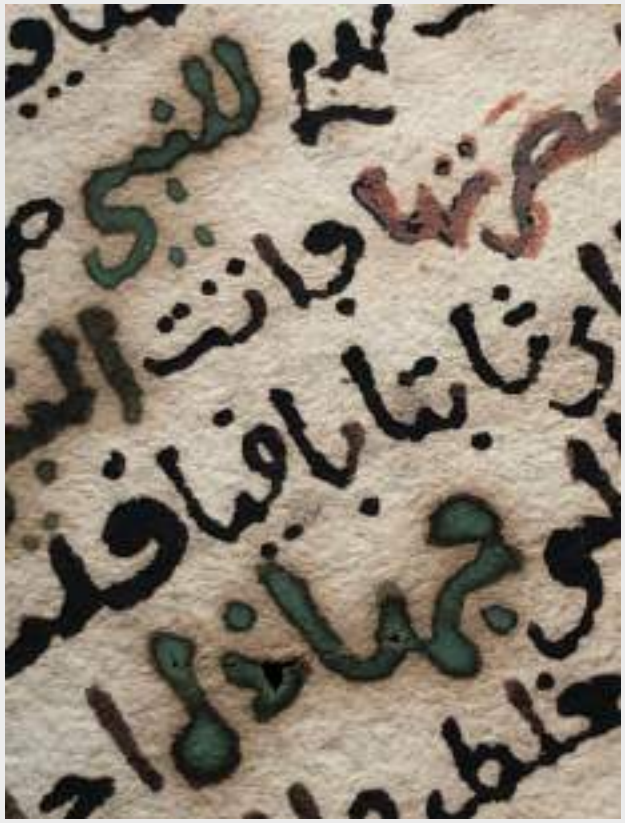
Organic Dyes: traditional extraction & modern innovation:

सप्पन लकड़ी – EK- البقم – Red/ Blue wood

Shaikha Alkharsan

MELCOM- PARIS 2025

सप्पन लकड़ी – EK- البقم – Red/ Blue wood



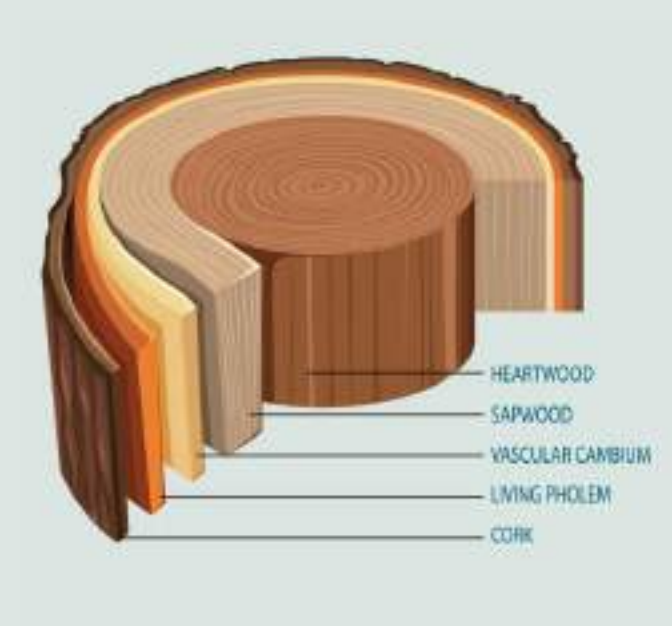


सप्पन लकड़ी –البقم – Sappan wood – Brazil wood

Biancaea sappan - Sappan wood



Wood anatomy



सप्पन लकड़ी –البقم – Sappan wood – Brazil wood

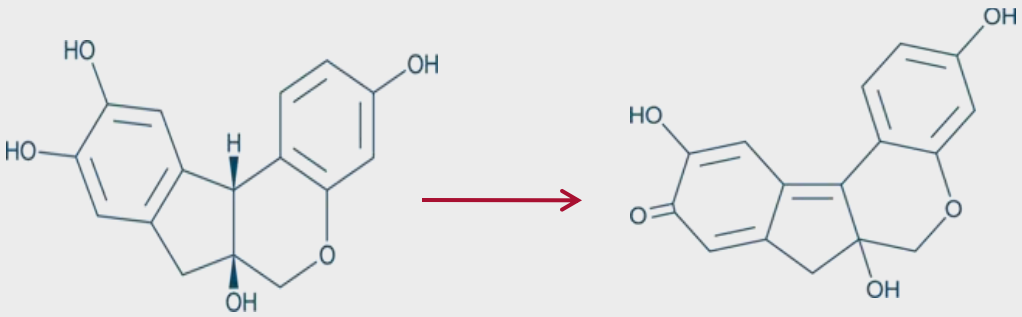






Extraction the dye.

