Comparing Leaf Readings Under Two Light Colors

Scoring guide · one credit per question · review written work against each rubric

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Question 1

Choice (1)

The red trial absorbs 80% versus 35% and gives 2.1 versus 0.8 mmol/h net uptake.

Question 2

The red trial absorbs 0.80 × 100 = 80 units. The green trial absorbs 0.35 × 100 = 35 units. The difference is 45 photon units.

Question 3

Both light color and the incoming photon count would differ between the trials. Either factor can change net uptake.

Question 4

Run both red and green at 200 incoming photon units using matched leaves and the same temperature, starting CO_2 concentration, and duration. Compare the measured net uptake.