

Botanical Ink Demo - Transcription (with video image description)

[image: Oxygen Art Centre logo on white background]

[stop-motion: spells out letter-by-letter 'How to Make Botanical Ink: red cabbage kitchen scraps' using botanical ink on watercolour paper]

"How to Make Botanical Ink using Red Cabbage Kitchen Scraps"

[stop motion: list of materials using brown ink on watercolour paper]

"Materials:

Red cabbage scraps,

A small saucepan, not to be used for food,

Stirring utensil [also not to be used for food],

Water,

A hotplate or stovetop,

A sanitized jar,

Cheesecloth,

Funnel,

Gum arabic,

A whole clove or thyme oil,

White vinegar,

Baking soda,

Coffee filter, and

Watercolour paper"

[video: from POV of speaker, speakers' hand displays frozen red cabbage leaves atop a white cutting board]

"So I'm just starting with the outer leaves of cabbage - every time I buy a cabbage I take off the outer leaves and freeze them"

[video: speakers' hand picks up and shows chopped red cabbage leaves atop a white cutting board]

"We can chop them up finely so that the pigments released easier"

[video: speakers' hand moves the chopped red cabbage leaves into a small saucepan]

"Then we will place all of these chopped leaves into the saucepan - again, dedicated solely for ink and dye and not to be used for food after this"

[video: red cabbage-filled saucepan is filled with water from above]

"We will fill this up fully with water, just until it's covered and then ..."

[video: this saucepan is now placed on a white hotplate, the speakers' hand turns the hotplate on and turns the burner dial to a low heat setting]

"...we can place it on our stove or hotplate"

[video: speakers' hand holds a small metal spoon and pushes down the red cabbage to remain submerged in the water in the saucepan]

"So we want this to be on low simmering for at least an hour if not three or four"

[video: speakers' hand carefully scoops up purple-tinted water from the saucepan into the spoon to show up close and then lowers back down, pours the water back into the saucepan, and removes the spoon from the frame]

"Low and slow seems to be the best approach for ink in order to retain colour and prevent browning"

"We can see that the water's already quite pigmented although we want it to be much more concentrated than that"

[video: speaker's hand holds a small strip of watercolour paper and submerges it halfway into the cabbage water, pulls it out and holds the strip up close to show the light purple colour of the water on the paper]

"About every hour I'm just submerging a test strip of watercolour paper to see..."

[video: speakers hand dips another small strip of watercolour paper into the cabbage water, now more pigmented signifying time has passed]

"...how the colour is changing and concentrating until it gets to a point that I'm satisfied with"

[video: speaker's hand places a strip of watercolour paper above three similar strips placed on a woven bamboo surface. Each of the four strips of watercolour paper note the date and time on the left side and have varied shades of a purple stain on the right side of increasing saturation]

"So it's not until the test strips are fully dry that we can see the true colour of the pigment"

[video: speaker's hand holds a 750 ml clear glass jar with cheesecloth secured over the opening with an elastic, then lifts the saucepan and tilts it to show a small amount of dark purple coloured water below the mass of red cabbage in the saucepan]

"It's been simmering for three hours now and I'm satisfied with the small amount of water and the concentration of pigment left"

[video: speakers' hand tilts the saucepan full of cabbage and water above the cheesecloth-covered jar, dark purple liquid pours from the saucepan through the cheesecloth and into the jar, camera pans down to show the water filling the bottom of the jar]

"So I'm just going to strain it using this cheesecloth overtop of a clean jar"

[video: clear jar with cheesecloth shown straight-on, purple liquid pours from the saucepan above, through the cheesecloth which catches pieces of red cabbage, and into the jar]

"You can also use a fine mesh strainer for this..."

[video: clear with cheesecloth shown straight-on, two hands squeeze red cabbage above the jar, purple liquid runs out between the hands, through the cheesecloth, and into the jar]
“...anything that’s going to separate the liquid from the cabbage and feel free to squeeze out any liquid remaining in the cabbage, just wear gloves if you don’t want dyed hands”

[video: speaker’s hand lifts the jar to show the small amount of purple liquid up close, lowers the jar and picks up the saucepan filled with red cabbage pieces and empty of any liquid]
“Now that’s all strained, we can see the remaining ink, it looks quite pigmented it’s always hard to tell until it’s actually on paper but I’m pretty satisfied with that and there’s no water left in the saucepan there”

[video: speaker’s hand lifts the jar, now without cheesecloth, and pours the purple liquid from this larger jar into a small funnel lined with a brown coffee filter that sits atop a small clear glass jar]
“And then this step isn’t necessary, but it, um, straining it through a coffee filter will remove any remaining organic particles of the red cabbage”

[video: camera pans from a purple liquid filled coffee filter lined funnel down to the show purple liquid slowly dripping out of the funnel into the small clear jar half-filled with purple liquid]
“If you’re just planning on using this with a brush you might prefer to have those particles just for some interest but if you’re planning on using this with a pen and nibs than you definitely want to strain it”

