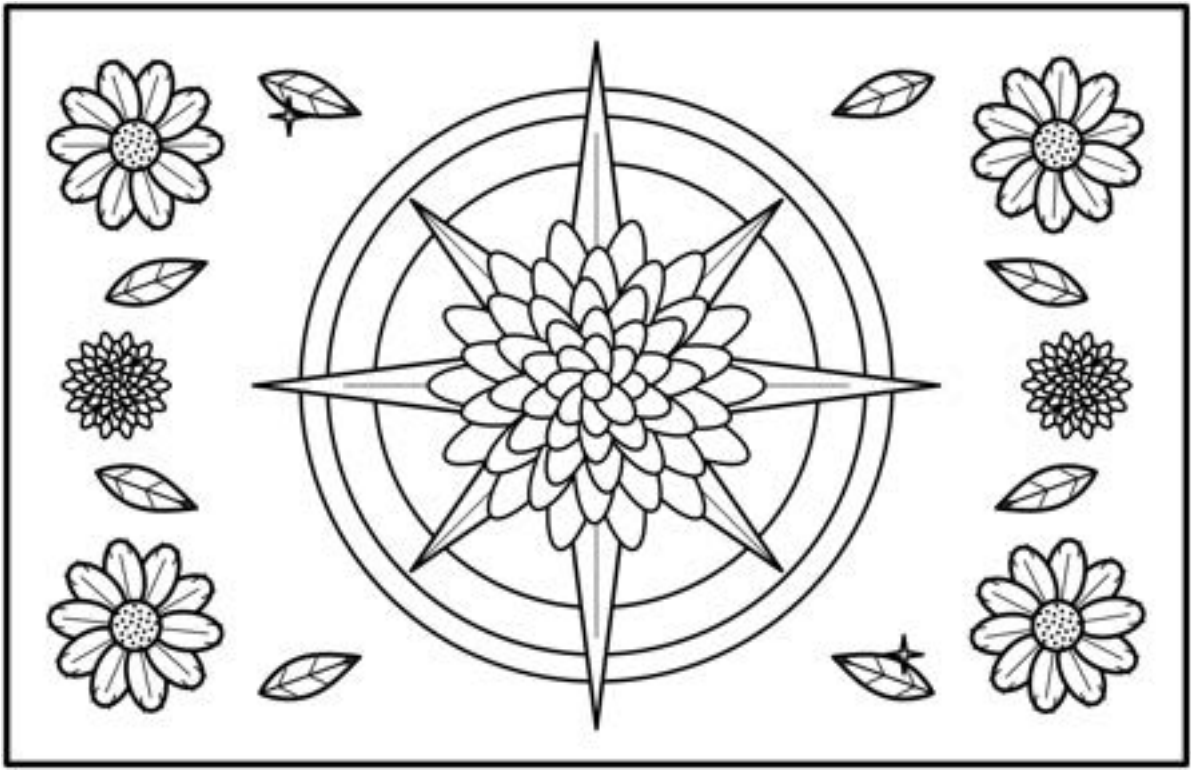
PLANT PASSPORT™

A Global Discovery Guide to Natural Color



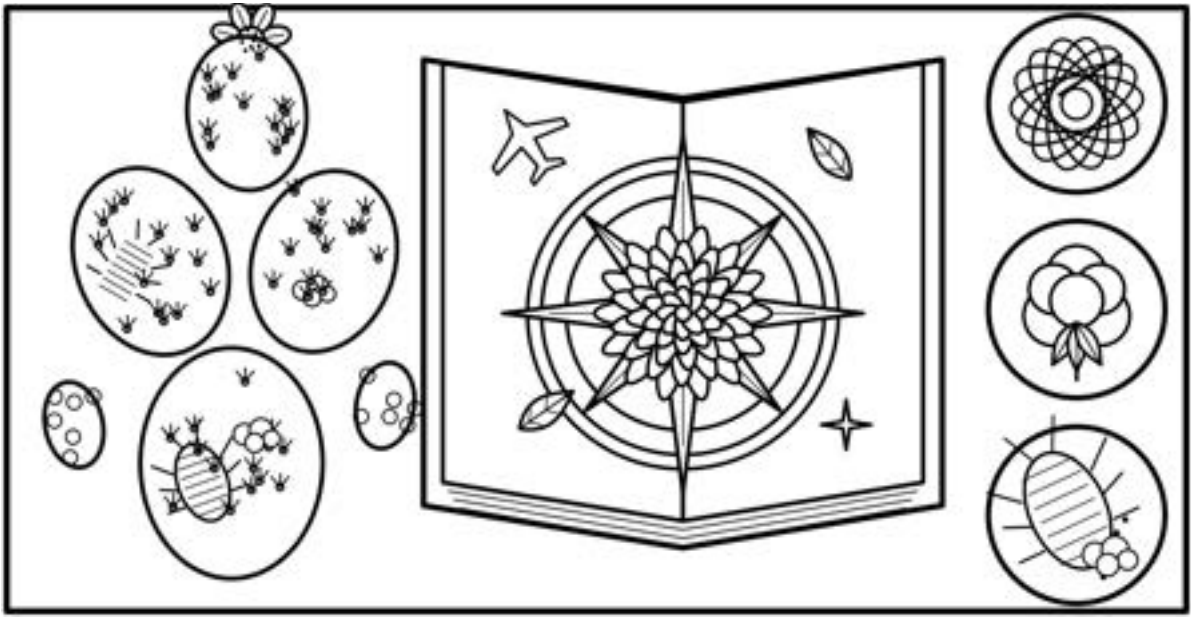
Dye Plant Coloring Book & Discovery Guide

20 plants • color theme • dye with them • record your results
Plant Passport Discovery Guide By Soil2Surface
Companion app available in the App Store.

PLANT PASSPORT™

PRICKLY PEAR

Opuntia ficus-indica & Dactylopius coccus



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

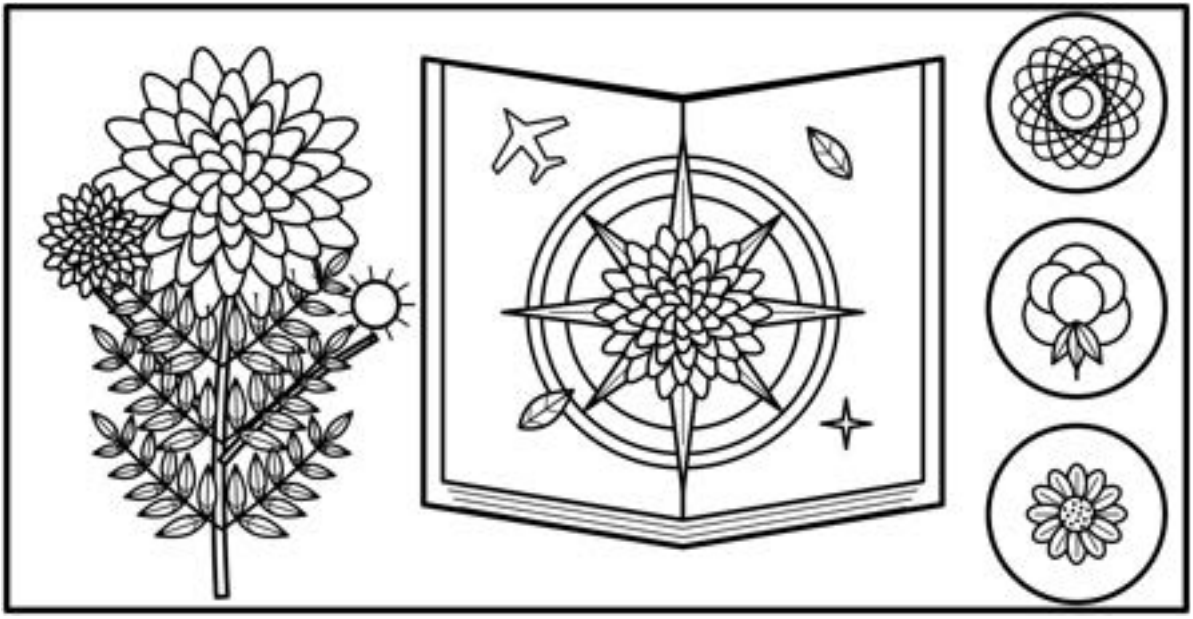
Color Result
Reflectance (at 530nm)