सप्पन लकड़ी –البقم – Sappan wood – Brazil wood

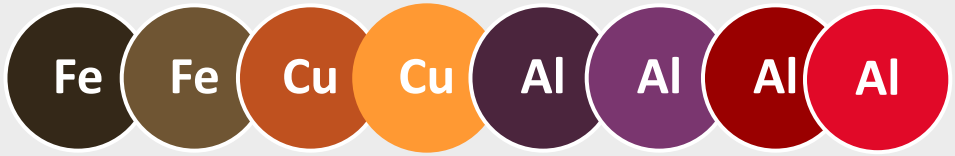


brazilin

brazilein

Brazilin is a pale yellow or colorless dye, after exposure to light and oxygen, it will oxidize to brazilein red-orange dye.

Mordant's



Brazilwood- البقم – Paubrasilia- Redwood

Paubrasilia echinata





Brazilwood- البقم – Paubrasilia- Redwood



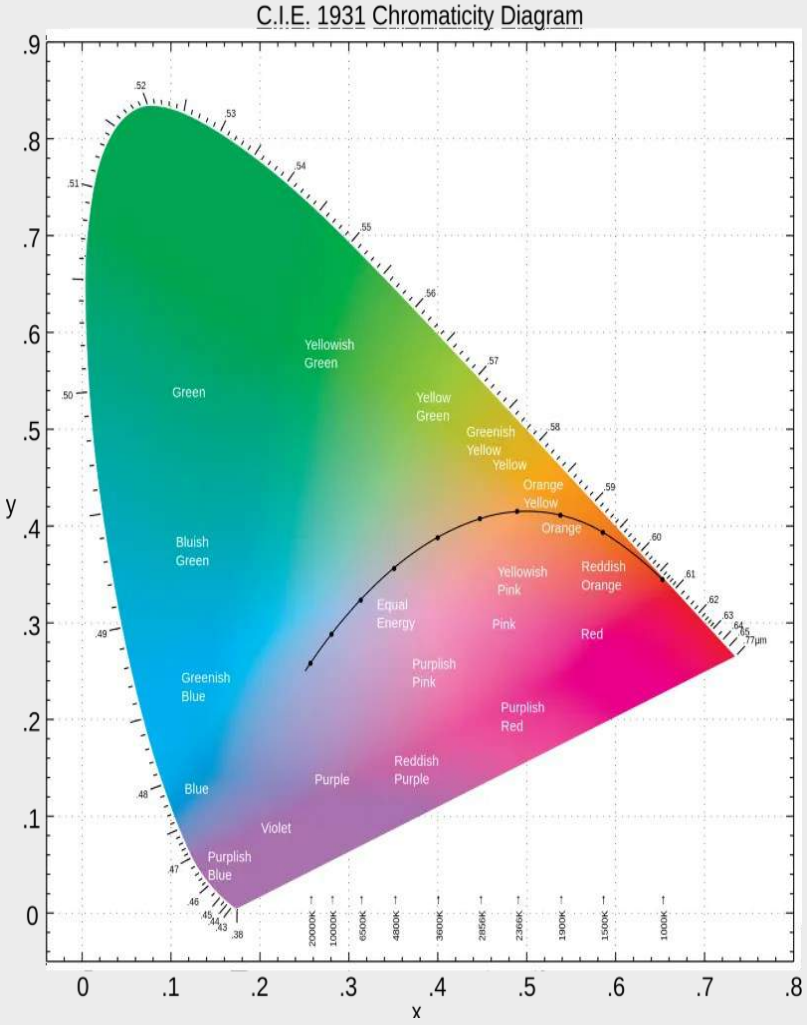
Color change &lightfastness

Basic factors of light fastness

- Metal ion of mordant.
- The substrate fiber.
- Light intensity & duration.
- Temperature
- Humidity.
- Chemical agents.



