# NATURAL INK: A BASIC RECIPE

Here is my secret: Natural ink isn't that complicated. You can throw almost any pigment-rich base ingredient into an old pot with vinegar and salt, boil it up for an hour or two, add a couple drops of gum arabic, and voila—you have an ink. Think of ink as any colored water that's permanent on paper. All the recipes in this book will make 2 cups (480 ml) of ink, or about eight standard 2-ounce (60 ml) bottles. I've tried to be as exact as possible with quantities, but keep in mind that the final amount of ink you make will depend on how long you cook your ink and the how much liquid your foraged material might contain. Your goal should not be a set amount of ink but rather a color and consistency that feels right to you. If your ink is too thin, keep cooking; if your ink gets too thick, add a bit more water. Unlike a fine French sauce, it's pretty hard to "ruin" an ink. And sometimes a very faint ink, if collected from a very special plant, can become a favorite.

## MATERIALS

**Note:** These are the materials I recommend every inkmaker have handy. You won't need every single one for every recipe, but the more tools you have available, the more techniques you can try.

water
a colorful base ingredient (such as berries, rocks, charcoal, nuts, roots, or leaves)
potato masher
measuring cups and spoons
mortar and pestle
a pot that you don't mind devoting to inkmaking
spoon or stir stick
white vinegar (cleaning grade if you can find it)
salt
thick white paper, for testing
gum arabic (a binder you can get at most art-supply stores)
wintergreen oil or whole cloves
glass containers with tight-fitting lids
sticker paper, for labels
glass muller or palette spatula, to be used on a glass surface
large bowl
fine-mesh strainer or colander
funnel
an old coffee grinder (optional)
coffee filters
funnelglass dropper
litmus papers
rubber gloves and some rags for cleanup

## STERILIZING YOUR MATERIALS

**Note:** Sterilization is especially recommended for any recipe that requires plant-based materials.

**1.** Place clean bottles, dropper, caps, and utensils in a large saucepan.

**2.** Add enough water to cover all the equipment, making sure there are no air bubbles.

**3.** Bring the water to a boil, and boil rapidly for 5 minutes.

**4.** Turn off the stove and allow the water to cool completely.

## METHOD

**1. Prepare the Base Color Ingredient**
For berries: Crush the berries using a potato masher. Add ½ cup (120 ml) water and 2 cups (450 g) berries. Then skip to step 3.

For rocks, charcoal, or other dry pigments: Grind ¼ cup of the material down to the finest dust using a mortar and pestle or similar. Add 2¾ cups (660 ml) water and 2 tablespoons gum arabic.

For nuts, roots, or leaves: Combine 2 cups (480 ml) water and 1 cup (120 ml) of plant material in the pot as is.

**2. Intensify the Color**
Put the base color ingredient into a large, old pot. Add 2 tablespoons vinegar and 1 tablespoon salt.

Heat to just below boiling and cook for at least 2 hours, stirring occasionally, until you have an intense ink color. (Dip a strip of paper into the colored water to test the intensity.) Remove from the heat and let cool.

**3. Filter the Color**
If you have large pieces of plant matter, like roots and leaves, first remove this material with a colander placed over a bowl, with the bowl catching the colored liquid. For a further level of filtering, place the small end of a funnel into the mouth of a glass container and fit a coffee filter into the funnel. Pour your strained liquid through the funnel slowly. The coffee filter should remove smaller particles, creating a cleaner ink. This step is particularly important if you plan to use the ink in a pen. To keep a pen writing smoothly, you need to use less binder, which can gum up the nib, and filter out any little grains of plant matter. On the other hand, for painters, some texture in the ink may be a positive—you can always refilter it if it seems too grainy.

**4. Make It Permanent**
Add gum arabic as a binder only after your ink is its desired color. For each 2-ounce (60 ml) bottle of ink I usually use 10 drops of gum arabic. If you're using a dry pigment as a base, you'll need to use more binder (usually 1 teaspoon per 2-ounce (60 ml) bottle). If you plan to use your ink for a pen, try to limit yourself to just a few drops of gum arabic for each small bottle. Add a few drops of wintergreen oil, or 1 whole clove, to each bottle to keep the ink from molding.

**5. Bottle It**
Any small glass jar or bottle with a tight-fitting lid can work for storing the ink. Your ink will last longer if you sterilize the bottle first with some boiling water. See instructions on page 48.

If you want to get fancy, you can find old empty ink bottles online or save small glass jars and bottles from your kitchen. You can also buy empty 1-ounce (30 ml) bottles in bulk. Label the ink with a sticker, give it a name, and list the ingredients, time, and location of the harvest. The labeling gives your ink meaning and also helps as a reference for later ink experiment comparisons.

**6. Test It**
A single drop of natural ink on paper will develop a lot of subtleties as it dries, often intensifying as it evaporates and darkening toward the edges. Another level of variation emerges as you test the ink using various tools: ink droppers, pens, nibs, brushes, and even sticks or feathers change the effect of the ink—as do different paper stocks.

**7. Clean Up**
While natural ink tends to stain less intensely than chemically produced ink, inkmaking can get messy and can stain clothes, countertops, and wooden spoons, so having rags, soap, and paper towels nearby can help keep you and the non-inkmaking members of your household on friendly terms.