Dye source: cochineal insects living on the pads. Colors: pinks, crimsons, scarlets and purples.

PLANT PASSPORT™

MARIGOLD

Tagetes erecta



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix ()_____ | Grey / Over-dyed

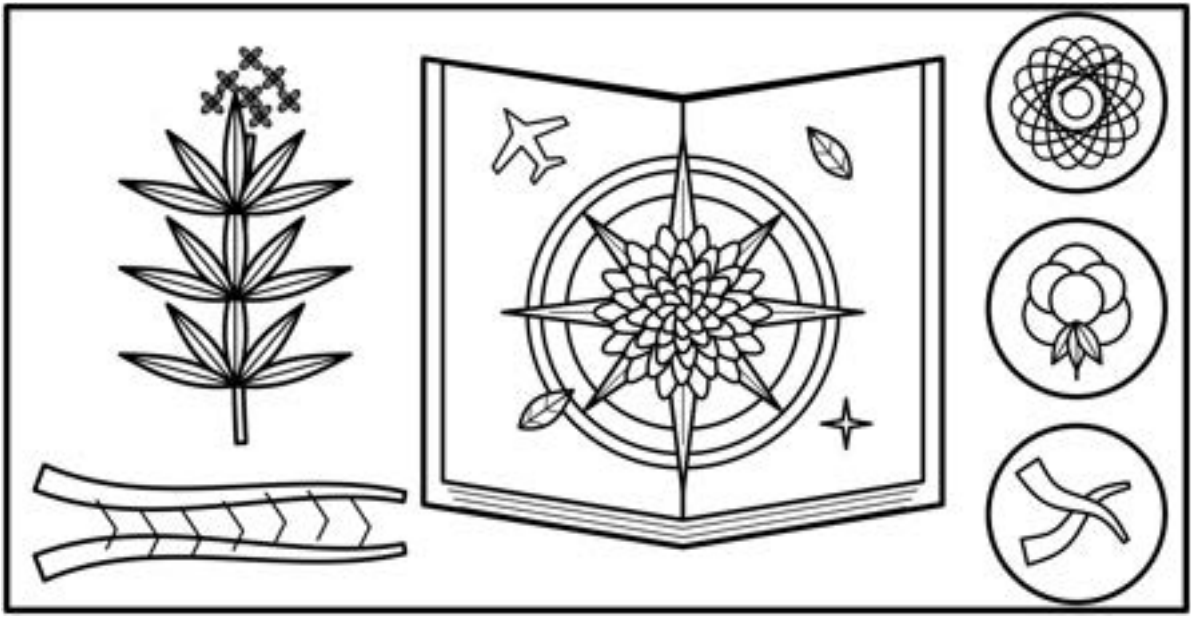
Color Result
Reflectance (at 530nm)

Dye source: dried flower heads. Colors: golds, oranges and yellow-greens.

PLANT PASSPORT™

MADDER

Rubia tinctorum



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

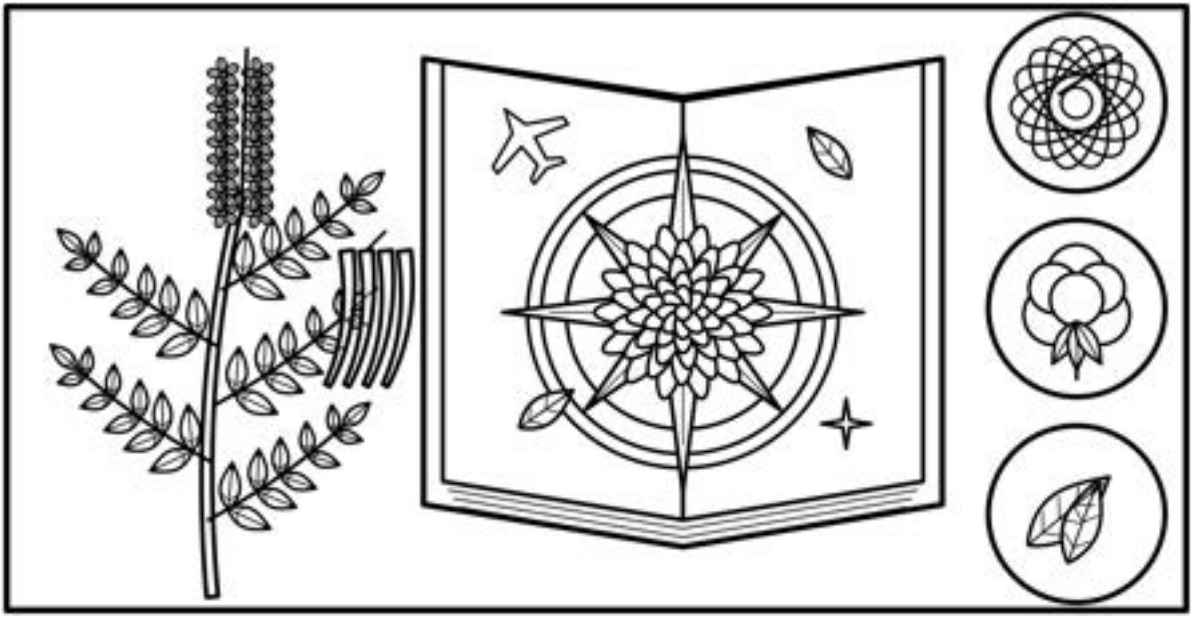
Color Result
Reflectance (at 530nm)

Dye source: roots. Colors: reds, oranges, pinks and terracottas.

