Specific Requirements and Considerations for Commonly Cultivated Fruits
Blueberries

- Very easy to grow IF you have the right conditions!
  - Acidic Soil: pH 4.0 – 5.5
    - Soil test before planting!
    - Over 6.0 = add sulfur
  - Well drained, sandy soil with lots of organic matter
  - Shallow roots – not drought tolerant
- Mulch
Blueberries

- One of the easiest fruits to grow organically
- Native to SE USA
- Begin producing in 3 years, remain productive 20+ years
- Yield = 12 lbs per plant (rabbiteye varieties)
- Plant at least 4 plants for family of 4
Blueberries

- Often grown on mounded row
- Mix organic matter in to 1’ deep
- Regular irrigation, especially in first few seasons (soaker hose)
  - Do not irrigate with hard water (high pH)
- Can tolerate more shade than other fruit crops, though yields will be reduced
Blueberries

Southern Highbush
- 6’ – 8’
- Earlier yield – harvest late May – June
- Smoother texture, smaller seeds
- Pick every 5-7 days

Rabbiteye
- 12’ – 15’
- Harvest June – July
- Tougher – more drought tolerant
- Recommended for homeowners
- Pick every 10 days
Rabbiteye Blueberry Varieties for SE NC

- ‘Climax’, ‘Premier’ – early season
- ‘Powderblue’ – mid to late

- Plant more than one variety for cross pollination and maximum yield!
Planting Blueberries

- Space 6’ apart in rows, 12’ - 15’ between rows
- Mulch 2” – 3” to conserve moisture and prevent weeds
- Prune hard at planting – leave only strongest 3 or 4 shoots, cut back all ½
- Remove flower buds 1st and 2nd season for maximum root development
- Keep well watered but not wet
Blueberries - Pruning

- **Late Winter**
  - Remove dead, diseased, weak shoots
  - Cut out 3-4 of oldest, tallest canes
  - Remove suckers

- **Summer**
  - Head back tall vigorous canes
Picking and Storing Blueberries

- Blueberries turn blue well before they are fully ripe!
- Berries ripen over time -- Each bush will need to be picked several times, every 10 days
- After picking (or purchasing) refrigerate ASAP in a container with air holes
  - Do not rinse until ready to eat
Blackberries

- In general, easy to grow
- Full sun
- Well drained soil
- Later blooming – frost not an issue
- At least 600’ away from wild blackberries (diseases)
- pH 5.8 – 6.8 ideal, tolerant of wider range
- Self fruitful
Blackberries

- Produce fruit in 2 years, remain productive 5-15 years
- Average yield
  - **Erect varieties**: 12-15 lbs per plant
  - **Semitrailing**: 20 lbs/plant
- # of plants to provide for family of 4
  - 6 erect or 2 semitrailing
Blackberry Varieties

**Semitrailing**
- Need support
- Thornless!
- Later ripening (late June)
- **Recommended varieties**: Hull, Gem, Chester, Triple Crown

**Erect**
- Support not necessary but sometimes provided
- Most have thorns, a few thornless
- Earlier ripening (late May)
- Suckering roots – must dig out
- **Recommended varieties**: Arapaho, Navaho, Choctaw, Cheyenne
Training Blackberries

Semi-trailing varieties = 2 wire support

Erect varieties = 1 wire support
Blackberries

- Spacing = 10’ between rows
  - Erect = 3’ apart within rows
  - Semitrailing = 4’ – 10’ within rows, depending on vigor

- Usually available early spring as dormant plants

- Eliminate perennial weeds before planting

- Plant with crown 1” below soil level
Blackberries

Bear fruit on 2 year old canes

- 1st year new canes grow from crown, branch during first growing season
- 2nd year canes develop flower buds on side branches (laterals)
- Canes die after fruiting
- Canes are cut out after fruiting
Blackberries - Culture

- **Mulch** - holds moisture, reduces weeds
- **Irrigate** - most important when berries are growing (1” per week)
- **Fertilize** - early spring and after harvest
Raspberries

- Grown similar to blackberries, but not as tough or heat tolerant
- Only do well in Coastal Plains on heavier, darker soils
- Short lived at best, 3-5 years
Raspberries

- Full sun, well drained, loamy soil
- pH 6.3-6.5
- Varieties:
  - Dormanred
  - Southland
Muscadine Grapes

