

Biology Field Trips. Problem 6

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The Place of the Textbook in the Broad Biology Problem. Problem 7

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"HOW I DID IT"

To make it easier to continue our study of leaves when the autumn season is past, and to



make our collection of leaves permanent, we have tried the following processes:

1. Rosin

To keep the colors and to preserve entire branches of autumn leaves for room decoration, we used crushed rosin and an old fashioned iron. We heated the iron, applied it

over the crushed rosin, and then pressed both sides of the leaf. This coated and dried the leaf, and prevented it from curling. The stems may be lacquered or painted for preservation.

2. Blueprints

We purchased some blueprint paper from an art supply store, and had some pieces of glass cut as large as our sheets of paper—8" by 11½". On a sunny day we placed the leaves on the blueprint paper and pressed them down with the glass. To get a sharp outline, contact between the leaf, the glass, and the paper must be very close to prevent the light from getting under the leaf. After exposing them to the sun until a sharp outline was produced, we proceeded to develop them by immersing them into a pan of water to which a few crystals of potassium dichromate were added.

3. Ozalid or Helios Prints

At an art supply store, we procured various colors of Ozalid or Helios prints. These are trade names for prints that are developed with ammonia fumes. The process for getting a sharp outline was identical with the one we had used for the blueprints with the exception that, instead of using water for developing, we used ammonia fumes from a bottle of ammonium hydroxide. The paper was held over the bottle and moved over the entire area until the leaves became dark in color. An easier and maybe more practical way with younger students would be to moisten a piece of cotton with ammonia water, and place it in the bottom of a large jar. Roll the exposed print and insert it into the jar. Keep the jar well closed until the leaf print becomes dark in color.

4. Paint Prints

We secured some oil paint from the art class, thinned it, and spread it on a glass. With a thin brush, we painted the under side of the leaves. The painted leaves were then inverted onto a clean sheet of paper. With another paper over the leaf, we ran our fingers over the leaf until each vein was imprinted on the bottom paper. Several copies may be made with just one painting. The colored leaves made attractive borders and good study specimens for our leaf collection booklets.

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