Color change &lightfastness





Fading of brazil wood dye according to CIE system



Logwood - البقم - Ek- blue wood

Haematoxylum campechianum

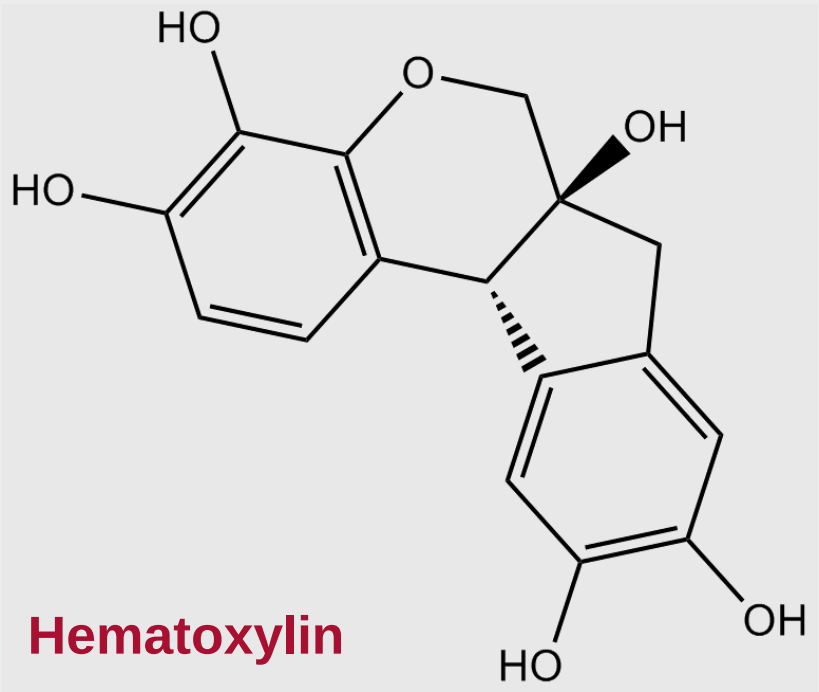




Natrural forest regions of North America 1910