- Native to southern US!
- **Muscadine** (purple - black skin varieties)
- **Scuppernong** (bronze skin varieties)
- Easy if properly trained
- Sun, well drained soil, pH 6.5
Muscadine Grapes

- Produce fruit in 3 years, remain productive 15-20 years
- Yield = 25-50 lbs/plant
- 2 vines can supply family of 4
Muscadine Varieties

- Some are **perfect flowered** (male and female parts) = self fruitful
- Others are **female only** = need perfect flowered variety for pollination
- Skin color (bronze/black)
- Early, mid, late season cultivars
- Fruit size
### Muscadine Recommendations

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<tr>
<th>Cultivar</th>
<th>Color/sex</th>
<th>Fresh/wine</th>
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<tr>
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<td>Fresh</td>
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<tr>
<td>Noble</td>
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<td>Doreen</td>
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<td>Fresh (clusters)</td>
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<tr>
<td><strong>Tara</strong></td>
<td>Bronze</td>
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<td><strong>Summit</strong></td>
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<td>Scarlett</td>
<td>Red/female</td>
<td>Fresh</td>
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Muscadine - Training

- Must establish permanent arms (cordons)
- Fruiting spurs arise off cordons
- Single or double wire (resembles a clothesline) systems
  - Pergolas and arches don’t work!
  - Double wire recommended
- Space plants 15’ - 20’ apart, wire 5’ – 6’ above ground
Feb/Early March – cut back last season’s growth (canes) to 3-4 buds
  - Vines will ‘bleed’ – not harmful
Muscadines

- **Fertilization** – early March and mid June (reduce rate if too vigorous)
- Drought tolerant once established
- Ripen August – October
- Few problems
  - Japanese Beetles
  - Powdery Mildew
Strawberries

- pH 5.5 - 6.5
- Excellent drainage to prevent root rot  
  - Raised beds
- Full Sun
- Shallow root systems  
  - Not drought tolerant!
  - Easily burned by too much fertilizer
Strawberries

- Can be challenging
  - Disease problems, frost damage
  - Birds! Netting can help

- Produce fruit in 1 year, remain productive 2-4 years

- Average yield/plant = 1/3 to 2 lbs

- # to supply 4 people = 50 plants
Strawberries

Varieties for SE NC

- **Junebearers** – actually bear in late April – May
- Anthracnose tolerant, if available
- ‘Sweet Charlie’, ‘Apollo’
- Everbearing and Day Neutral varieties not productive in Coastal Plains
Strawberries

Production cycle

- **Commercial**: grown as annuals
  - Planted fall, pulled up after harvest
  - Grown on black plastic with fertigation

- **Homeowner**: keep plants 2-3 years
  - Matted Row
  - Rotate patch every 2-3 years
Strawberries

- Matted Rows
  - Strawberries produce runners
  - Plant single plants early spring (March), in rows 36”-42” apart
  - Do not allow fruit to form first season
  - Runners are produced in summer
  - Peg down around mother plant to make a matted row 18”-24” wide, with 18”-24” between rows
Strawberries

Initial Planting:
36” – 48” between rows
18” – 36” between plants

Final Stand:
Runners fill in between plants
24” between rows
Matted row ~ 18” wide
Strawberries: Planting

Plant crown (where roots and leaves meet) at soil level.
Strawberries

- Harvest second season
- **Renovate beds**
  - After fruit harvest
  - Mow off leaves
  - Cut back rows to 12”-18” wide
  - Thin to leave only most vigorous and healthy plants spaced ~ 6” apart
- Pull out if disease or insect problems
Strawberries:
Fertilization

- Fertilize after planting (N)
- Do not fertilize during harvest
  - More disease, poor flavor
- Fertilize in fall – bloom set
- Slow release best in sandy soils
- Roots easily burned
- Irrigation important throughout production cycle ~ 1” week
Strawberries

- **Mulching**
  - February
  - Pine Straw or Grain Straw
  - Lightly cover plants

- **Weed Control**
  - Hand weeding
Strawberries

- **Frost Protection**
  - Floating Row Cover/Frost Protection Cloth

- **Irrigation**
  - Used in commercial production
  - Must run continuously until temps above 32 degrees
  - Low rates, $\frac{1}{4}$” per hour
Strawberry Anthracnose

- Over fertilization encourages anthracnose
- Choose tolerant varieties when possible
- Pull out plants and start over if anthracnose becomes a problem!