

Drought-Tolerant Plants: a Master Gardener Experiment

by Marlys Bell

Are you interested in plants that will look good year-round without supplemental water in the summer? Just think of all the money and time you could save if they could survive on their own. It would also make it possible to add interest in areas currently considered off limits because of water considerations such as under oak trees, by the mailbox or on slopes.

Several Master Gardeners and I are developing a preliminary list of plants that we are growing and monitoring for water needs and performance. We would like others to join us in sharing experiences and observations about these plants and to propose others for inclusion in our experiment. Make your comments and get more information on the Master Gardener - Tuolumne County Facebook page.

Obviously there are not many plants that are able to adapt completely to our hot, dry summers, heavy clay soils and winter rains unless they originated here or someplace with similar conditions, like the Mediterranean. As a result, our preliminary list includes many (but not all) California natives and Mediterranean plants.

There are many sources of information about drought-tolerant plants such as the U.C. Davis Arboretum list of “All Stars,” a research and practice-based compilation of 100 plants that do best in central California. Their web site http://arboretum.ucdavis.edu/arboretum_all_stars.aspx has a drought tolerant search category but most of them still need some summer water. Another good resource is “Care & Maintenance of Southern California Native Plant Gardens,” from Rancho Santa Ana Botanic Garden, available from the California Native Plant Society. This guide, published by the Metropolitan Water District of Southern California, identifies plants with very low water use.

Ultimately we would like to be able to share information on three different levels of supplemental water need:

1. No water needed, except when planted
2. Water only until established
3. Infrequent water indefinitely.

Having that foothill-specific information will make it easier to assess what to plant where and what kind of provisions need to be made for supplemental watering. Our preliminary list includes those, identified by research, that are actually being grown by Master Gardeners:

Category 1 – no water. This category includes those plants that maintain an evergreen presence year-round and those that disappear in the summer, but not those that go dormant and look “dead”. Most must be planted in the fall and receive enough winter rain to become established by their first spring. Examples are California fremontia, matilija poppy, California fescue, bearded iris, Pacific Coast iris and California wild rose. Many bulbs—such as daffodils, Ithuriel’s Spear (*Tritelia laxa*, a member of the Brodiaea family), several salvias—such as brandegei, white, and clevelandii, and many spring wildflowers—such as California poppies, Chinese houses (*Collinsia heterophylla*) and bush lupine—belong in this category.

Category 2 – water until established. These plants benefit by being planted in the fall and then watered in the summer until established (1-3 years depending upon growth/vigor). After that they should not need water unless the summer weather is extremely hot and the plant shows signs of stress. Then deep, infrequent watering may be needed. Plants being considered for this category include western redbud, several salvias—such as brandeggi, white, clevelandii (Allen Chickering, Whirly Blue, PozoBlue)—and Rhus ovata (sugarbush) and trilobata (basketbush). Varieties of ceanothus (Concha), manzanita (Howard Mc Minn), rosemary, cistus (rockrose), artemisia and Russian sage (Perovskia atriplicifolia ‘Little Spirit’) belong in this group.

Category 3 - infrequent water. Most of these plants, once established need infrequent but deep (once a month) water during the summer as determined by signs of plant stress. Some of those being investigated are ceanothus (Yankee Point), manzanita (Emerald Carpet) and salvias—Bees’ Bliss, leucophylla ‘Figueroa,’ sonomensis ‘Fremont Carpet’, ‘Dara’s Choice’). Other choices are deer grass, lavender, yarrow, penstemons, euphorbia (Mediterranean varieties), hellebores, santolina, goldenrod (solidago California ‘Cascade Creek’), bush germander and lambs ears (Stachys).

In addition to determining if we have each of these plants in the right categories, we want more gardeners to try them and report on their experiences. It will be an evolving project as we observe, gather and compare information over time. An important priority is to identify what additional plants we want to consider adding to the list and to make plans for planting them this fall. We welcome suggestions and comments on Facebook. Let’s all work together to save scarce water resources by finding plants that thrive in our foothills climate.

Marlys Bell is developing a demonstration garden on her property to showcase plants need no supplemental water.