**Botanic Garden**
**Artist-in-Residence, 2023 - 24**
**Nabil Ali**

Artist Nabil Ali is developing an online Dye Research Index to provide historical and technical information about organic paint systems. The dye colours in this trail were developed by Nabil whose residency was supported using Arts Council England funding.

Nabil Ali’s art practice focuses on the process of creative representation, specialising in object art, sculpture and organic paint systems. He uses historical technical manuscripts focusing on painters’ and illuminators’ recipes to inform the extraction of dyes from plants, and develops his research into site-specific, conceptual art installations.

**Dementia Compass**

This guide has been created through the Portals to the World programme, a partnership between the University of Cambridge Museums and Dementia Compass.

Dementia Compass is a social venture with over a decade of experience supporting individuals with Alzheimer’s or other dementias and their families.

Dementia Compass builds and provides resources that reduce the impacts of dementia and to help people stay connected with who and what matters.

For more information visit the Dementia Compass Website: [www.dementiacompass.com](http://www.dementiacompass.com)
Phone 07876 350 638
Email hello@dementiacompass.com

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**Why a garden walk?**

Visiting a garden is a great opportunity to meet friends and have some gentle exercise as you explore the plants.

**How long will it take?**

With time to stop and look the walk should take you approximately 50 minutes.

**How far is it?**

It’s approximately 600 steps.

**Are there places to sit?**

There are benches at regular intervals throughout the Garden and wheelchair accessible tables in most of the picnic areas.

**What access support is there?**

Manual wheelchairs are available to borrow free of charge at both the Brookside Gate and Station Road Gate. These can be pre-booked by phone or email (see below).

There are accessible toilets behind the Glasshouses, in the Café, and at the Brookside Gate.

Trained assistance dogs are permitted to visit the Garden, when supporting a disabled handler.

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**Garden Walk**
**Inks & Dyes in Nature**

How to make colour with Nature’s plants

Natural inks and dyes made from plants have been integral to human civilisation for centuries providing a source of colour for textiles, animal skins and body decoration.

This walk shares stories and recipes collected by artist Nabil Ali during his artist residency at the Botanic Garden from 2023 to 2024.

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**Contact us:**

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Mahonia brings a splash of colour to winter with its bright yellow flowers and purple berries. What is not commonly known is that the inside of the mahonia stem is also bright yellow.

The yellow colour in the plant's stem is a compound called berberine. Depending on the way it is processed, berberine can create many different shades of yellow.

Berberine was valued in ancient Asian civilisations for its medicinal properties as well as its use as a dye.

The Botanic Garden

The sleepy mallow is native to Central and North America. The flower petals of the mallow produce a terracotta dye. As with other plant dyes, the process of making it starts with steeping the petals in hot water (for other plants this might be the leaves, bark, berries etc). The mallow dye steeping takes 24 hours, after which the petals are removed. Further heating reduces it to a dye.

The mixing of different metallic substances (mordants) with the dye can change its colour tone from terracotta to salmon pinks, red, brown or tan.

The jade vine is native to the Philippines. At twilight, the flowers have a glowing brightness, this attracts bats which it relies upon for pollination.

Slow heating of the jade vine flowers, in rainwater with potash, creates a green dye.

The colour of the green dye can be changed by the addition of a metallic substance (a mordant). A tin mordant in the dye turns it pinkish purple. An iron mordent turns it black.

Wasp larvae cause the development of abnormal growths on oak trees, which are known as oak-galls. A black, tannin-based ink can be made from the galls.

The recipe for oak-gall ink is extremely old with the first record of its use being over 2,300 years ago.

Many of today's surviving historical documents were written with oak-gall ink. Notable examples include the Magna Carta and drawings by artists Leonardo da Vinci and Vincent Van Gogh.