

NATIONAL EARTH-KIND[®] ROSE FIELD TRIALS: DATA COLLECTION FORMS

Prepared by Dr. Steve George
Extension Landscape Specialist
Texas AgriLife Extension Service
Texas A&M System
January 19, 2010

General

- There is no need to collect data the first full growing season as we want to give the plants time to reestablish their root systems, and time for any pesticides applied during the greenhouse production phase to break down completely.
- Evaluate monthly during the active growing season of years 2 and 3. Do final evaluations at the end of the third full growing season.
 - So at the end of the study, you will have two complete sets of monthly ratings, one for year 2 and one for year 3, and one set of final evaluations.
- On a copy machine, make a copy of the monthly rating form and a copy of the final evaluation form for each plant in the study. To make data collection easier, arrange these sheets in the order in which cultivars are actually planted in the field.
- Suggest that you keep all forms, blank and completed, in a separate three-ring binder specifically designated to store Earth-Kind[®] trial materials.
- The rating scale is from 0 to 10 with 10 being best. The monthly rating recorded for each plant reflects, in a single numerical value, the plant's overall landscape performance. This encompasses: vigor, foliage quantity and color, blossom quantity and quality, fragrance, disease and insect tolerance/resistance, soil tolerance, growth habit (i.e. the form or shape of the plant itself), and overall aesthetics.
- If indicated, it is perfectly acceptable to give ratings that include a quarter or a half point, e.g. 4.25 or 8.50.
- In the rating system, the phrase “perfect foliage” denotes an abundance of healthy, lush green leaves that are free from disease, insect, and mite injury.
- The term “blossoms” in the rating system indicates flowers that are at least half open. Do not count: (1) balled blossoms (i.e. those flower buds which swell but then become covered with a thin, brown, parchment-like material and never open), or (2) spent blossoms (i.e. those in which the senescent petals are just about to drop).

- Susceptibility to rabbit injury should be reflected in monthly and, if necessary, final evaluations.
 - Example: If rabbits eat a particular plant completely to the ground, that plant should be rated a 0.5 to 1.0, depending on whether or not any green leaf tissue is still present.
- Best to evaluate in two-person teams, then record the average of the two individual ratings for each plant.

Monthly Rating Scale

<u>Rating</u>	<u>Observed Condition</u>
10	Perfect foliage, absolutely covered with blossoms, outstanding growth habit, flawless in every respect. (Note: Almost never is a plant good enough to receive this rating)
9	Very healthy foliage, an abundance of blossoms, really nice growth habit
8	Healthy foliage, a significant number of blossoms, nice growth habit
7	Healthy foliage, only a few blossoms, nice growth habit
6	Healthy foliage, no blossoms, nice growth habit
5	10% leaf drop, no blossoms
4	25% leaf drop, no blossoms
3	50% leaf drop, no blossoms
2	75% leaf drop, no blossoms
1	90% leaf drop, no blossoms
0	Plant is dead

Specific Additions

- If the blossoms of a plant possess good fragrance, add 1 full point.
- Even if a plant has dropped 10% or more of its foliage, if some blossoms are present, add 1 full point to the score that plant would otherwise receive.
 - Example: If a plant has dropped 50% of its leaves, but has some flowers, begin with a score of 3.0, then add 1.0 for the blossoms, to arrive at a rating of 4.0.

Specific Deductions

- Even though no foliage may have dropped, if a number of leaves (e.g. 25% or more of the total canopy) are exhibiting symptoms of disease, or if a significant insect or mite problem exists, then deduct 1 full point.
- If a particular plant retains its old flower petals (i.e. it does not deadhead itself), then deduct half a point (i.e. 0.5 deduction).
- If a given plant, which is supposed to be grown as a shrub, exhibits an awkward, unattractive growth habit (i.e. overall plant shape), then deduct 1 full point. (Do not make this deduction for cultivars which are climbers, as climbers will naturally tend to sprawl along the ground when given no vertical support.)
- If a plant shows significant chlorosis (i.e. yellowing) of the foliage, deduct 1 full point.

Comments

- Brief comments are very helpful in our overall evaluation of a given cultivar, so please record all pertinent observations.

- Examples:

February - extensive rabbit injury

March - heavy winter injury

April - very fragrant

May - highly susceptible to powdery mildew

June - foliage is becoming chlorotic (i.e. yellowed)

July - sparse blooming

October - nice growth habit, produces attractive hips

Final Evaluations

- Made at end of the third full growing season.
- For a given cultivar, calculate and report the average from all three blocks.
- Final vigor:
 - If a plant dies in a given block, average in a zero for that plant; if plants of that cultivar die in two blocks, average in two zeros; and so on.
- Example:

- Ratings for cultivar XYZ: Block 1 - 0 (dead), Block 2 - 3.0, and in Block 3 - 0 (dead).

- So, $0 + 3 + 0 = 3$, divided by 3 (which is the total number of blocks), equals a final vigor rating of 1.

NATIONAL EARTH-KIND[®] ROSE FIELD TRIALS:
MONTHLY DATA COLLECTION FORM

TRIAL COORDINATOR: _____

TRIAL LOCATION (city and state): _____

YEAR: _____

GROWING SEASON (i.e. second or third): _____

MONTHLY EARTH-KIND® RATINGS
OF OVERALL LANDSCAPE PERFORMANCE

Year: _____
Block Number: _____

Cultivar Name: _____

(Rating scale: 0 - 10, 10 = best: foliage and blossoms)

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Comments (please note month in which the comment was made):

NATIONAL EARTH-KIND[®] ROSE FIELD TRIALS:

FINAL EVALUATION COLLECTION FORM

TRIAL COORDINATOR: _____

TRIAL LOCATION (city and state): _____

YEAR: _____

FINAL EARTH-KIND® EVALUATIONS
(Made at end of third full growing season)

Block Number: _____

Cultivar Name: _____

Plant Size

Height (in.): _____

Width (in.): _____

- Average the following two measurements to determine width:

- Width measurement number 1: _____

- Width measurement number 2 (taken at right angles to measurement number 1):

Final Vigor Rating

- Scale of 0 - 10, 10 = best vigor.

- Rate just the overall vigor (e.g. amount of foliage, color of foliage, overall plant growth, etc.) and health of the plant. Flowering is not considered in this rating.

- Final vigor rating: _____

- Comments on final vigor:

Page Number: _____
(make multiple copies of this page)