

---

## ENVIRONMENTAL HORTICULTURE

Environmental Horticulture #EH401



### ECHINACEA

### PRODUCTION AND CONSUMER CARE

Thomas M. Blessington, David L. Clement, and Kevin G. Williams  
Central Maryland Research and Education Center  
University of Maryland

#### INTRODUCTION

- Common name: Coneflower
- Scientific name: *Echinacea purpurea*
- Name derives from the Greek *echinos*, meaning ‘hedgehog’
- Native to eastern and central North America
- Herbaceous, drought tolerant perennial
- Grows 3-4’ in height
- Lance shaped, fuzzy, medium green leaves
- Large heads of composite flowers bloom throughout the summer
- Blossoms are 2½’’ across and resemble daisies
- Roots are used as an immune booster
- Hardy in zones 3-9

#### GROWTH AND DEVELOPMENT

- Thrives in sunny areas; will tolerate some light shade
- Requires well-drained media; will not tolerate wet feet
- Media should be slightly acidic and should be enriched with organic matter
- Mulch in hot weather to conserve soil moisture
- Well established plants do not require fertilizer or regular watering

#### PROPAGATION

- Propagation by division often results in bushier plants with fewer flowers
- Seeds should be sown indoors 6-8 weeks before last frost

- Seeds germinate best between 70-75°F; germination should occur within 10-20 days
- Transplant seedlings outdoors after last danger of frost has passed, spacing plants 12 inches apart
- Existing plants can be allowed to seed themselves
- Leave faded flowers on the plant into autumn when their centers release seed
- Identify and transplant seedlings the following spring

### DISORDERS

- Bacterial leaf spot (*Pseudomonas*)
  - Leaves develop brown spots
  - Remove infected plants
- Root rot (*Sclerotium*)
  - Dark brown to black lesions form at and above the soil level
  - Remove infected plants
- Leaf spot (*Cercospora*)
  - Purple spots form on leaves
  - Remove infected foliage
- Impatiens necrotic spot virus
  - Dark purple spots appear on leaves
  - Remove and destroy plants showing symptoms
- Powdery mildew (*Erysiphe*)
  - White coating develops on upper leaves
  - Leaves wilt, brown, and drop
  - Reduce humidity and remove infected plants

### CONSUMER CARE

- Coneflowers look best at the back of a bed or border due to their height
- Cut flowers are useful in flower arrangements

- Roots and leaves are used in many over-the-counter herbal preparations
- Flowers attract bees, butterflies, and beneficial insects

### CULTIVARS AND SPECIES

- *Echinacea*
  - ‘After Midnight’: magenta flowers with black-red cone
  - ‘Big Sky Sunrise’: lemon-yellow flowers with golden green cone
  - ‘Big Sky Twilight’: rose-red flowers with deep red cone
  - ‘Fancy Frills’: large purple-rose flowers
  - ‘Harvest Moon’: gold flowers, golden orange cone
  - ‘Pink Double Delight’: bubble-gum pink flowers
  - ‘Summer Sky’: light orange flowers with a rose halo
- *Echinacea purpurea*
  - ‘Double Decker’: purple rose flowers with two layers of petals
  - ‘Magnus’: rose-red flowers
  - ‘Ruby Star’: purple-pink flowers
  - ‘White Swan’: creamy white flowers

### References

<http://en.wikipedia.org/wiki/Echinacea>  
<http://www.gardening-tips-perennials.com/coneflower.html>  
<http://www.yardener.com/Coneflower.html>  
<http://www.doityourself.com/stry/coneflower>

Mention of trade names does not constitute an endorsement by the Maryland Cooperative Extension, University of Maryland, College Park, or University of Maryland, Eastern Shore.