MASTER GARDENER
COLORADO STATE UNIVERSITY
EXTENSION

CMG GardenNotes #510

Herbaceous Plants

References and Review Material

Reading/Reference Materials

CSU GardenNotes

- https://cmg.extension.colostate.edu/volunteer-information/cmg-gardennotes-class-handouts/.
- #213, *Managing Soil Tilth: Texture, Structure, and Pore Space*.
- #245, *Mulching*.
- #511, *Colorado Plant Ecosystems*.
- #512, *Herbaceous Plants: Right Plant, Right Place*.
- #581, *Native Grasses for Use in Colorado Landscapes*.
- #582, *Native Plants Reference List*.

CSU Extension Fact Sheets

- https://extension.colostate.edu/topic-areas/yard-garden/.
- #7.234, *Xeriscaping: Retrofit Your Yard.*
- #7.211, *Fall and Winter Watering.*
- #7.214, *Mulches for Home Grounds.*
- #7.228, *Xeriscaping: Creative Landscaping*.
- #7.230, *Xeriscaping: Ground Cover Plants.*
- #7.231, *Xeriscaping: Perennials and Annual Flowers.*
- #7.232, *Ornamental Grasses.*
- #7.233, *Wildflowers in Colorado.*
- #7.235, *Choosing a Soil Amendment.*
- #7.242, *Native Herbaceous Perennials for Colorado Landscapes.*
- #7.400, *Ground Cover Plants.*
- #7.401, *Rock Garden Plants.*
- #7.402, *Perennial Gardening.*
- #7.405, *Herbaceous Perennials.*
- #7.406, *Flowers for Mountain Communities.*
- #7.410, *Fall-Planted Bulbs and Corms.*
- #7.411, *Spring-Planted Bulbs, Corms and Roots.*
- #7.413, *Ground Covers and Rock Garden Plants for Mountain Communities.*

Plant*talk* Colorado™

- https://planttalk.colostate.edu/.

Other

- Plant Select®, https://plantselect.org/.
- *Annuals for Connoisseurs*, Wayne Winterrowd, Prentice Hall, 1992.
- *Best Perennials for the Rocky Mountains & High Plains*, Celia Tannehill, and James E. Klett, Word Press, 2003.
- *Encyclopedia of Perennials: A Gardener's Guide*, Christopher Woods, Facts on File, 1992.
- *Hardy Herbaceous Perennials*, Leo Jelitto and William Schacht, Timber Press, 1990.
- *Illustrated Encyclopedia of Perennials*, Ellen Phillips, and C. Colston Burrell, Rodale Press, 2004.
- *Sunset Western Garden Book*, Seventh Edition, Sunset Publishing. 2001.
- *The Perennial Garden: Color Harmonies Through the Seasons*, Jeff and Marilyn Cox, Rodale Press, 1992.
- *Tough Plants for Tough Places: How to Grow 101 Easy-Care Plants for Every Part of Your Yard*, Peter Loewer, Rodale Press, 1996.
- *Waterwise Landscaping*, Jim Knopf, Chamisa Books. 1999.
- *The Well-Tended Perennial Garden: The Essential Guide to Planting and Pruning Techniques*, Third Edition. Tracy Disabato-Aust, Timber Press Inc., 2017.
- *Xeriscape Colorado*, Connie Ellefson and David Winger, Westcliffe Publishers. 2004
- *Xeriscape Plant Guide*, Denver Water, Fulcrum Publishing. 1996.
- *Flora of Colorado*, Second Edition, Jennifer Ackerfield. Brit Press, 2022.

Learning Objectives

At the end of this training, the student will be able to:

- Select plants for different garden situations.
- Describe Colorado Eco-regions found in their area.
- Describe factors that influence microclimates.
- Describe methods to create and exploit microclimates.
- Interpret catalog and plant label descriptions, as they relate to:
    - Life cycles.
    - Exposure.
    - Irrigation requirements.
    - Drought tolerance.
    - Soil requirements.
- List other selection considerations related to Right Plant, Right Place.
- Describe clues to overly well-adapted plants in relation to Colorado noxious weeds.

Review Questions

Climate and Microclimate

1. Describe Colorado Eco-regions found in your area of the state.
2. What parameters is the USDA Hardiness Zone based on?
3. What is the hardiness zone of your region? How well does it describe your own garden situation? Why may it be different?
4. List six factors that can influence hardiness.
5. Describe a situation in the landscape where you may have a "heat-tolerant" location.
6. Define microclimate.

7. Describe how microclimates can be influenced by the following situations:
    - Elevation.
    - Aspect.
    - Hills and valleys.
    - Rocks.
    - Structures.
    - Bodies of water.
8. Describe techniques to create and exploit microclimates.
9. What are the advantages and disadvantages of gardening at higher elevations?
10. You have four sides of your house – north, south, east, and west – describe what types of plants or the type of growing conditions that would work best on each side.
11. Describe how a windbreak in your location could work to your advantage or disadvantage.
12. Describe the microclimates around your home landscape.

Interpreting Plant Descriptions

13. Describe what makes a well-defined (complete) plant description in a catalog and a poorly defined (incomplete) plant description.
14. What attributes define the four different life cycles?
    - Annual.
    - Biennial.
    - Perennial.
    - Bulbs, corms, and tubers.
15. What are the benefits of having annuals, biennials, and perennials in your garden? Give one example for each life cycle.
16. List the five different exposure situations and discuss challenges associated with growing plants in each situation.
17. Describe different hydrozones associated with residential landscapes.
18. Explain common misunderstandings related to xeriscaping.
19. What makes a plant “drought tolerant”?
20. Plants that can be defined as xeric may have adaptations to their leaf structure that make them more drought tolerant. After each adaptation, describe why it would assist the plant in its drought tolerance:
    - Thick.
    - Waxy.
    - Fleshy.
    - Hairy.
    - Light-colored.
    - Small and narrow.
21. What defines a “woodsy” or “woodland soil”?
22. What ecosystems/climates/locations in Colorado could fit in the description of having a soil that would have a “woodsy” or “woodland soil”?
23. Define “ordinary soils.”
24. Given your preference for time of year flowering, what type of plants (annuals, biennials, perennials, bulbs, corms, and tubers) would be your primary choice of plants in your garden?
25. Horticulturally speaking, what is resistance?
26. What are the parameters that define wildlife resistant plants?
27. Give three examples of plants that you believe have attractive or contrasting foliage.

Ecological Adaptation

28. What are the characteristics of the “ideal” Colorado plant? Which of these characteristics are applicable in your area?
29. Give five attributes that make a plant adaptable to many of Colorado’s growing areas.
30. Of these five attributes, can any of them also be attributes that could make the plants aggressive or invasive?
31. Define the following terms in regard to plant populations:
    - Aggressive.
    - Invasive.
    - Native.
    - Alien.