



KAJI MUNDO

Introduction to Natural Pigments and Inks

Kaji Mundo works with natural dye farmers, harvesters and makers around Asia to develop small batch natural color ranges for screen printing and painting.

WWW.KAJIMUNDO.COM

PLANT BASED . COMPOSTABLE . WASHABLE

Ink Basics

There are 3 basic components to make an ink:

Pigment (colour), binder (adhere the pigment), and a carrier (to move the pigment across a surface).



Kaji Mundo's natural ink medium has been developed for textile screen printing.

Carrier: water and sodium alginate

Binder: natural rubber

Pigment: Natural indigo, Ceriops Tagal

More info: <https://www.kajimundo.com/aboutink>

Ink Basics

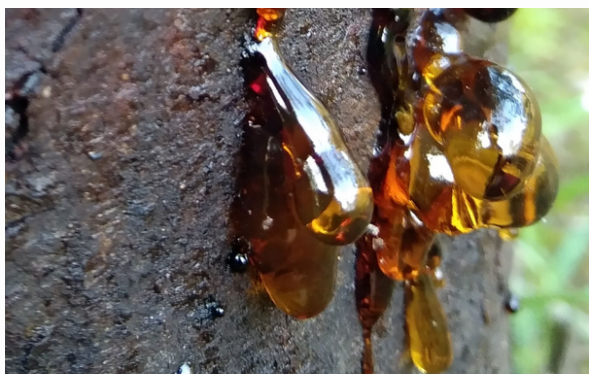
Common natural ink mediums for non-textile surfaces

1. Egg Tempera, was traditionally used for frescos and medieval paintings.



[Three Egg Tempera Recipes](#)

2. Gum Arabic



[Gum Arabic Binder Video Tutorial](#) - for watercolor painting

[Gum Arabic Direct Mixing Recipe](#) - for watercolor painting/calligraphy

Natural Pigments in Heritage Balinese Craft

Kamasan painting, Topeng and Wayang Kulit



Image: Cush Gush Gallery for Colors of Bali project



Natural Pigments in Traditional Balinese Craft



Images: Kaji Mundo, Cush Cush Gallery for Colors of Bali Project



Colour making in Kamasan, Bali.

Top Image: bone for white colour, charcoal on charred kemeri nuts, crushed pere stone.

Left image: colour mixing with hide glue and pere stone

Natural Colour Sources



Gumut Blossoms



Indigofera Australis



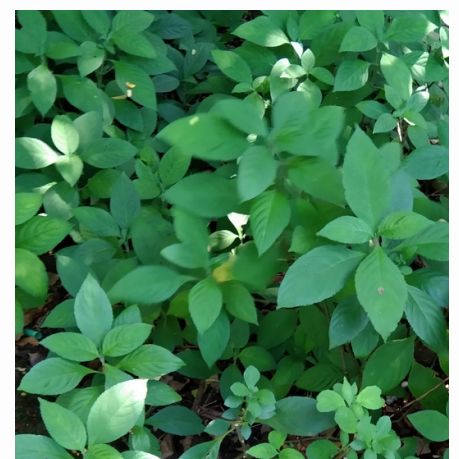
Eucalyptus leaves/bark



Soft stones



Achiote/Kesumba Seeds (Favorite of mine)



Marigolds

Indigo Leaves

You can make colour from almost anything. Flowers, leaves, bark, stones, soil, food scraps and even broken bricks or terracotta tiles. Be aware of Fugitive Dyes, these are dye plants that can easily fade. However with enough experimentation there's usually the right balance to keep a strong colour using either an ink or mordant process. Harvest natural matter mindfully and only take what you need ♡.

PIGMENT PROCESSING BASICS- Making Colour

1. PIGMENT LAKES

Stable, rich colour. Filtration process to attach pigment molecules to a metallic salt.



Image: Lost in Colors

PIGMENT LAKING 101:

<https://www.lostincolours.com/how-to-make-lake-pigments/>

PIGMENT PROCESSING BASICS

2. Boiled Dye, Liquid Extract

Use for dip dyeing, water colour inks, painting/printing with mordants, make lakes.