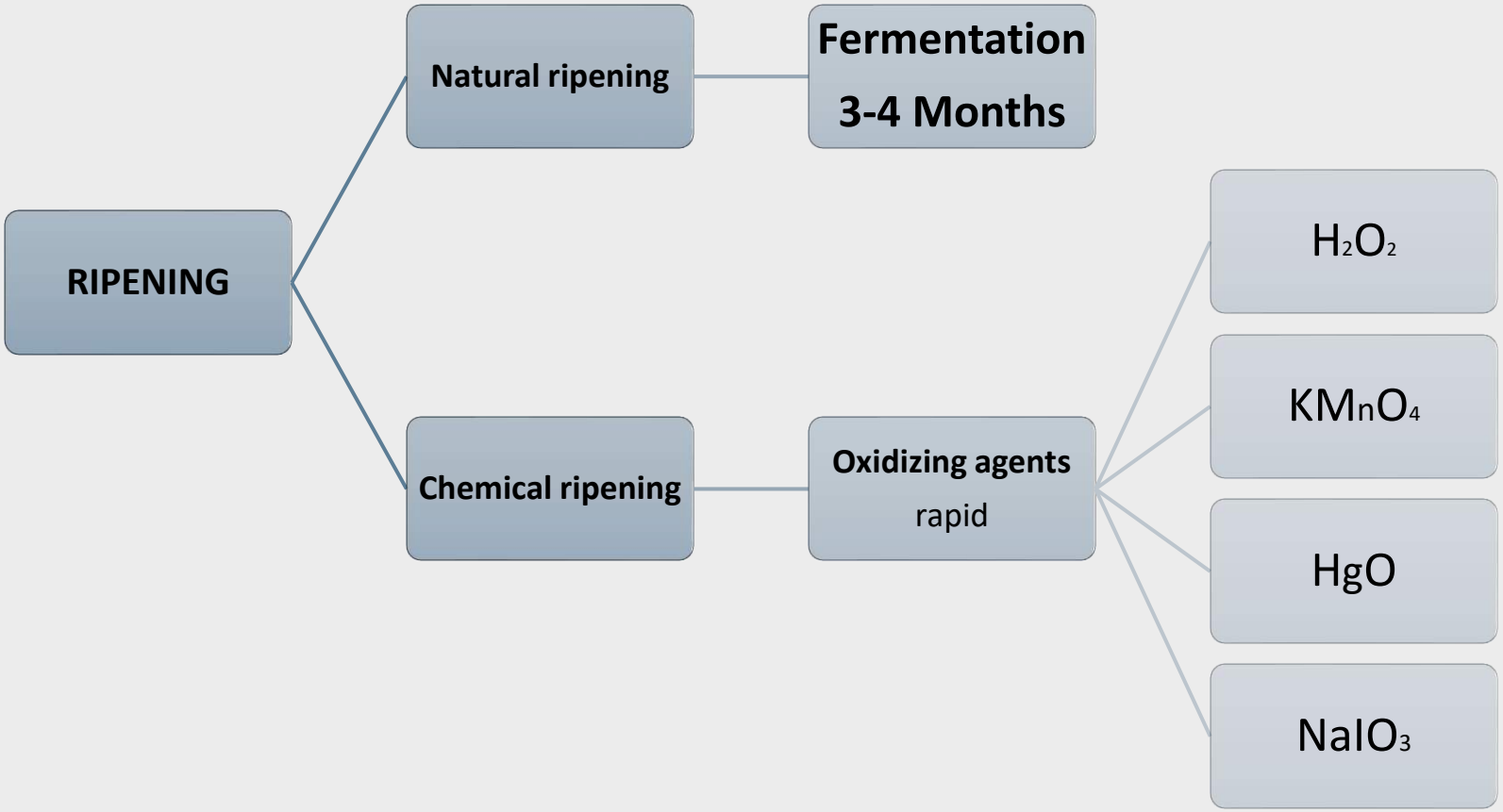
Logwood - البقم - Ek- blue wood



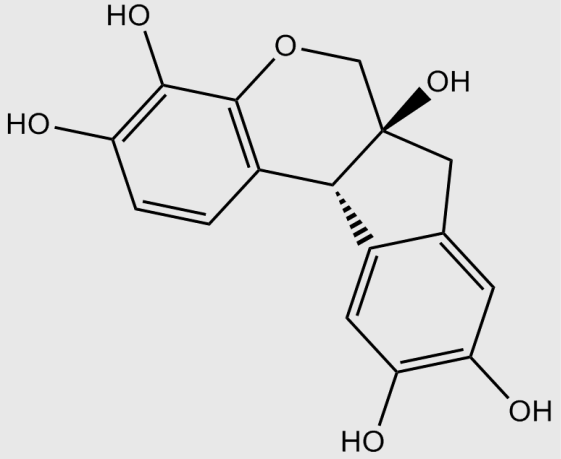


Hematoxylin

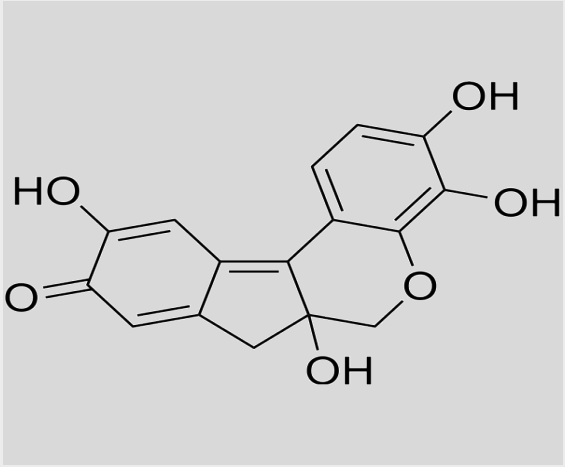
Logwood - البقم - Ek- blue wood



Logwood - البقم - Ek- blue wood



oxidize



Hematoxylin