PLANT PASSPORT™

INDIGO

Indigofera tinctoria



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

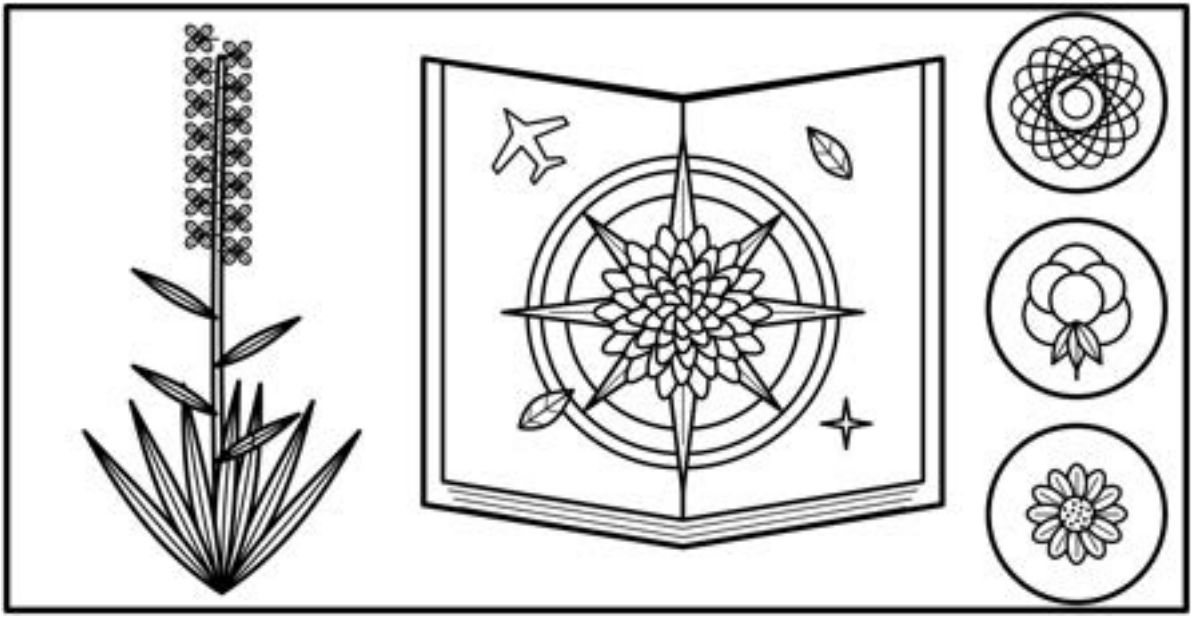
Color Result
Reflectance (at 530nm)

Dye source: leaves, fermented in a vat. Colors: blues from pale sky to deep navy.

PLANT PASSPORT™

WELD

Reseda luteola



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

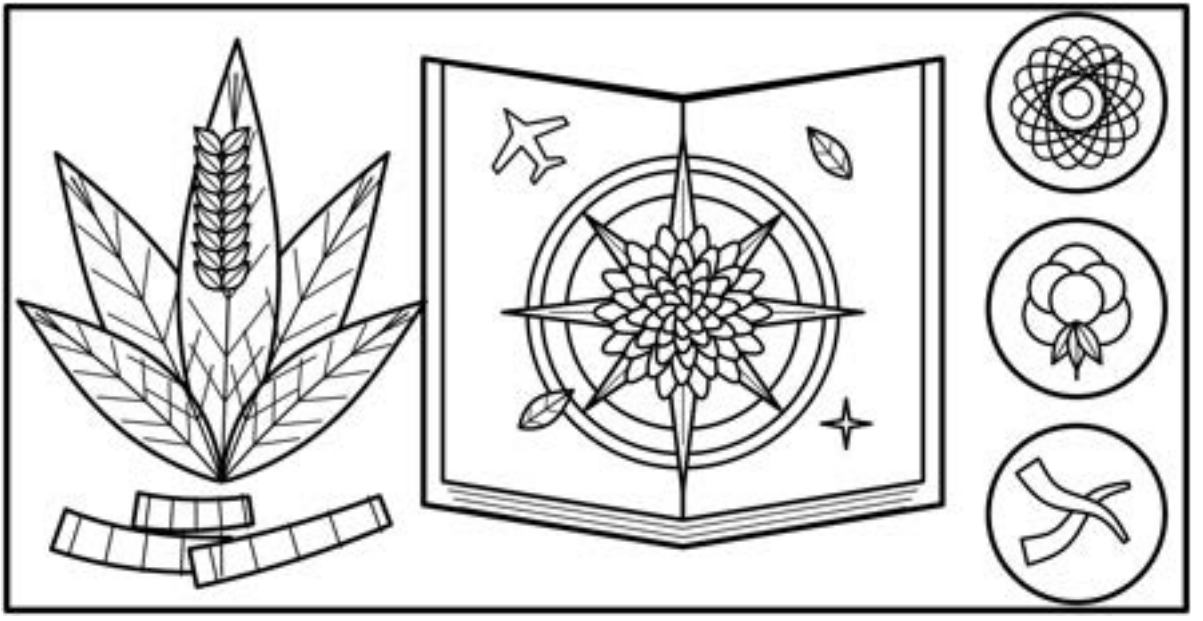
Color Result
Reflectance (at 530nm)

Dye source: the whole plant. Colors: clear, lightfast lemon and golden yellows.

PLANT PASSPORT™

TURMERIC

Curcuma longa



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

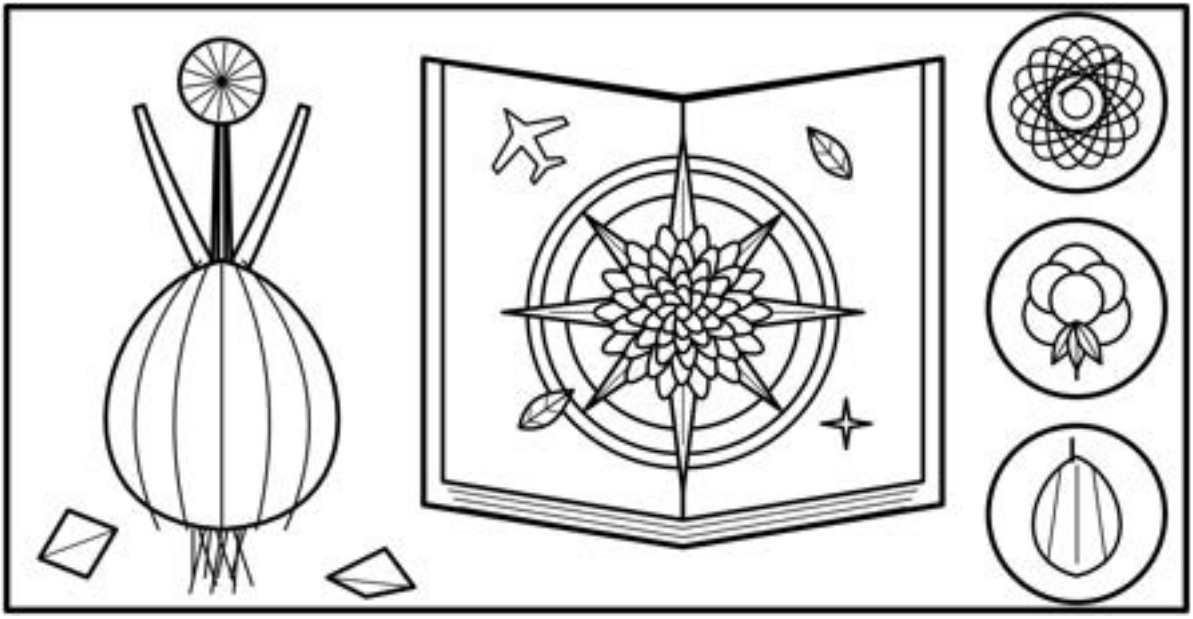
Color Result
Reflectance (at 530nm)

Dye source: rhizomes. Colors: bright yellows and oranges (fades quickly in light).