Image: Peppermint Magazine

PIGMENT PROCESSING BASICS

3. Crushing

Crush minerals (like soft rocks), clays, soil and mix with your chosen ink medium to paint or print with the colour.



Image, Cush Cush Gallery for Colors of Bali Project

PIGMENT FROM ROCKS

<https://www.lostincolours.com/foraging-for-pigments-from-local-rocks/>

UNIQUE INDIGO

Indigo molecules are unique, they are insoluble in water. Indigo dye comes from leaves of the indigo plant. To dye with them you need to reduce them in a PH elevated vat so they are temporarily soluble. However for printing, indigo can be used un-reduced in pigment form and combined with a binder.



Image: Kaji Mundo



Image: Kaji Mundo, shot by Olen Riyanto

Properties of our natural indigo for printing and painting:

- Good light fastness
- Excellent wash-fastness
- Poor abrasion resistance (wears in like your favourite pair of jeans)
- Insoluble in water
- Does not need mordants/additional metal fixatives to stay on fabric

UNIQUE INDIGO

Indigo plants are part for the pea family, there are over 750 species of indigo plants around the world.



Image: Kaji Mundo



Image: Kaji Mundo

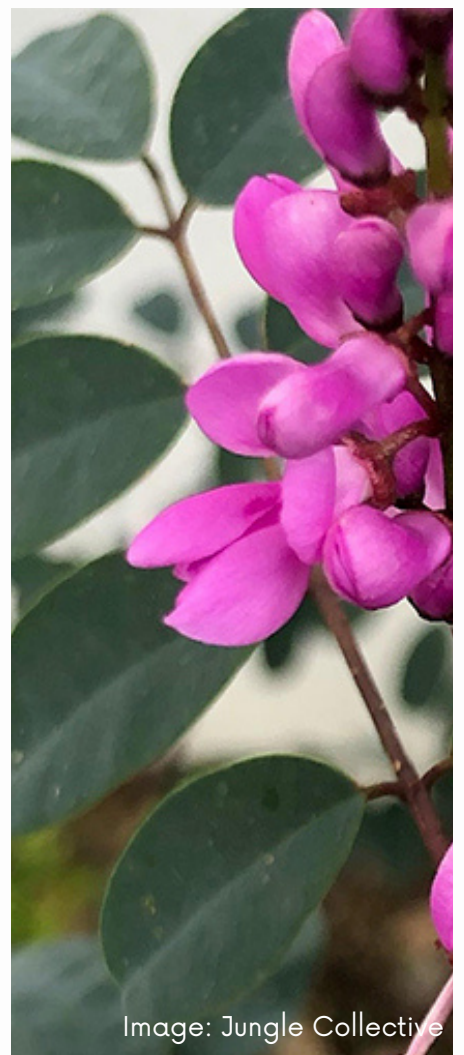


Image: Jungle Collective

Indigofera Tinctoria,
Bali, Indonesia

Indigo strobilanthes
Bali, Indonesia

Indigofera Australias,
South Australia.

Nerd out about Indigo
<https://naturaldyes.ca/indigo:>

NERDY STUFF~ Ceriops Tagal

Ceriops tagal, also known as Indian mangrove, is derived from tannin-rich mangrove roots. Mangroves plantations in Indonesia are under threat from environmental stress from herbicide runoff to clear cutting groves for aquaculture and residential development. Our ceriops tagal is FSC certified from a sustainably managed plantation and contributes to the preservation of mangrove plantations in Indonesia.



Properties of our Ceriops Tagal Pigment for Printing and painting

- tannin rich, darkens over time
- good light fastness
- has best washability when blended with a clay or another colour.
- Bleeding can occur when washed if too much pigment is used.

Glossary

Pigment

- A pigment is a colored material that is completely or nearly insoluble in water. At Kaji Mundo, when we make paints and ink we use pigments.
- A **lake pigment**, is a dye that has undergone a filtration/precipitation process, with a metallic salt. The result is a strong, stable pigment bound with the metallic salt. Lakes tends to resist bleeding and are colour fast.

