

Natural Dye Testing Research

Department of Chemical Engineering and Biotechnology
University of Cambridge

Artist Nabil Ali

September 2024 – October 2025

Multi-fabric Substrate

A

Wool

B

Acrylic Crayon

C

Polyester

D

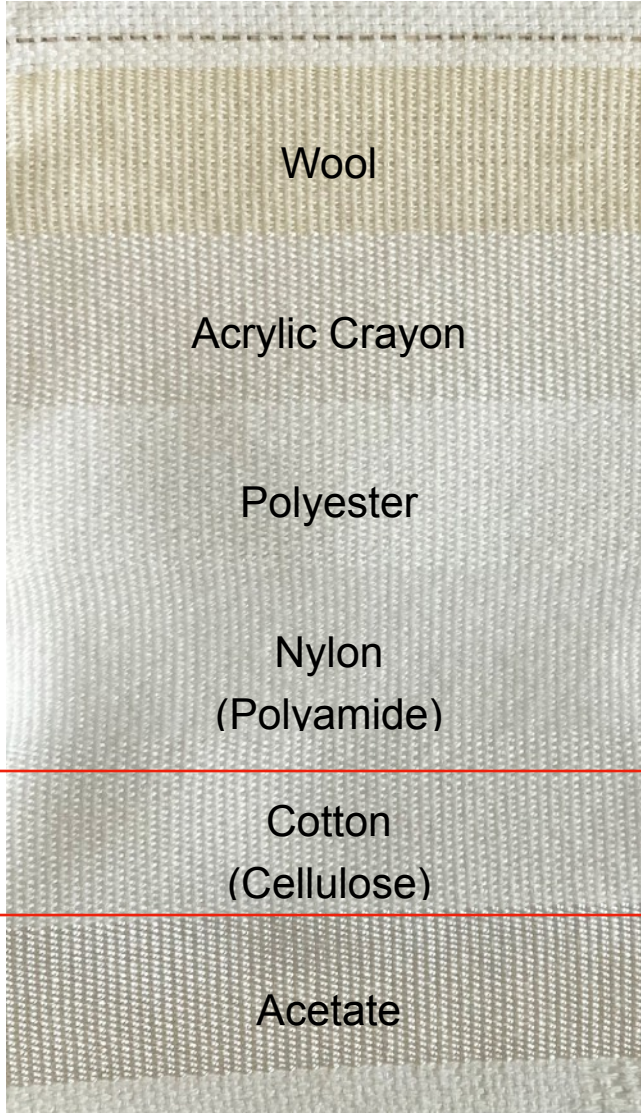
Nylon
(Polyamide)

E

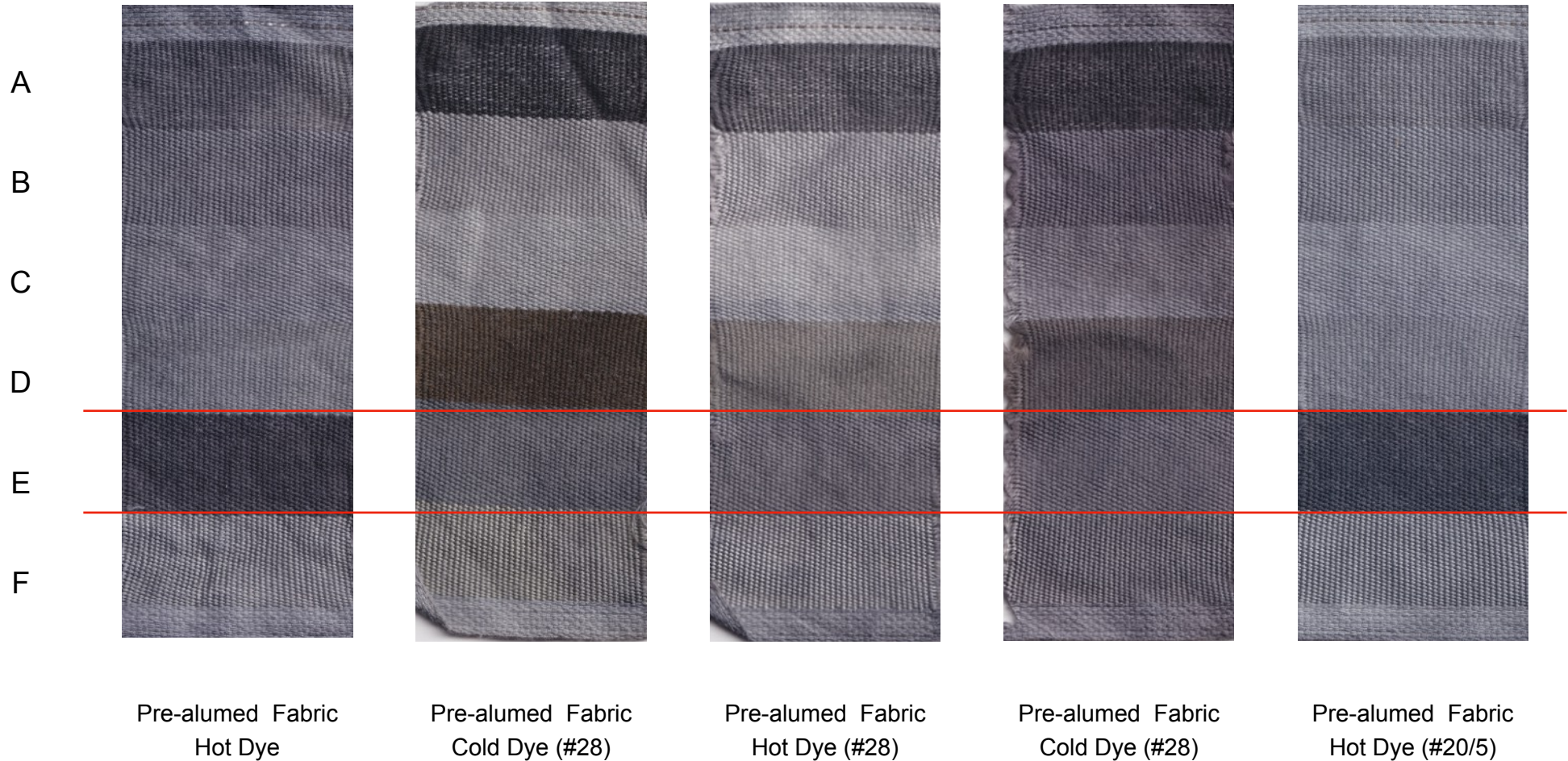
Cotton
(Cellulose)