PLANT PASSPORT™

YELLOW ONION

Allium cepa



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

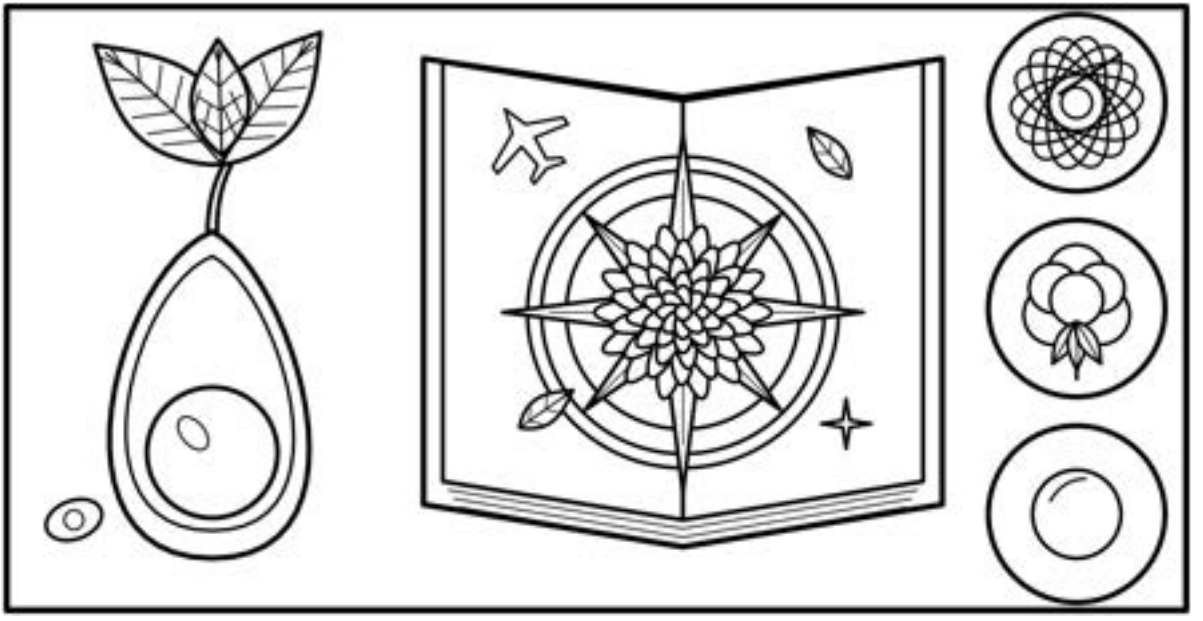
Color Result
Reflectance (at 530nm)

Dye source: dry outer skins. Colors: golds, oranges and rusty browns.

PLANT PASSPORT™

AVOCADO

Persea americana



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

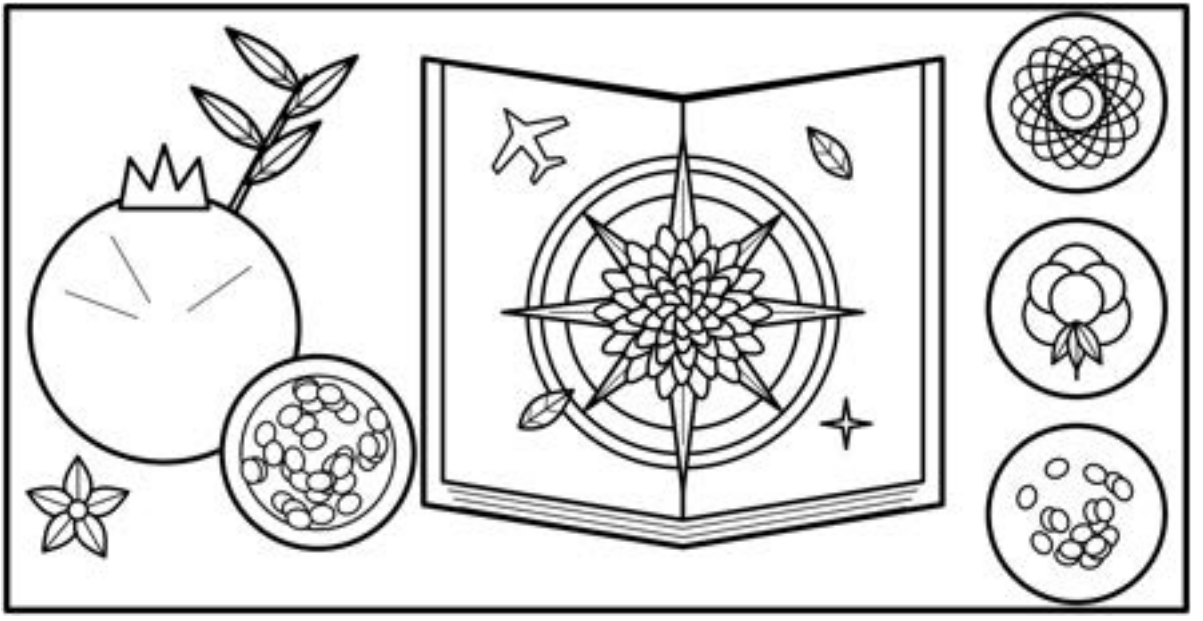
Color Result
Reflectance (at 530nm)

Dye source: pits and skins. Colors: soft blush pinks, peaches and tans.

PLANT PASSPORT™

POMEGRANATE

Punica granatum



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

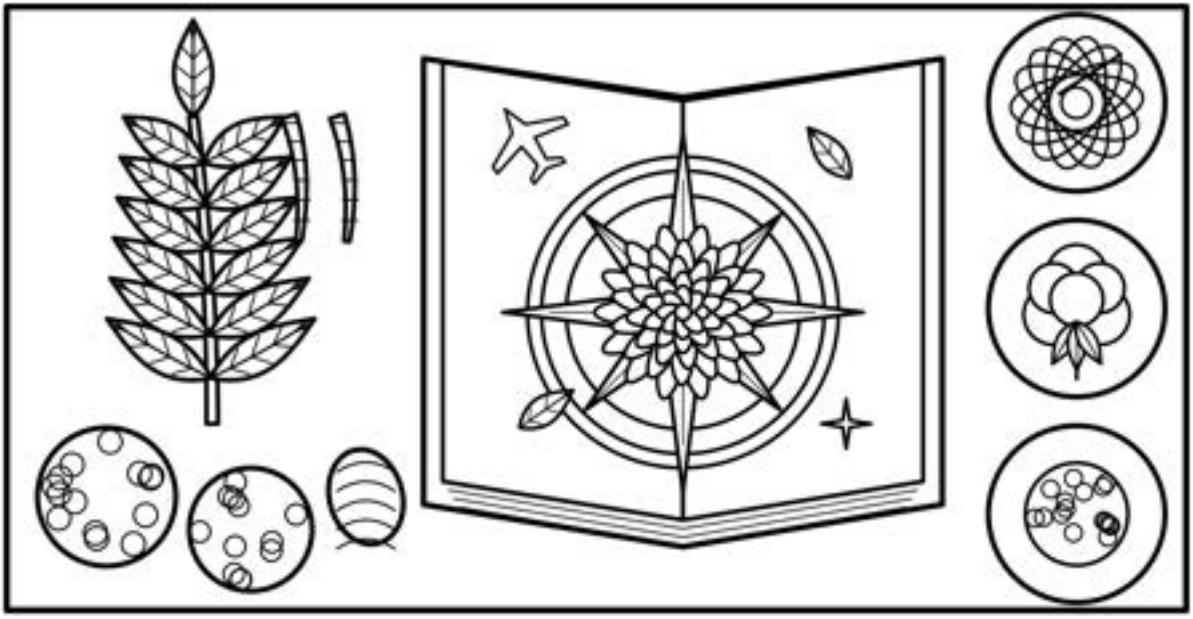
Color Result
Reflectance (at 530nm)

Dye source: fruit rinds. Colors: yellows and khakis; grey to black with iron.

