

NATIONAL EARTH-KIND[®] ROSE FIELD TRIALS PROCEDURAL CHECKLIST

Prepared by
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and
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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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