



## **Result Demonstration Report**

**2013 Earth-Kind® Perennial Trial**

**Texas A&M AgriLife Extension Service**

**Taylor County**

**Cooperator: Cisco College**

**Robert Pritz, County Extension Agent, Abilene**

### **Summary**

Creating beautiful landscapes while dealing with the tough elements of Taylor County; high summer temperatures, extreme wind speeds and recent draught, is a challenge for many local gardeners. The community has identified the need for a database of resilient plants that will thrive in difficult conditions, yet not strap the area for natural resources, particularly water.

Earth-Kind® is the Texas Agrilife Extension Service program focusing on sustainable landscaping principles and practices. This educational program uses research-based information to provide maximum garden and landscape enjoyment while preserving and protecting the environment. The objective of Earth-Kind® is to combine the best of organic and traditional landscaping principles and practices to create a horticultural system based on real world effectiveness and environmental responsibility. The goals of Earth-Kind® include:

- Landscape water conservation
- Reduction of fertilizer and pesticide use
- Landscaping for energy conservation
- Reduction of landscape wastes entering landfills

Taylor County has chosen to demonstrate Earth-Kind® landscaping principles and practices so community members can learn to create beautiful, easy-care landscapes, while conserving and protecting natural resources and the environment.

In this result demonstration, 102 various perennials were planted and maintained using Earth-Kind® principals and then evaluated monthly to determine landscaping success in Taylor County. The project is to continue through 2018. At the conclusion of the trial, an Earth-Kind® Index value will be calculated and the information made available, within Taylor County and the state, via the Earth-Kind® Plant Selector Database.

The demonstration is ongoing.

### **Objective**

The objective of this demonstration is to observe perennials in a harsh landscape setting and to rate their overall performance. Testing will commence in 2014 and results will be tabulated and

distributed to the Big Country Master Gardeners for use in educational community programs. Final quantitative results will be made available to the public through the Earth-Kind® Plant Selector Database.

### **Materials and Methods**

One hundred and two (102) cultivars were selected for evaluation based on use or potential use in local landscapes. Each cultivar was replicated four times in random placement throughout the trial beds located at Cisco College.

Cultivars included:

Agastache, Apricot Sunrise	Geranium, Cranesbill	Salvia, Furmans Red
Agastache, Blue Fortune	Germander	Salvia, Henry Duelberg
Artemisia, Silver Mound	Germander, Prostrate	Salvia, May Night
Aster, Alert	Germander, Wall	Salvia, Moonglow
Aster, Hardy Blue	Gloxinia, Hardy White	Salvia, Pink
Balloon Flower, Blue	Lambs Ear, Helen V Styne	Salvia, Pink Friesland
Candylicily	Lantana, New Gold	Salvia, Pink Kadillac
Candytuft Alexander's White	Lantana, Pink	Salvia, Purple
Catmint, Walkers Low	Lavendar, Otto Quast	Salvia, Raspberry
Chocolate Flower	Loosestrife, Mordens Pink	Salvia, Sierra Linda
Coneflower, Magnus	Loosestrife, Robert	Salvia, Silkes Dream
Coneflower, Purple	Marigold, Mexican Mint	Salvia, Snow Hill
Copperleaf, Raspberry Fuzzies	Mexican Hummingbird	Salvia, Trident
Coreopsis, Flying Saucers	Mistflower, Gregs	Santolina, Green
Coreopsis, Route 66	Obedient, Miss Manners	Scabiosa, Blue
Daisy, Angelita	Paper Flower	Scabiosa, Pink Mist
Daisy, Copper Canyon	Penstemon, Huskers Red	Sedum, Autumn Fire
Daisy, Englemann	Primrose, Missouri	Sedum, Frosty Morn
Daisy, Four Nerve	Primrose, Texas	Sedum, Mexicana
Daisy, Shasta Becky	Rock Rose, Brazilian	Skullcap, Starrfire Red
Dalea, Sierra Gold	Rock Rose, Texas	Turks Cap, Pink
Daylily, Baby Betsy	Rosemary, Hill Hardy	Turks Cap, Red
Daylily, Happy Returns	Rosemary, Tuscan Blue	Veronica, Sunny Border Blue
Daylily, Joan Senior	Ruellia, Katies Blue	Winecups
Daylily, Little Business	Ruellia, Katies Pink	Yarrow, Moonshine
Daylily, Stella d'Oro	Sage, Chaparral	Yarrow, Paprika
Dianthus, Firewitch	Sage, Jerusalem	Yarrow, Royal Tapestry
Gama, Side Oats	Sage, Mealy Blue	Yarrow, Summer Pastels
Garlic, Green Society	Sage, Russian	Yarrow, Terra Cotta
Garlic, Society Variegated	Salvia, Augusta	Yarrow, White Beauty
Gaura, Pink	Salvia, Black & Blue	Zinnia, Desert
Gaura, White	Salvia, Blue Hills	Zinnia, Prairie

Trade names of commercial products used in this report is included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension Service and the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.

Gayfeather	Salvia, Coral
Gayfeather, Dotted Blazing Star	Salvia, E Friesland
Gayfeather, Kobold	Salvia, Flame

The demonstration was implemented following Earth-Kind® Guidelines, prepared by Texas AgriLife Extension Service. Recommended Earth-Kind® sustainable landscaping principles and practices were used for: site selection, preparation, weed control, plant installation, mulching, irrigation, fertility, and pest management.

During 2013, the first full growing season in the trial, the plants were left to reestablish their root systems and no judging was conducted. In 2014, the perennials will be evaluated monthly by teams of volunteers during their active growing season. This monthly evaluation will be conducted again in 2015, 2016, 2016 and 2018 before final results are tallied and submitted to the Earth-Kind® Plant Selector Database.

Plant ratings range from 0 to 10, with 10 being the best. The monthly rating recorded for each plant reflects the plant's overall landscape performance. The figure includes points for vigor, foliage quantity and color, blossom quantity and quality, fragrance, disease and insect tolerance/resistance, soil tolerance, growth habit and overall aesthetics.

All data will be collected on standardized spreadsheets. Average performance ratings will be determined through statistical analysis of the volunteer judge assessments. Interim results will be maintained by the Big Country Master Gardener Association.

### **Results and Discussion**

The demonstration is in its first year. The site was prepared and perennials planted in the first year. While no formal judging has been conducted, the volunteers maintaining the site noticed many perennials planted in the Spring 2013 were faring rather poorly, likely due to poor planting procedures. Many plants were not transplanted properly and as such, had to be removed from the trial beds and replaced in the Fall of 2013.

### **Conclusions**

Though this is an ongoing demonstration, differences in local acclimation and resource efficiency between the subject perennials has been demonstrated. Appropriate selection of plant materials can have a significant impact on landscape quality in Taylor County. The Earth-Kind® trials aim to provide data for local gardeners to make their landscaping decision and encourage the minimized use of natural resources in their landscape maintenance.

This demonstration and associated educational activities are ongoing, as such, total knowledge gain has not yet been calculated.

### **Acknowledgements**

This project would not have been feasible without the volunteer hours of the Big Country Master Gardeners and our partnership with Carol Dupree, Provost of Cisco College. Additional AgriLife Extension Service members heavily contributed to this project, including John Begnauld.