PLANT PASSPORT™

BLACK WALNUT

Juglans nigra



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

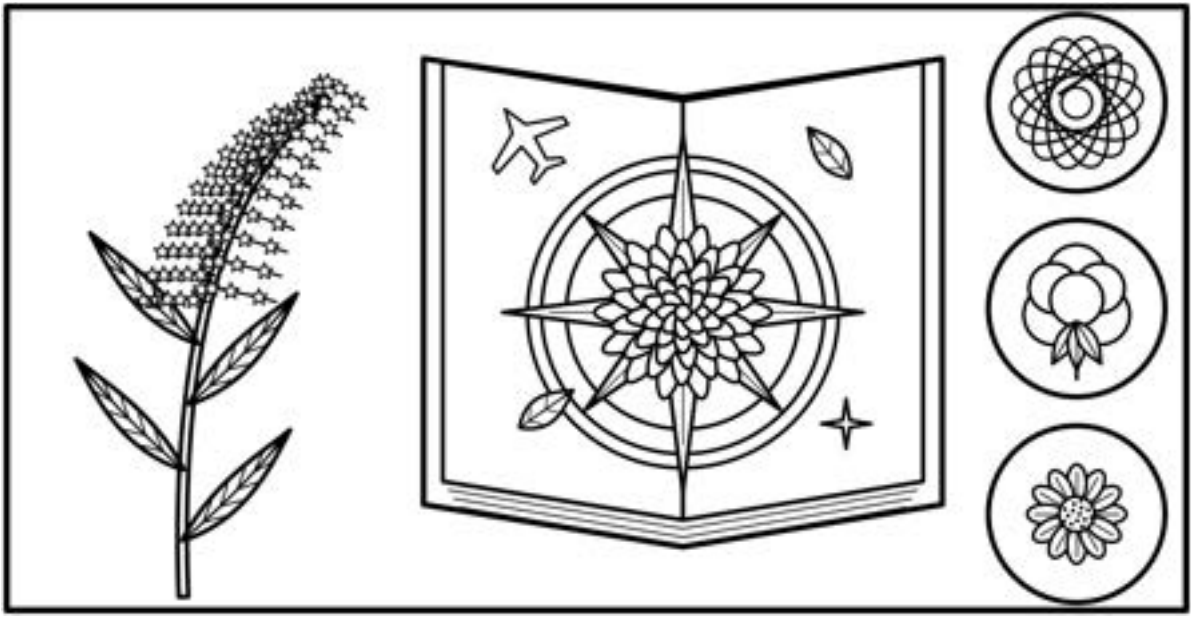
Color Result
Reflectance (at 530nm)

Dye source: green or dried hulls. Colors: rich browns, with little or no mordant needed.

PLANT PASSPORT™

GOLDENROD

Solidago canadensis



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

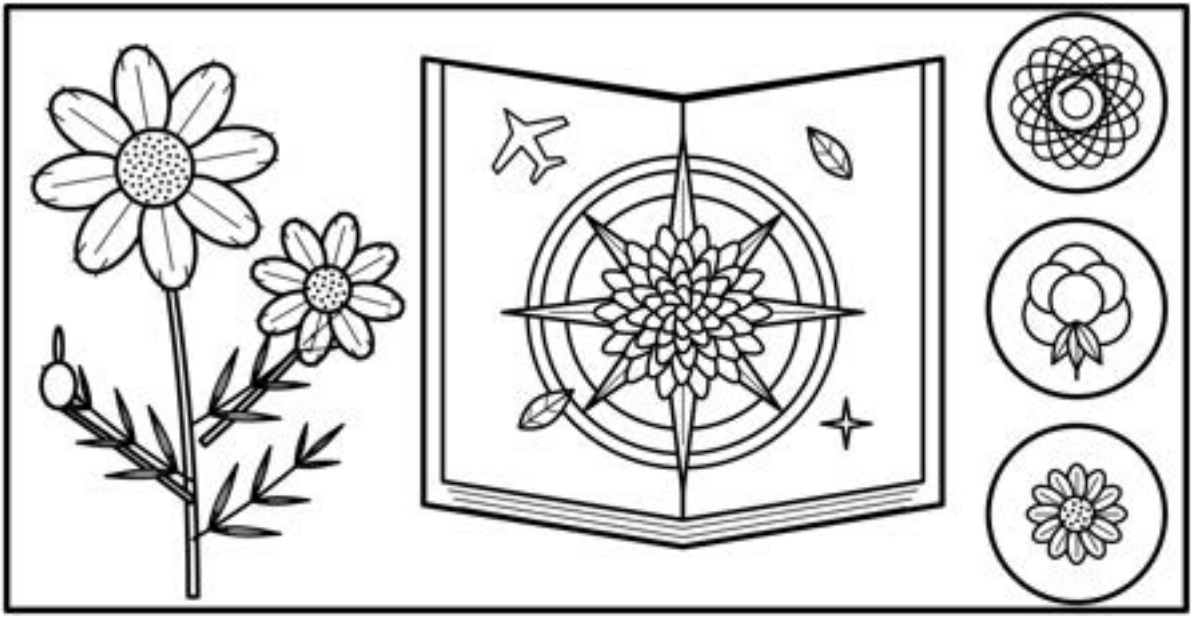
Color Result
Reflectance (at 530nm)

Dye source: flower heads. Colors: yellows, golds and warm greens.