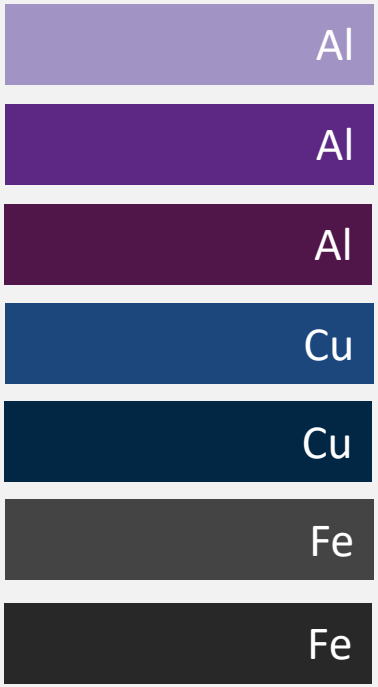
Hematein

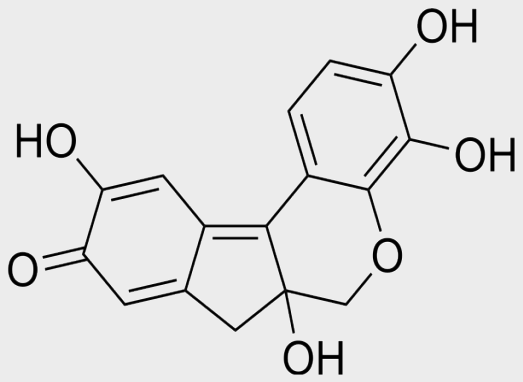
natural Black 182

CI75290

Logwood - البقم - Ek- blue wood

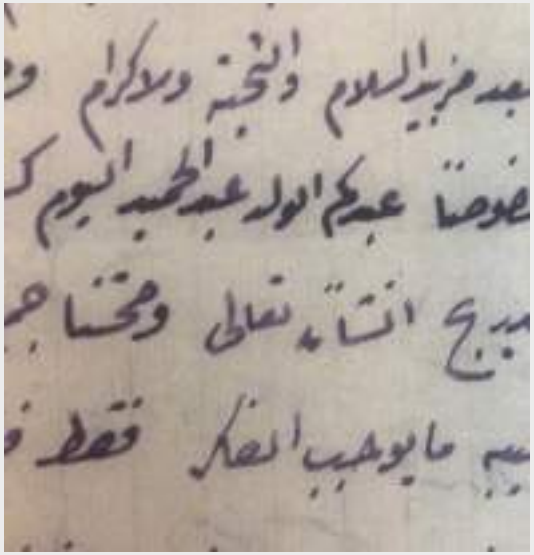
MORDANTS





Hematein

Logwood - البقم - Ek- blue wood



