



The DeKalb County Federation of Garden Clubs, Inc.

2015-2017 AWARDS APPLICATION FORM

AWARD # 18-1 **AWARD NAME** Horticulture Study/Activity Award **DATE** 02/28/2017

SUBMITTED BY (club name) Shenandoah Rose Garden Club **# OF MEMBERS** 15

CLUB PRESIDENT'S NAME & PHONE # Sandy Reed, 404-772-2854

- This Application form **may not be altered**. The Application is limited to three printed pages-front of pages only. This sheet counts as the first sheet. No report cover, binders or plastic sheets.
- DeKalb Federation Awards Chairman must receive entries (by mail, electronically or in Garden Center) by March 1st.

Please complete each topic, if applicable. Use numbering as below when completing form.

1. New project: Yes x No Beginning date 09/19/16 Completion Date 09/19/16

2. Brief summary and objectives of project:

This was a slide presentation given to the members of the Shenandoah Rose Garden Club for their September 2016 meeting. It was held at the Tucker Reid Cofer Library.

Objectives:

1. To give the membership an understanding of how plant exploration, mutation and seedling selection have contributed to new plant development
2. To explain the process by which new cultivars are developed through plant breeding
3. To identify exciting new perennial, shrub and tree cultivars that members might wish to try growing in their own yards
4. To explain the role of plant patents and trademarks in new plant development

Outline of talk:

- I. Role of exploration in new plant development
 - A. Where is plant exploration occurring
 - B. Who is collecting new plants from wild
 - C. What is being collected
 - D. Why plant exploration is still important
- II. Selection of sports (mutations)
 - A. Variegated plants
 - B. Mutations recovered from tissue culture
 - C. Often not stable; may revert
- III. Selection of seedlings
 - A. Selected from seedlings growing in wild or under cultivation

- B. Selected by nursery and greenhouse professionals and by home gardeners
- C. Involves no breeding

IV. Plant Breeding

- A. What is plant breeding
- B. Steps in a plant breeding program
- C. Hand pollination techniques
- D. Who is doing ornamental plant breeding
- E. Definition of cultivar (cultivated variety)
- F. Plant patents and trademarks

Plant Materials:

Throughout the talk, new cultivars of many perennial, shrub and tree species were used as examples and photographs provided. Among the species highlighted were:

1. *Angelonia* (summer snapdragon)
 2. *Buddleja* (butterfly bush)
 3. *Calibrachoa* (Million Bells)
 4. *Cercis canadensis* (Eastern redbud) ‘
 5. *Chaenomeles* (flowering quince)
 6. *Cornus angustata* (evergreen dogwood)
 7. *Distylium*
 8. *Echinacea* (coneflower)
 9. *Heuchera* (coral bells) and *Heucherella*
 10. *Hydrangea arborescens* (smooth hydrangea)
 11. *Hydrangea macrophylla* (bigleaf hydrangea)
 12. *Hydrangea paniculata* (panicle hydrangea)
 13. *Hydrangea quercifolia* (oakleaf hydrangea)
 14. *Impatiens*
 15. *Lagerstroemia* (crapemyrtle)
 16. Encore azalea (*Rhododendron*)
3. Involvement of club members, other organizations, etc.

This program was developed and presented by SRGC member Sandy Reed. Dr. Reed has a Ph.D. in plant breeding and genetics. She worked for the US National Arboretum as a plant breeder for 17 years, developing new cultivars of *Hydrangea*, *Clethra*, *Styrax* and *Callicarpa*. She drew upon her experience and interest in new cultivar development to prepare this program.

Eight members and two guests attended the program.

4. Project expenses and means of funding

The \$35 fee for renting the Tucker library conference room was donated by the presenter, who also provided refreshments. There were no other expenses.

5. Continuing involvement, follow-up, maintenance: Attach or insert photos, digital photos, and/or landscape plan (does not need to be professionally drawn).

The slide show used in the program has been posted to the club website. It can be viewed at [New Plants Presentation](#).