PLANT PASSPORT™

COREOPSIS

Coreopsis tinctoria



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

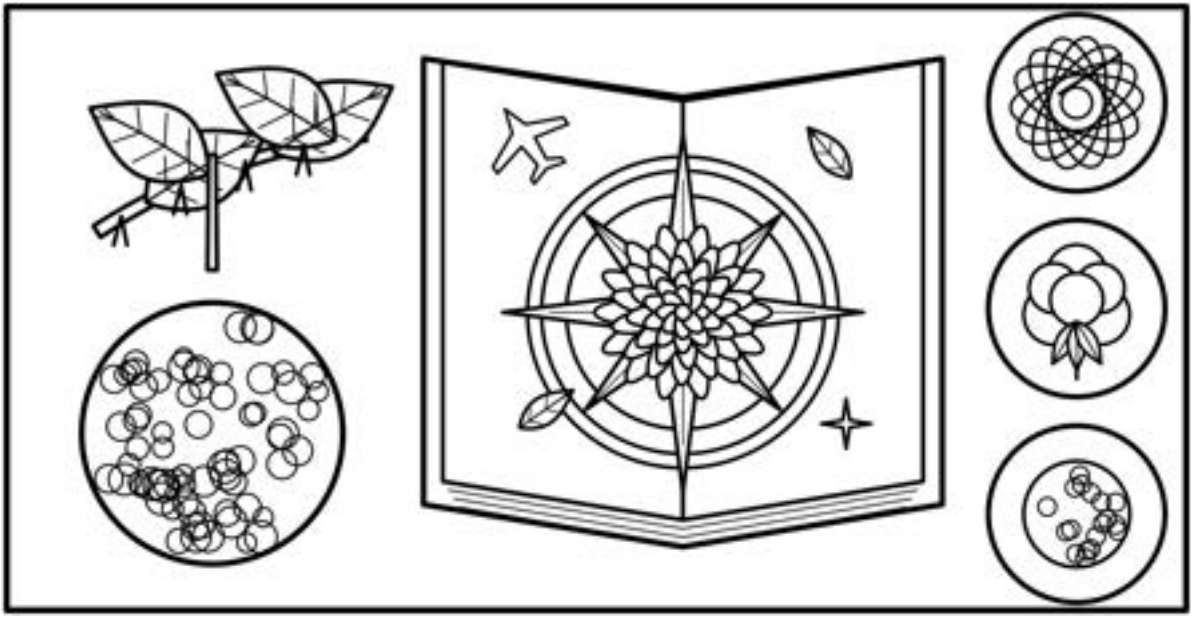
Color Result
Reflectance (at 530nm)

Dye source: flower heads. Colors: oranges, rusty reds and burnt golds.

PLANT PASSPORT™

OSAGE ORANGE

Maclura pomifera



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

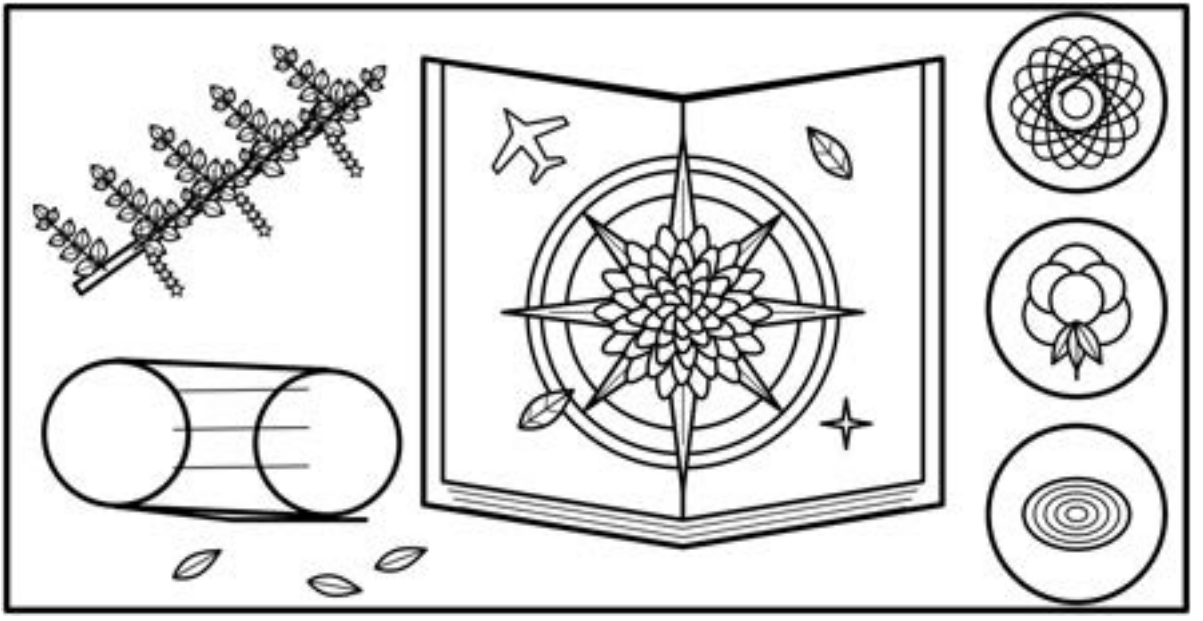
Color Result
Reflectance (at 530nm)

Dye source: heartwood shavings. Colors: bright yellows to deep golds.

PLANT PASSPORT™

LOGWOOD

Haematoxylum campechianum



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

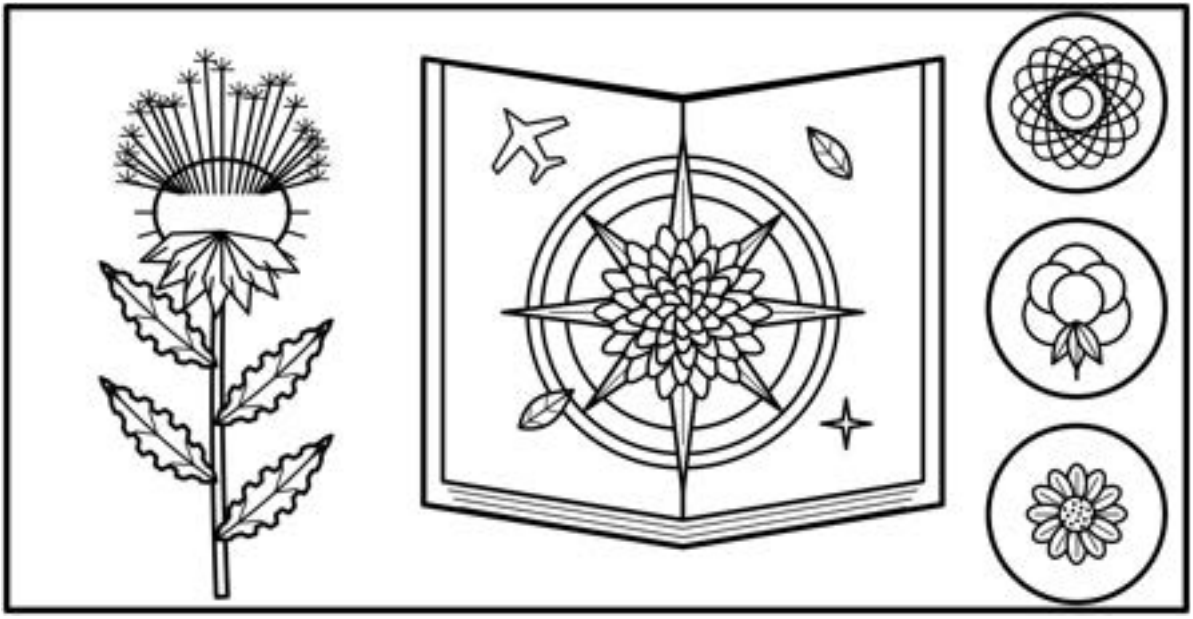
Color Result
Reflectance (at 530nm)

Dye source: heartwood chips. Colors: purples, violets and blue-greys; black with iron.

