Dyeing With Fresh Indigo Leaves

This is a two-stage process that will introduce you to the basics of indigo dyeing. The first step gives a turquoise color on most silks using only indigo leaves \textit{(Polygonum tinctorium)} and water. The second stage adds an alkali and fructose to the strained leaves and chemically reduces them by heating. Once reduced, this liquid can be used to dye cellulose fibers a light blue.

Part 1: Dyeing silk

1. Prepare silk (\textit{shibori}) and wet out
2. Strip indigo leaves from stems, rinse, and set aside in bucket.
3. Half fill blender with very cold water. Add leaves until full and blend for 1 minute, adding more leaves if possible while blending.
4. Immediately strain into a clean container, setting aside strained leaves in a large stainless steel pot for dyeing cellulose (see Part 2).
5. Submerge silk in indigo liquid and dye, constantly moving for 3-5 minutes.
6. Remove silk from dye liquid. Open to expose evenly to air for a few seconds, then rinse in cold running water until it runs clear. Discard dye liquid in container with strained leaves.
7. Hang to dry in the shade.

Experiment by pounding the indigo leaves directly onto the cloth. Over-dye yellows to produce brilliant greens.

Part 2: Dyeing cellulose fibers

1. Add water to fill the pot containing the strained leaves and used dye liquid.
2. Add alkali – limestone, wood-ash, or soda ash – and stir. (limestone: 15g / liter of liquid in pot)
3. Add fructose (grape juice concentrate – equal to limestone added)
4. Slowly heat to 60° C (140°F) over 30 minutes, stirring constantly. As reduction begins, a frothy blue “bloom” and metallic purple film will start to form on the surface and the liquid should start to turn yellowish.
5. Turn off heat. Allow dye liquid to cool and chopped leaves to settle to the bottom of the pot before dyeing.
6. Dye by submerging wetted-out materials in this liquid for at least 5 minutes. Remove from liquid, wring, and open to expose to air so that the indigo may oxidize. Oxidizing for an equal amount of time as the materials were submerged in the dye.
7. Repeat dyeing process (re-dip) to produce darker shades. Because of the low concentration of indigo in this liquid, you will only be able to dye lighter blues.

Be careful when dyeing not to let your materials drop to the bottom of the pot and get covered with the chopped leaves. It is almost impossible to wash out all the little bits of plant matter.
Supplies:
Silk
Cotton or other material
Grape juice concentrate
Limestone, wood ash, or other alkali
Straining cloth
Buckets
Blender
Stainless steel pot
Thermometer
Limestone/wood-ash – alkali
Stirrer