Societas Analysis Accessible Scientific Experiment

Experiment Title: Biophoton Feedback Loop Experiment (BFLE)

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Objective:
To explore whether plant growth or behavior is influenced by the reflective feedback of its own biophoton e

Hypothesis:
Plant morphology will show significant differences when grown inside a mirrored box that reflects their own

Apparatus:
- Shoebox-sized container
- Mylar reflective sheets
- IR-blocking film or sunglasses lenses
- Smartphone camera
- Seeds and soil
- Optional Arduino sensors

Protocol:
1. Control Group: Grow plants in standard unlined box.
2. Experiment 1: Mylar-lined interior (visible light reflection).
3. Experiment 2: Mylar + IR-blocking film.
4. Experiment 3: One-way mirror configuration.
5. Measure height, color, morphology, and lean daily over 2–3 weeks.

Measurement Criteria:
- Growth rate
- Leaf color and pattern changes
- Phototropic behavior
- Optional image analysis with Fiji/ImageJ

Novelty Justification:
- Novelty lies in closed-loop biophoton interaction in living systems using common materials
- No high-end photodetectors required
- Completely open-access, citizen science approach

Conclusion:
This experiment opens new ground in understanding whether low-level biological emissions (biophotons) c