## Lichen Dye (Step 1)

Lichens are made up of fungi and algae living in symbiosis. They have been used for dyes for thousands of years. They have been especially valued for dyeing purple by steeping the lichen in urine/ammonia which creates a dye compound called 'Orchil'.

Species we will use: Flavopunctelia flaventior



There are tens of thousands of species of lichens and most do not produce orchil so it is very important to know what you are picking. Many lichens look very similar. One tool to help identify lichens is the "spot-test". We will use the "C spot-test". It means dropping a small amount of chlorine on the medulla (inside of the lichen). For this lichen it should yield a fast change in color to red. Many other species have the same reaction but it helps narrowing the possibilities.

Lichens grow extremely slowly. Do not pick lichen from trees, only from sticks and bark found on the ground.

Recipe for making purple dye (orchil) from lichen:

- 1. Place small pieces of lichen in a jar.
- 2. Cover the lichen with a mix of 50% ammonia and 50% water.
- 3. Place in a dark and warm place in your house.
- 4. Let steep for several weeks until the liquid is a strong purple color.
- 5. Briefly open the lid (be careful to not smell the liquid or get it on you), once a day for the first week. The process needs oxygen.
- 6. Shake the jar carefully several times a day the first week then once a day.
- 7. Wait for many weeks until dark purple

We will dye with the orchil in class late in May. Do not use before that.

For information about dyeing with lichens and the history of lichen dyes see links on class homepage.

WARNING!! Ammonia irritates the eyes and skin. Keep the jar away from you when shaking and opening the lid. Tell everyone in your household what is in it so that they don't accidentally open it.