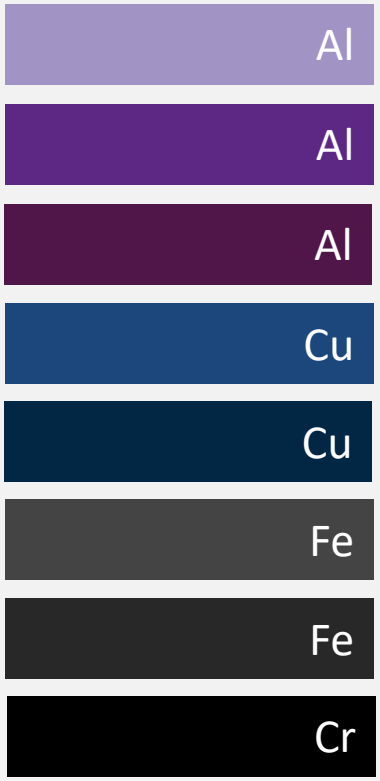


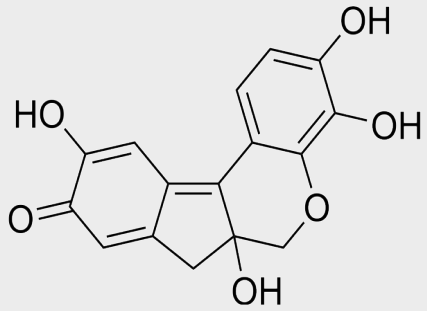


Fading & color change

Logwood - البقم - Ek- blue wood

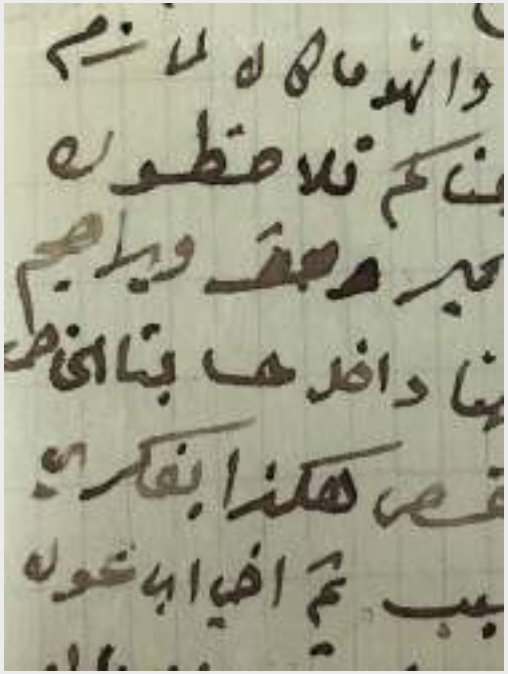
MORDANTS

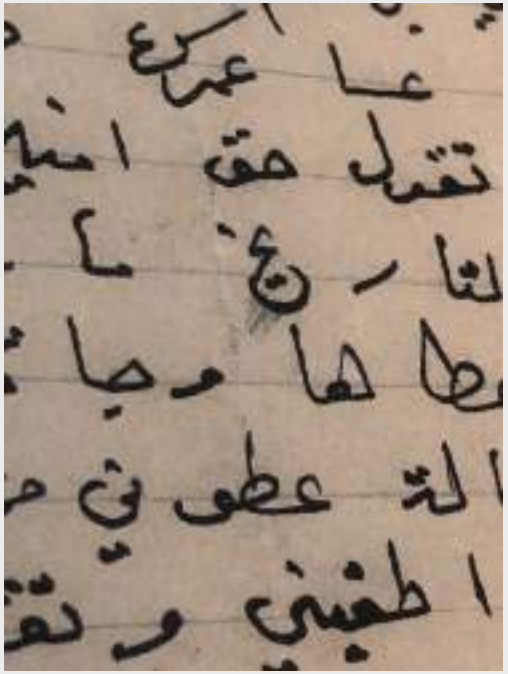


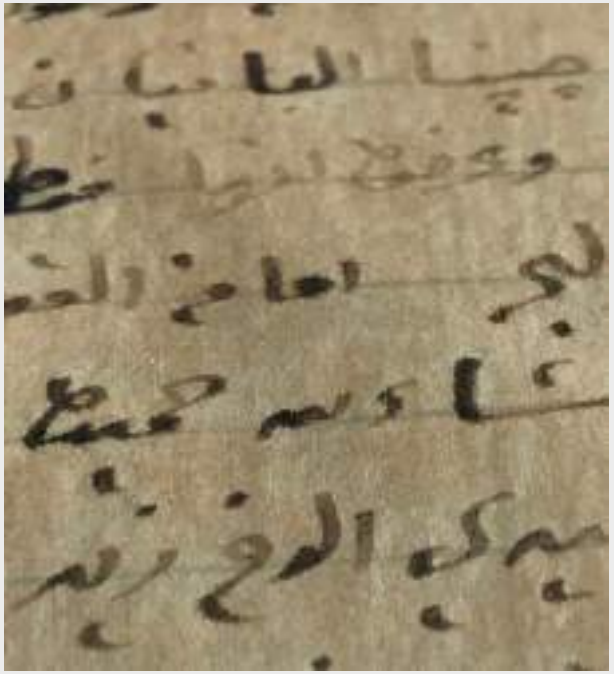