PLANT PASSPORT™

SAFFLOWER

Carthamus tinctorius



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

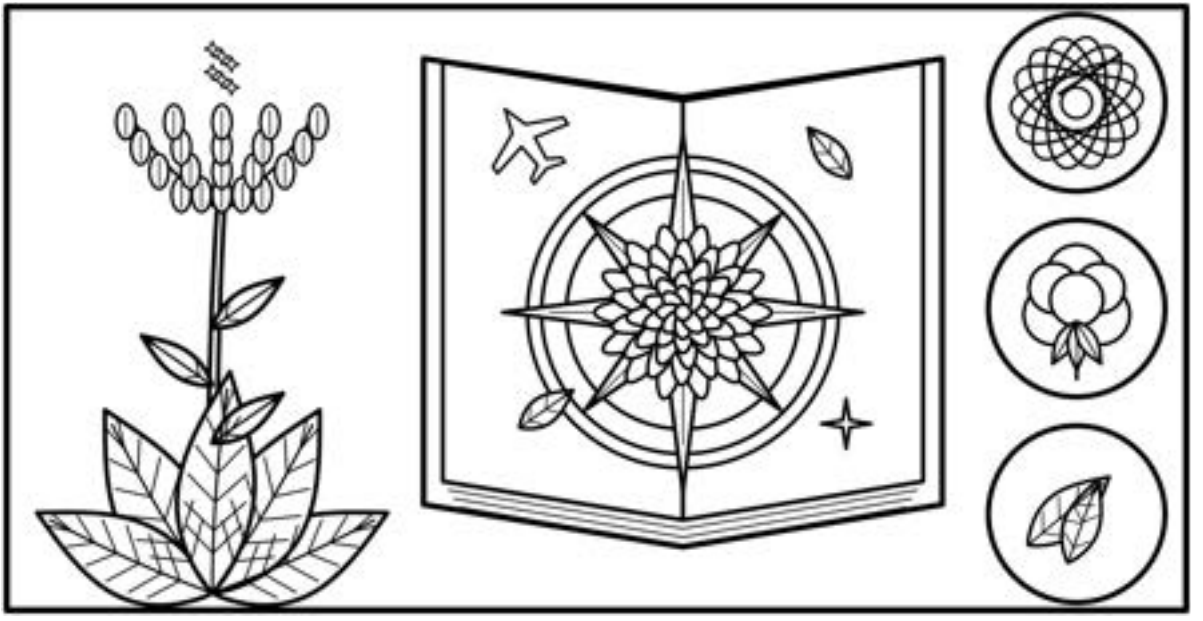
Color Result
Reflectance (at 530nm)

Dye source: petals. Colors: yellows first, then pinks and reds after an alkaline rinse.

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WOAD

Isatis tinctoria



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

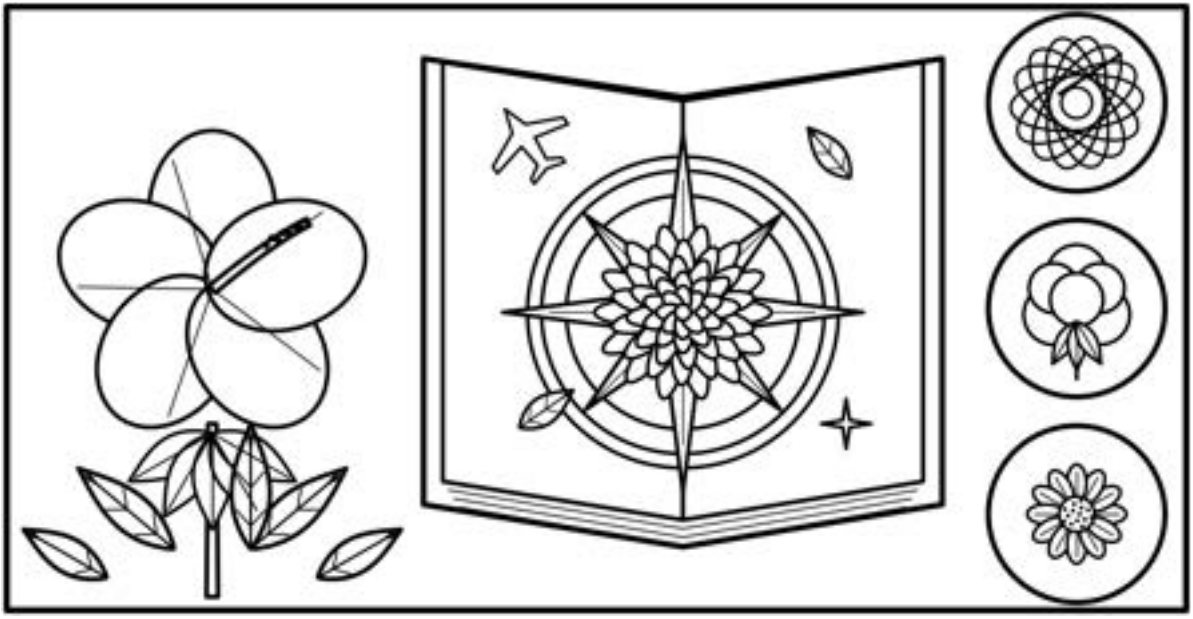
Color Result
Reflectance (at 530nm)

Dye source: leaves, fermented in a vat. Colors: soft to medium blues.

PLANT PASSPORT™

ROSELLE HIBISCUS

Hibiscus sabdariffa



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

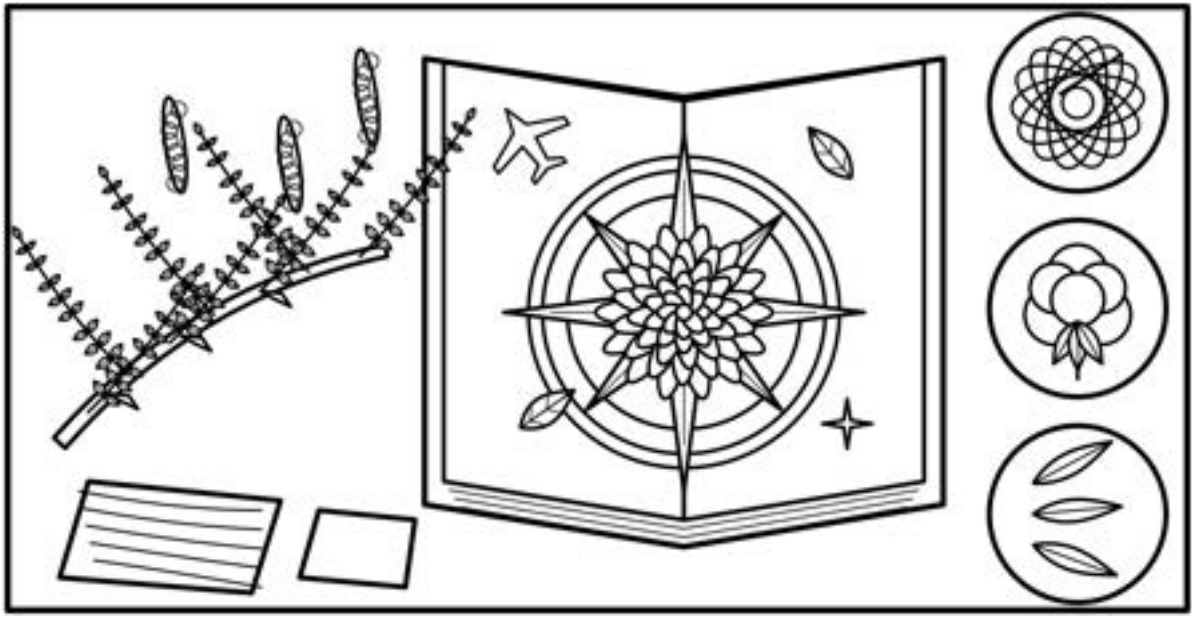
Color Result
Reflectance (at 530nm)

Dye source: calyces. Colors: pinks, magentas and mauves (shift easily with pH).