[video: speaker’s hand holds up close a small brown glass bottle labeled ‘Thyme’ then slowly releases 2 drops into a small clear jar filled full with purple liquid on the right and releases 1 drop into the same sized jar filled $\frac{1}{3}$ full with purple liquid on the left]
“To help preserve the ink and prevent moulding, in addition to using sanitized jars, I’m also just adding a few drops of thyme oil”

[video: speaker’s hand holds up close a small plastic bottle labelled ‘gum arabic’ then slowly releases 10 drops into the full jar on the right and 3 drops to the $\frac{1}{3}$ full jar on the left]
“And then gum arabic comes from the acacia tree, and I’m just adding it in to be a binder I’m just adding ten drops to the larger jar and three to the smaller one. This will help the pigment bind to the paper and last longer”

[video: speaker’s hand pours purple liquid from a small clear jar into three small shallow white ceramic cups from left to right]
“Now with this finished ink, with the thyme oil and gum arabic in there, I’m just dividing it up to test out some pH modifiers”

[video: speaker’s hand hold a small plastic bottle of white vinegar above the three cups of purple liquid, slowly pours vinegar into the left cup, the purple liquid turns partially light pink, speaker’s hand lifts the cup and swirls the liquid turning more of it light pink]

“So the first is just white vinegar, which will make the ink far more acid and we can see immediately, even before swirling it, it’s becoming more vibrant, lighter pink”

[video: speaker’s hand holds a small open jar with baking soda, adds two pinches of the powder to the middle cup of purple liquid, lifts the cup swirls the liquid which turns darker and more blue]

“This is baking soda, this will make the ink more basic, so we’ll put a few pinches in there I think before swirling it to see how that changes the hue or the colour”

“We can see again almost immediately it turns darker and more of a blue”

[video: speaker’s hand pours a small amount of clear viscous liquid from a jar into the third cup filled with purple liquid, lifts the cup and swirls the liquid]

“I thought I would try out soap as well, this is just natural dish soap. Generally soap is more basic than even baking soda but we’ll see what effect that has.”

[video: stationary top down view of a white blank piece of watercolour paper atop an old wooden table surrounded to the top and right by four shallow white cups containing liquid of various colours]

So let’s test out our inks!

[video: speaker’s hand holds a paintbrush, dips it into the jar on the left and paints a vertical line on the paper, the colour is a medium purple]

“This is the red cabbage, unmodified”

[video: speaker’s hand holds a paintbrush, dips it into the jar second from the left and paints a vertical line to the right of the first line, the colour is similar purple slightly more blue than the first colour]

“And then the red cabbage with dish soap, which should be the most basic”

[video: speaker’s hand holds a paintbrush, dips it into the jar second from the right and paints a vertical line to the right of the second line, the colour is medium blue-teal]

“The red cabbage and baking soda, again a basic”

[video: speaker’s hand holds a paintbrush, dips it into the jar on the right and paints a vertical line to the right of the third line, the colour is a vibrant pink]

“And then red cabbage and white vinegar, the most acidic”

[video: speaker’s hand holds a pen and writes details below each ink sample line, video is sped up]

“Since botanical inks are always an experiment, I’m going to go ahead and label these here for future reference”

“So I’m labeling them with the date, sometimes how long I’ve simmered it, whether I’m using tap water or, um, rain water which will change the ink as well, and then any modifiers I’ve added”

[video: speaker's hand hold a small clear glass jar filled with purple ink with a label taped onto it that shows the purple colour of the ink on the paper label and written details about contents and date, and sets it down beside the cups of modified ink]

"I'm going to make sure that I label my finished jars of ink as well, just with the materials so red cabbage, the date, and the thyme oil and gum arabic I've added, and I'm just using one of the final test strips to do that"

[image: close-up of the 4 painted and labeled vertical lines of ink on watercolour paper, from left to right: unmodified red cabbage ink, a medium purple; red cabbage ink modified with dish soap, a medium blueish purple; red cabbage ink modified with baking soda, a medium blueish teal; red cabbage ink modified with vinegar, a vibrant pink]

"So here's our ink before it's dry..."

[image: transitions into the same close-up revealing different dried colours, from left to right: a darker purple, a lighter bluer purple, a cool green, a deep blue]

"...and then a day later when it's fully dried - we can see it's changed quite a bit"

[image: ochre, reddish brown, and black abstract ink marks on white watercolour paper]

"Botanical ink is living, it will continue to change over..."

[image: magenta, and muted pink, green, and blue abstract ink marks on white watercolour paper]

"...time, some more than others, and I encourage.."

[image: vibrant and glossy ochre, green, purple and blue abstract ink marks on what watercolour paper]

"...you to experiment with different binders and different modifiers"

[video: book with the title 'Make Ink: A Forager's Guide to Natural Inkmaking' by Jason Logan is shown and then pulled away to reveal the text 'Thanks for watching!' written in purple and brown botanical ink]

"This book is a great resource for anyone in further inkmaking"

[stop-motion: letter-by-letter removes the text 'thanks for watching!' to reveal a blank white page]

"Thanks for watching!"

[image: Oxygen Art Centre logo with the text "Created by Oxygen Art Centre with funding support from: Vancouver Foundation, The Province of British Columbia, United Way Lower Mainland, Government of Canada"]