Binder & Base

- In painting and printing you need a **base**- something for the pigment to sit in and a **binder**- something to keep/"stick" the colour to the surface you're painting on.
- Egg tempera is a natural binder that was used in many medieval and renaissance paintings. (as the name suggests, using egg). You can use this also for painting with natural pigments on canvas. For fabric, you need something permanent and washable. In our natural ink binder we use natural latex.

Dyes

- **VAT DYE:** dye undergoes a reduction process in a vat/vessel in order to be soluble and fix to fabric. The colour is "locked" into the fabric fibres through a deoxygenation/oxygenation process. Eg Indigo.
- **Mordant Dyes-** mordants are substances used to fix non-vat dyes to fabric. such as metallic salts. How? Dye molecules and mordant molecules form a bond, allowing them to "attach" to the fabric. EG Symplocos, alum powder. Most plant dyes need a mordant.

Get Nerdy...

Visit

kajimundo.com/tutorial - online tutorial for natural screen printing, and using Kaji Mundo's ink binder on cloth.

lostincolor.com

<http://www.wildcolours.co.uk/>

<https://maiwa.com/>

<http://www.asiantextilestudies.com/>

Follow 

[@colours_of_indonesia_](#) project documenting mineral colors in Indonesia

[@ochre.earth](#) Amazing Australian natural pigment artist

[@kauae_raro](#) Maori artist research collective, natural pigments

[@wildpigmentproject](#) US based, featuring worldwide pigment artists

[@cintabumiartists.](#) dear friend and natural colour queen, Indonesia

[@wildd.sg](#) Singapore based natural colour practice

[@threadsoflife.](#) Bali based natural dye studio and social enterprise

[@designnomaddiaries](#) YortaYorta multimedia artist

[@kajimundo](#) That's me! :)

And that's just to start you off, there's so so so so many more amazing artists connecting and creating with nature around the globe.....

Get Messy...

NATURAL INK MAKING INGREDIENT ESSENTIALS

Sodium Alginate or Gum Arabic (this is your modifier, to thicken a liquid)
Water (carrier/solvent)
Clove oil (natural preservative)
Kaji Mundo natural ink medium (for a 100% natural option for a washable screen print).

Pigment Making

Coffee Filter (for filtering lake pigments)
Alum (Potassium Aluminium Sulphate)
Soda Ash/Washing Soda
Glass Jar
Ph strips
Mortar and pestle
Glass Muller (not essential to start off with, but handy if you really get into the pigment making.)

Ready to use Natural Pigments (best for screen printing)

Kaji Mundo Ceriops powder
Kaji Mundo Natural indigo powder and LuMaya powders (best for textile works that will be washed)

Achiote Powder (you may need to refine more for printing)
Marigold Powder (you may need to refine more for printing)
Ochre Powder (you may need to refine more for printing)

Matter for Easy DIY natural pigments:

Crush soft stones
Crush fresh Achiote/Kesumba seeds
Dry and crush Gumnut Blossoms
Eucalyptus extract (non textile surfaces, will need to mordant cloth if painting directly only fabric with the liquid.

SILK SCREEN SPECIFICATIONS FOR NATURAL PRINTING

T55 size mesh works best, however you can go up to T120. Possible to print with a raster screen also. Wider mesh for coarser pigments.

Creations with Kaji Mundo Natural Ink



Images:

Limited edition indigo screen prints, Kaji Mundo
commission by Ricky Lee Gordon. Artwork by Ricky
Lee Gordon. Printed in partnership with Black
Hand Gang.

Screen Print Textiles



Top image: Kaji Mundo natural ink binder with natural indigo on an organic cotton tote bag. Artwork, Kaji Mundo.

Left Image: Kaji Mundo natural indigo with Matsui ZDHC certified ink medium. Artwork for Elami and Co.



Shop Kaji Mundo Natural Ink and Pigments

RETAIL INTERNATIONAL:

<https://threadsoflife.com/collections/screen-printing-sets>

TRADE ENQUIRIES + INDONESIA RETAIL

Email: kajimundo@gmail.com

Web: www.kajimundo.com



Contact

Fiona Caripis- Cofounder, Artist.

Email: kajimundo@gmail.com

IG: [@kajimundo](https://www.instagram.com/kajimundo)