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CUTCH

Acacia catechu



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

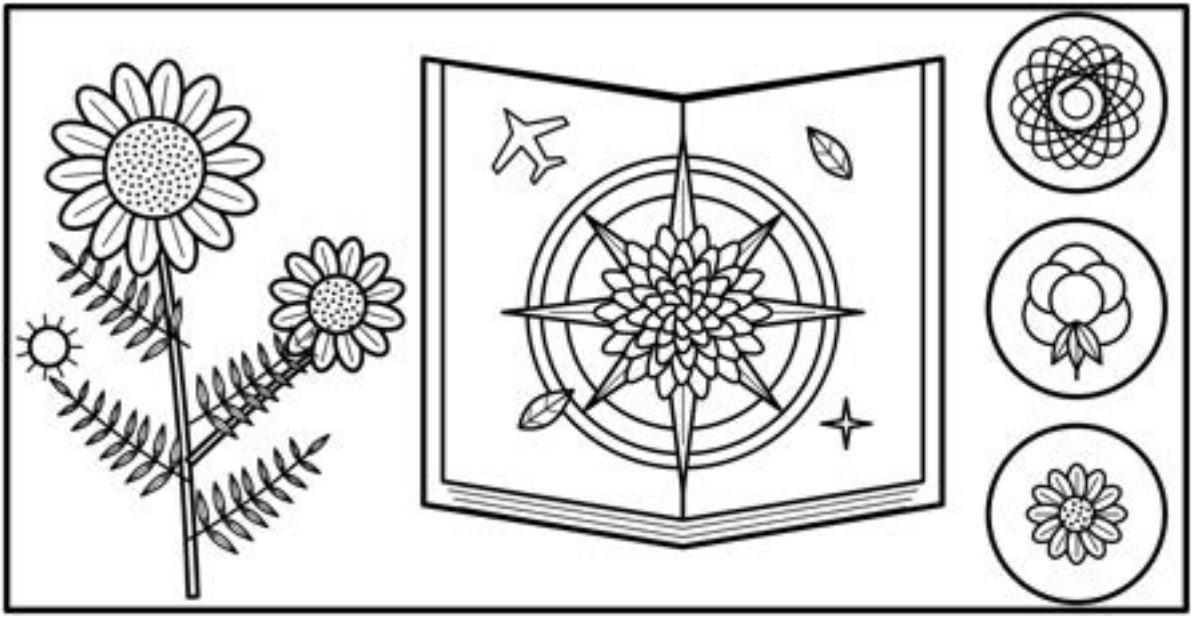
Color Result
Reflectance (at 530nm)

Dye source: heartwood extract. Colors: tans, browns and khakis.

PLANT PASSPORT™

DYER'S CHAMOMILE

Anthemis tinctoria



Color Result (Uncolored)	Pure Alum Mordant	Acidic pH Shift	Alkaline pH Shift	Tin Mordant	Plant Mix (_____)	Grey / Over-dyed

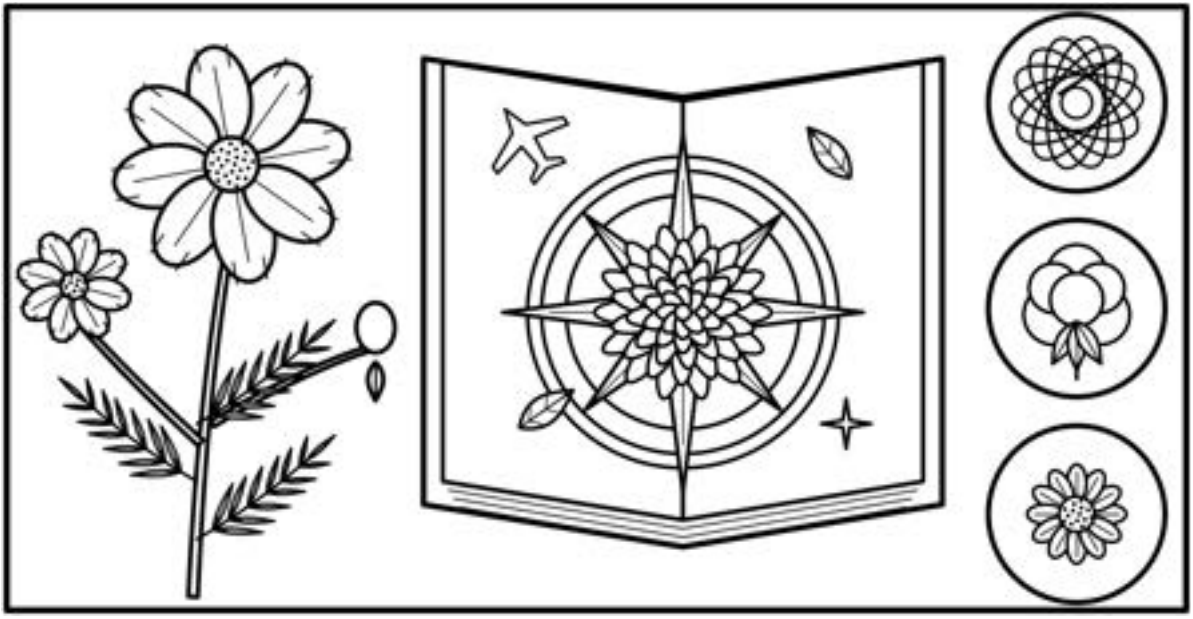
Color Result
Reflectance (at 530nm)

Dye source: flower heads. Colors: sunny yellows and golds.

PLANT PASSPORT™

SULPHUR COSMOS

Cosmos sulphureus



Color Result (Uncolored) | Pure Alum Mordant | Acidic pH Shift | Alkaline pH Shift | Tin Mordant | Plant Mix (_____) | Grey / Over-dyed

Color Result
Reflectance (at 530nm)

Dye source: flower heads. Colors: oranges, golds and rusty reds.

PLANT PASSPORT™

A Global Botanical Discovery Guide

How to use this book

1. Dye a test swatch for each condition on the page, then color the circles to match your results.
2. Write the color in *Color Result* and, if you can, record the weight of the dye material and recipe.
3. Results change with water, fiber, plant, and mordant, so treat each page as a record of your own tests. Always use distilled water and wear protective gear when handling plant based materials.

Be careful handing mordants such as tin and alum:Wear gloves and work in a well-ventilated space. PLANT PASSPORT™ is a pending trademark.

iPhone app companion book by Soil2Surface Inc.

Made in the U.S.A

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