Elderberry Propagation

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Outline

- Introduction
- Stem cuttings
- Root cuttings
- Seeds
- Tissue culture
Cuttings

- Most important means of propagating elderberries
  - Hardwood cuttings
  - Sprouted hardwood cuttings
  - Softwood cuttings
Cuttings

- Depends on the formation of adventitious roots and buds
Cuttings

- Rooting hormones
  - Indolebutyric acid (IBA) is an auxin used to stimulate root formation and growth
  - Available in powder, liquid and gel form
**Cuttings**

- **Types of cuttings**
  - **Softwood cuttings**
    - Taken during the growing season
    - Taken from actively growing shoots
    - Preparation
      - Timing – before July 15
      - Size of cutting - generally 3-6 inches long, 3-4 nodes in length
      - Tip cuttings (softwood) or mid-shoot (semi-hardwood)
      - Remove lower leaves, reduce surface of remaining leaves
Cuttings
Cuttings
Cuttings

- Types of cuttings
  - Softwood
    - Propagation medium – well drained but moisture retentive
    - Sterile if possible
    - Provision to maintain humidity around cuttings is important
Cuttings
Cuttings
Cuttings
Cuttings

- Types of cuttings
  - Hardwood cuttings
    - Generally taken from late fall to early spring
    - Use shoots of the previous season’s growth are used
    - Usually several nodes in length
Cuttings

- Types of cuttings
  - Hardwood cuttings
    - Preparation
      - Collect cuttings before risk of winter injury
      - Store in a moist, cool area or stick at once
      - Rooting hormone
    - Propagation medium
      - Can use propagation beds with special medium mixes or stick in soil
  - Heated beds
  - High humidity
Collecting hardwood cuttings in January
Types of cuttings

- Hardwood cuttings
Cuttings

- Types of cuttings
  - Hardwood cuttings
Field nursery production
Hardwood cuttings in cell packs
Elderberry Culture

- Establishment – hardwood cuttings
  - Stick directly in the soil
  - Success percentage can vary
Elderberry Culture

- Root cuttings
  - Collect in late winter
  - Pencil diameter is good
Elderberry Propagation

- Seed propagation
  - Useful for mass production of seedling plants
  - Resulting plants are not uniform
  - Stratification is helpful
Elderberry Propagation

- Tissue culture
Any Questions?

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http://extension.missouri.edu/greene/ElderberryDevelopmentProject.aspx