Hematein

Chrome logwood – Fading





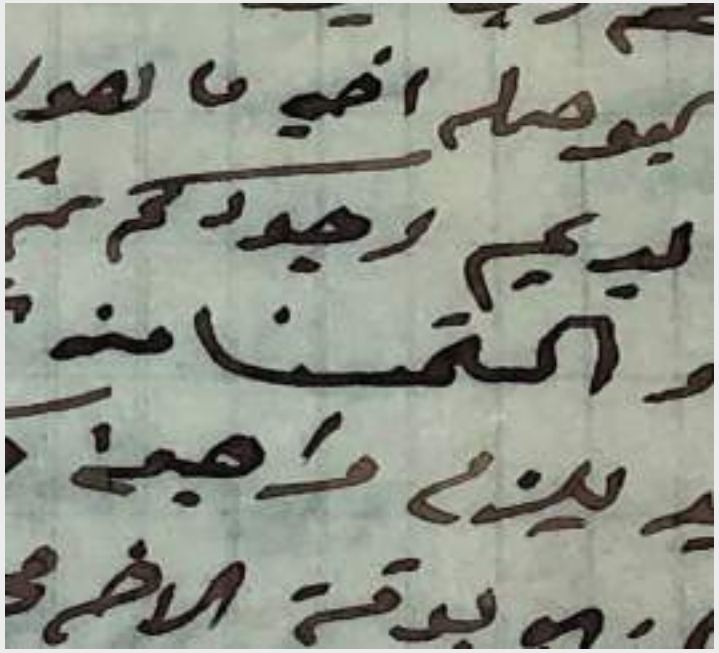


Non- destructive analysis (XRF)

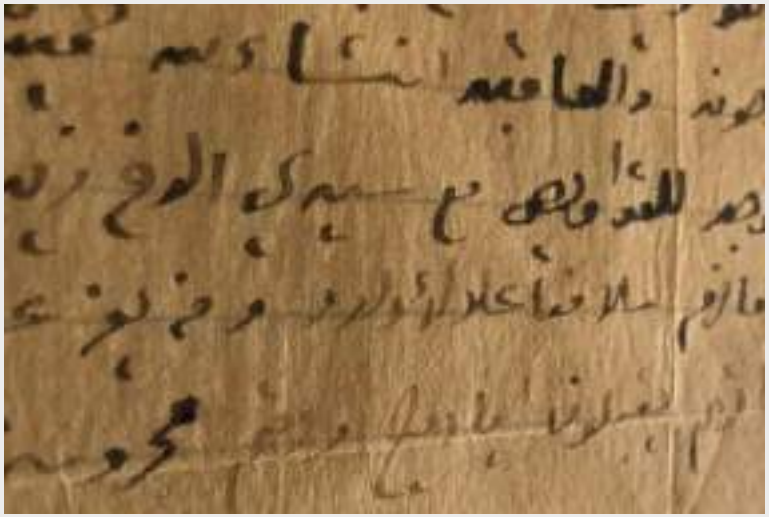


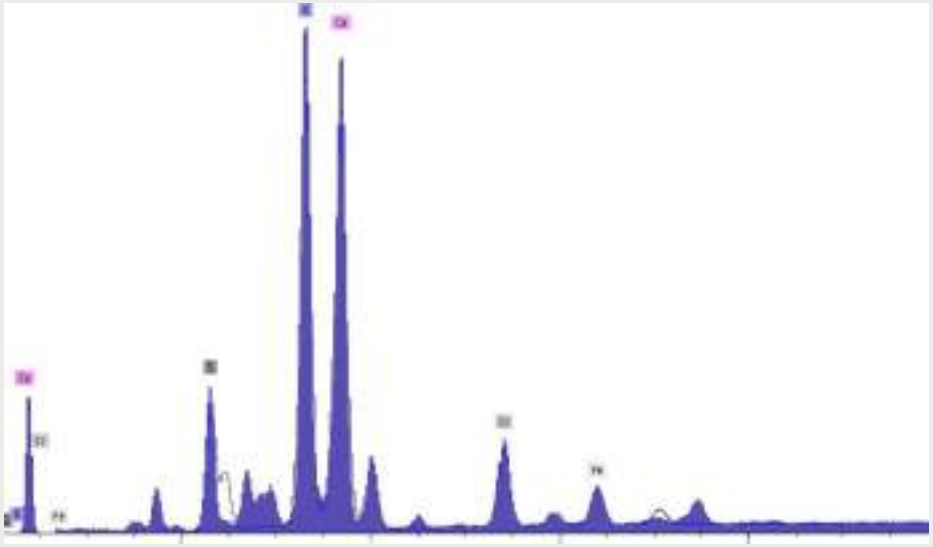
Chrome logwood - non-destructive analysis

