

Dyeing with Tannins and Iron Sulfate

Art 185LJ April 14, 2023

Needed:

Plant materials: Oak Galls, Eucalyptus (leaves, bark), Wattle, Willow

Fiber materials: Un-mordanted Cotton, Silk and Wool

Modifier: Iron Sulfate

When tannins from plants (the same chemicals that makes some red wines bitter and astringent) reacts with iron sulfate, gray and brown colors are created. Iron gall ink, made with tannins from oak galls and iron was the standard ink used in Europe from 500 CE to 1900 CE, 1400 years!

Process:

1. Boil plant materials containing tannins in water for 30 mins to 2 hours (or longer)
2. Simmer fiber/textiles in the water for 10-30 mins (or longer) at around 180f.
3. Make an iron sulfate solution by mixing iron sulfate and hot water in a jar. See below about amounts.
3. Dip the textile in the iron sulfate solution.

Experiment with different amount of time in the dye pot, different strengths of iron sulfate solutions, and amount of time in the iron solution. Wool is sensitive to iron, so use as little as possible. Start with less than a teaspoon in a jar of hot water.