NATIONAL EARTH-KIND® ROSE FIELD TRIALS
PROCEDURAL CHECKLIST

Prepared by
Dr. Steve George
Professor and Landscape Horticulture Specialist
Texas AgriLife Extension Service, Texas A&M System
and
Dr. David Zlesak
Assistant Professor of Horticulture
University of Wisconsin - River Falls
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_____ 1. Coordinate with local County Extension Agent.

- This applies only to Master Gardener groups.

- Secure agent’s approval for project, then work under his or her direction.

_____ 2. Contact Mary Ellen Battle.

- Trial Site Coordinator from each site should contact Mary Ellen to be
  added to our nationwide roster of coordinators.

- Contact information:

  Mary Ellen Battle
  Texas A&M Research and Extension Center
  17360 Coit Road
  Dallas, Texas 75252
  Telephone: 972-952-9211
  E-mail: m-battle@tamu.edu

_____ 3. Select and measure a suitable trial site.

- Must have 8 hours or more full, direct sun every day of the year and
good air movement over foliage. This is crucial!

- Choose a site with typical garden soil conditions for your region.

- Adequate soil drainage is very important. Avoid areas where water
  stands for a protracted period after a rain. Also avoid areas that are
  subject to flooding.
4. Calculate total number of plants for which you have room.

- Plant Spacing

  - In the North: Plant 5 feet apart on centers within the rows, 9 feet apart on centers between rows.

  - In the South: Plant 8 feet apart on centers within the rows, 12 feet apart on centers between rows.

- Minimum number of plants at a given site: 15 (i.e. 3 plants each of 5 different cultivars or "varieties").

  - To accommodate 15 plants in the South would require an area of 1,280 square feet and cost approximately $1,200 (total) for compost, plants, drip system, & mulch.

5. Raise money to pay for compost, rose plants, drip irrigation system, and mulch.

6. Request specific guidance on which cultivars should be planted at your site.

- This is done to maximize the number of cultivars under test in any given geographic region. Also done to eliminate needless repetition.

- ‘Carefree Beauty’ should always be included as one of the experimental cultivars at every trial site to act as a nationwide control.

- For specific cultivars to be planted, please contact:

  Dr. Steve George  
  Texas A&M University Research & Extension Center  
  17360 Coit Road  
  Dallas, Texas 75252-6502  
  Telephone: 972/952-9217  
  E-mail: s-george3@tamu.edu

- In your request, please include your: name, location, daytime telephone number, e-mail address, soil type, and total number of roses that you will be planting.
7. Order rose cultivars assigned to your site.
   - Place order several months prior to planting.
   - If you need help in finding sources for your assigned cultivars, please contact Dr. George.
   - Arrange for roses to arrive just prior to your desired planting date.

8. Lay out rows.
   - Rows may be either straight or curved.
   - Suggest that you leave a 4-foot-wide grass strip between rows to serve as a walkway.

9. Get soil tested for pH, macronutrients and micronutrients at a university laboratory by submitting a sample through your local Extension office. Collect sample prior to adding compost.
   - Purpose of this test is to establish baseline data characterizing the pH and nutrient status of the soil.

10. Kill existing grass and weeds within the rows with a glyphosate product (e.g. Roundup).
    - Repeated applications of glyphosate may be necessary to kill certain weeds depending on the weed species and time of year.
    - Read and follow all label directions on the glyphosate container.

11. Secure a source (hopefully a free source) for compost and mulch.
12. Till in compost.
   - Within the rows, incorporate 3 inches of fully-finished (not half raw), plant-derived compost to a depth of 8 inches.
   - Some manures may have a high salt concentration and large amounts of such materials can easily damage plants. Therefore, plant-derived compost is recommended.
   - If you have any suspicion that the compost may not be fully finished, then do this tilling at least 3 months prior to planting. This will lessen danger of raw organic material in the compost robbing roses of nitrogen.

13. There is no need to construct raised planting beds, even in heavy clay soils.

14. Throughout the duration of the trial, do not add any commercial fertilizer.
   - This means no commercial synthetic fertilizer and no commercial organic fertilizer.

15. Make final preparations to the planting area.
   - Till soil one last time just prior to planting.

16. Plant roses in a randomized, complete block experimental design.
   - One plant of each cultivar in each block. Planting order re-randomized for each block. Total of 3 blocks.
   - See Extension publication entitled “National Earth-Kind® Rose Field Trials: Experimental Design.”
   - E-mail list of cultivars actually planted to Dr. George.

17. Install drip irrigation system.
18. Mulch within rows with 3 inches of a coarse organic material.

- Examples: (1) tree limbs, with leaves present, that have been run through a chipper, (2) shredded hardwood bark, or (3) tree leaves.

- These materials can be used raw (i.e. there is no need to age the wood tissue as long as it is not being worked into the soil).

19. Water in well at planting.

- Throughout the life of the plant, even during the 6 weeks following transplanting, the rule on how often to water is as follows:
  
  **Water only when soil in rootball is dry to a depth of 1 inch!**

- During the first 6 weeks after transplanting (especially if plants are being subjected to hot, dry, windy conditions):
  
  - First week: Check moisture level in rootball every day.
  
  - Second week: Check moisture level in rootball every second day.
  
  - Third week: Check moisture level in rootball every third day.
  
  - Fourth week: Check moisture level in rootball every fourth day.
  
  - Fifth week: Check moisture level in rootball every fifth day.
  
  - Sixth week: Check moisture level in rootball every sixth day.

- Thereafter, for the duration of the trial:
  
  - Check soil moisture once per week during growing season.

  - In most areas of the nation, you may not have to irrigate well-established plants at all during the winter months as natural rainfall is normally sufficient.

  - Usually water no more than once a week, and possibly less depending on rainfall.

  - Particularly in sticky, poorly-aerated clay soils, don’t water too often!

  - Hand water for first 2 months.
20. Throughout the duration of the trial, do **not** apply any pesticides to the plants. 
   - This means no fungicides, no insecticides, no miticides, no neem oil, no anything!

21. Throughout the duration of the trial, do **not** deadhead the plants (i.e. do **not** remove the spent blossoms).

22. Continue watering as needed.

23. Throughout the duration of the trial, do **not** provide any additional winter protection.

24. Throughout the duration of the trial:
   - Pruning:
     - In the **North**: The only pruning to be done is the removal of cold-damaged tissue in early spring each year.
     - In the **South**: Never do any pruning.

25. Maintain year-round mulch layer at a thickness of 3 inches by adding additional mulch as needed in late spring and/or fall.

26. In years 2 and 3, evaluate plants monthly during the growing season.
   - There is **no** need to collect data during year 1 (i.e. the year the roses were transplanted).

27. Submit data to Mary Ellen Battle at the end of the growing season of years 2 and 3.

28. Duration of trial for current group of cultivars is 3 years.
   - During the winter following year 3, remove all plants from trial site. Transplant outstanding cultivars to an Earth-Kind® educational display bed in a park or at an elementary school. Discard cultivars that did not perform well.
29. At the end of the 3-year study, please mail a hard copy of the soil test results and your overall evaluation of the rose cultivars to Dr. George for our records.

- For Dr. George's mailing address, see Step 6.

30. During spring of year 4, we hope that you will want to continue your involvement by planting a new and different set of experimental cultivars as suggested by Dr. George.

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