Detecting Photosynthesis: Analyzing Other Scientists' Data

The Details of our Photosynthesis Experiment

- At 11 am on Friday, June 15, 2007 ivy leaves growing at UCSF were covered as follows:

Foil - Covered with aluminum foil

Bag - Covered with a clear, plastic bag

Untreated - Not covered with anything (control)

- All leaves were left attached to the rest of the plant until Thursday, June 21 at 11 am, for a total of 168 hours.
- On Thursday, each leaf was cut, uncovered, brought indoors, and analyzed for starch (food) content.*
- Dark purple or black on the leaf indicates the presence of starch. Yellow or brown on the leaf indicates that no starch is present.
- Leaves were photographed.

* *Leaves were boiled in water to break down cell walls, boiled in alcohol for about 10 minutes to remove chlorophyll, dipped in boiling water to soften, and finally stained with iodine on the underside to detect starch.*