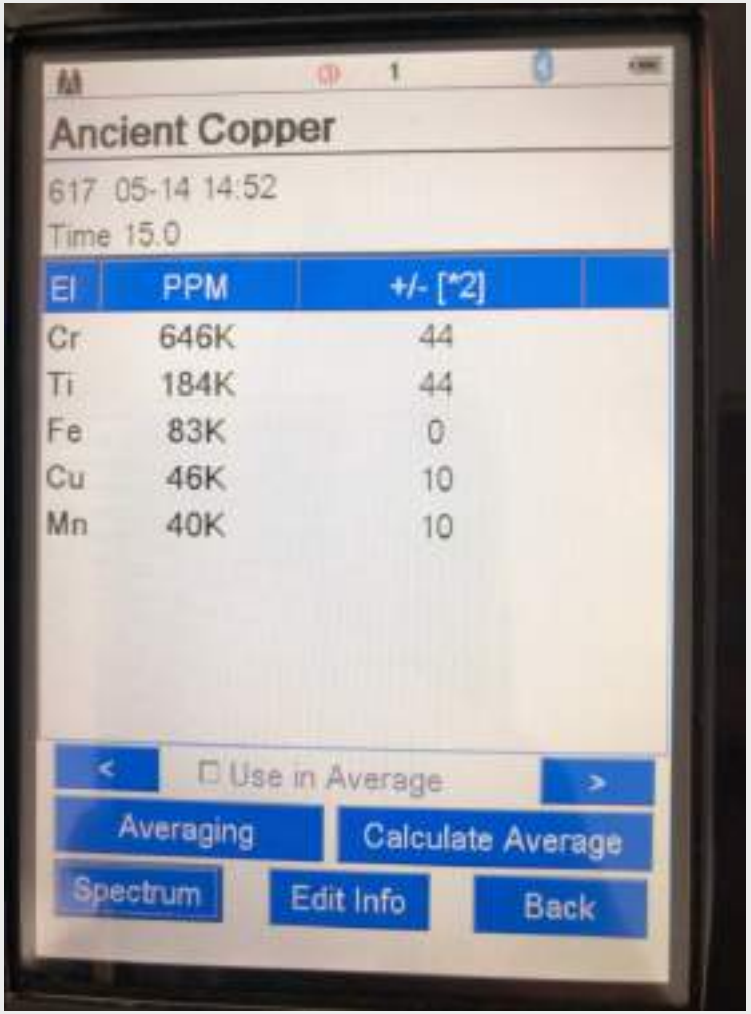
El	Min	%	Max	+/- [*2]
Ti		45.26		0.00
Cr		40.02		0.00
Cu		12.11		0.00
Mn		2.60		0.00



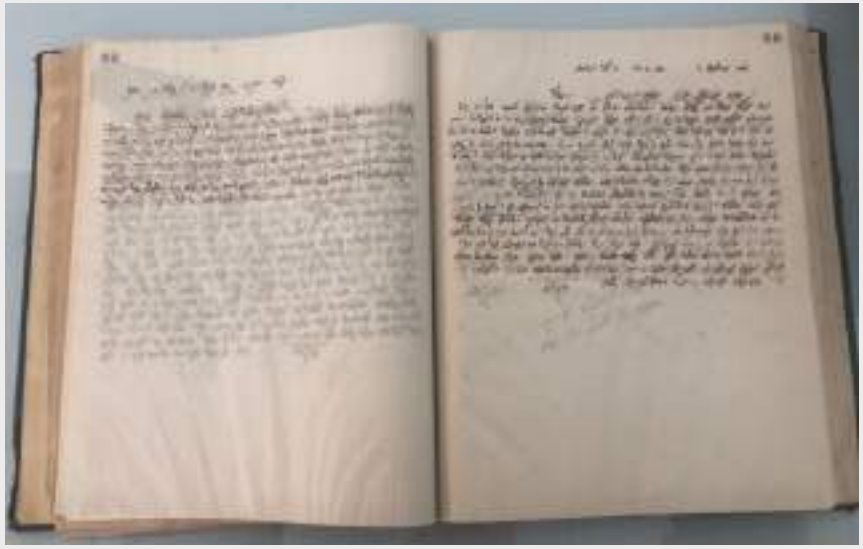
Iron logwood ink







Iron logwood ink – copy ink



El	Min	%	Max	+/- [*2]
Fe		70.93		0.00
Cr		17.08		0.00
Cu		5.93		0.00
As		3.24		0.00
Mn		2.82		0.00





Chrome logwood – conservation







Shaikhah2h@aol.com

Thank You