity and buy your own seeds

## 2. Start Your Own Plants Or Contract For A Flat (or two)

- Start in one-inch cells (72 cell flats)
- Transplant into 4-inch pots
- 60 to 80 degrees is optimal
- Harden for 1-2 weeks
- Plant deeper than in pot


## 3. Use reusable landscape fabric to conserve moisture and reduce spore splashing




## 4. Use Drip Irrigation

Header Line $3 / 4$ "

## Garden Hose



Feeder Lines $1 / 2^{\prime \prime}$

Drip Tape or Poly Tube Feeder Lines


## Drip irrigation works for pots, too



## 5. Focus on training and pruning

## Plant Growth Habits




Indeterminate

## The Meristem



## The Meristem

All of the diverse plant structures we see originate from the meristem.


## Suckers <br> (aka

"laterals") can be problematic




# Pruning and Staking 

- Leave one or two main stems
- Remove suckers between leaves and main stem
- Remove suckers before they get 2 ½ inches long



# Pruning and Trellising 

- Staking
- Caging
- Single-String
- Florida weave



## Horizontal Trellis (Florida Weave)



## Basket Weave





## Soil and Fertility

- Test your soil for P and K
- Add organic matter
- Avoid manure (unless it is very well-rotted)
- Add fertilizer at planting (if necessary)
- Add fertilizer when first fruits are golf ball size
- Mulch 2-4 inches


## Fertilizing Tomatoes



## Soil Test

Sandy soils low organic matter ~6 oz./plant 10-10-10

Heavy soils with higher organic matter $\sim 4$ oz. 5-20-20

DO NOT over apply nitrogen
promotes vegetative growth decreases fruit production increases chance of diseases

- 8-32-16 or 6-24-24 when soil is being worked (1lb per 100 sq ft )
- 3 lbs per 100 sq ft calcium nitrate when first fruits are formed