F

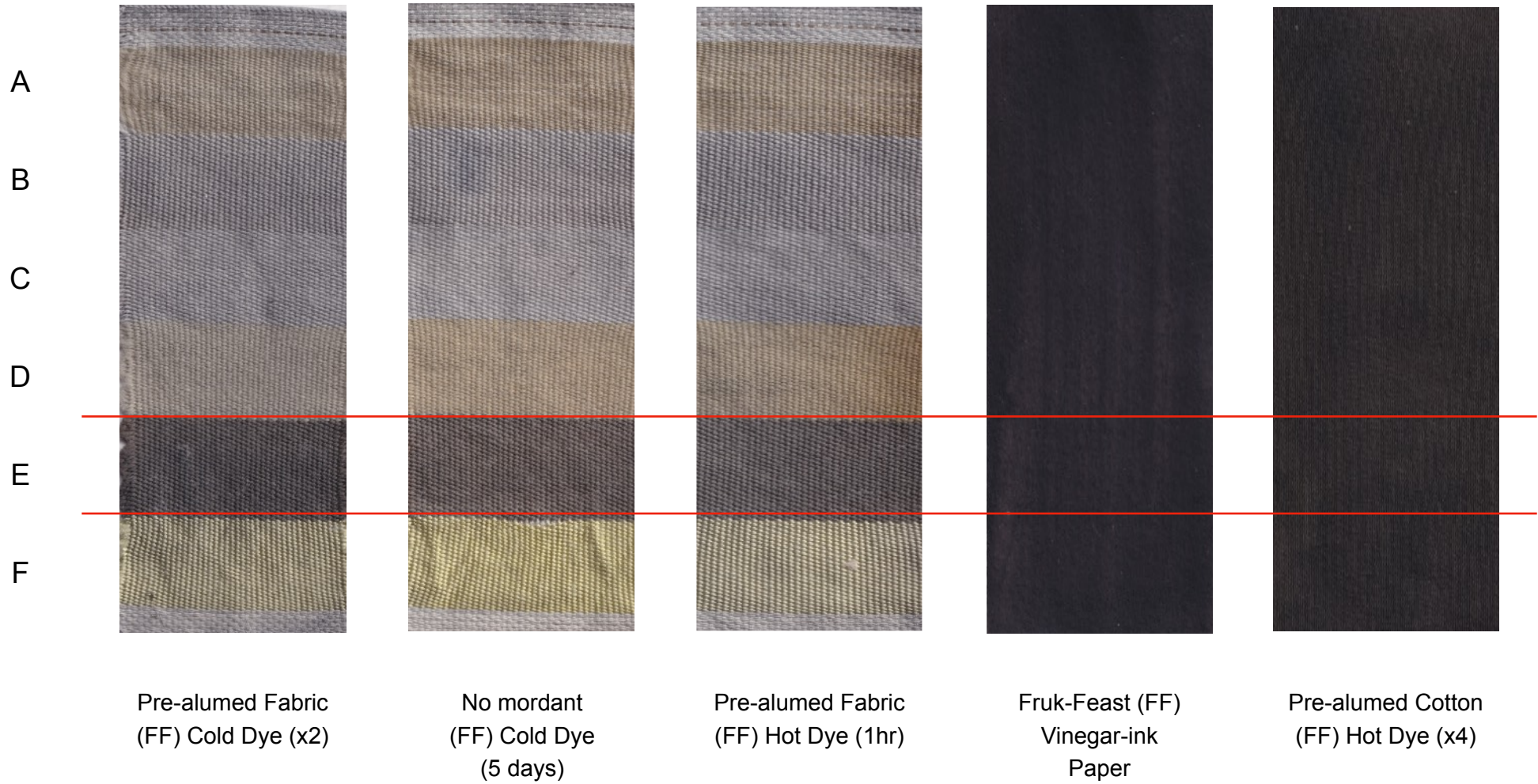
Acetate



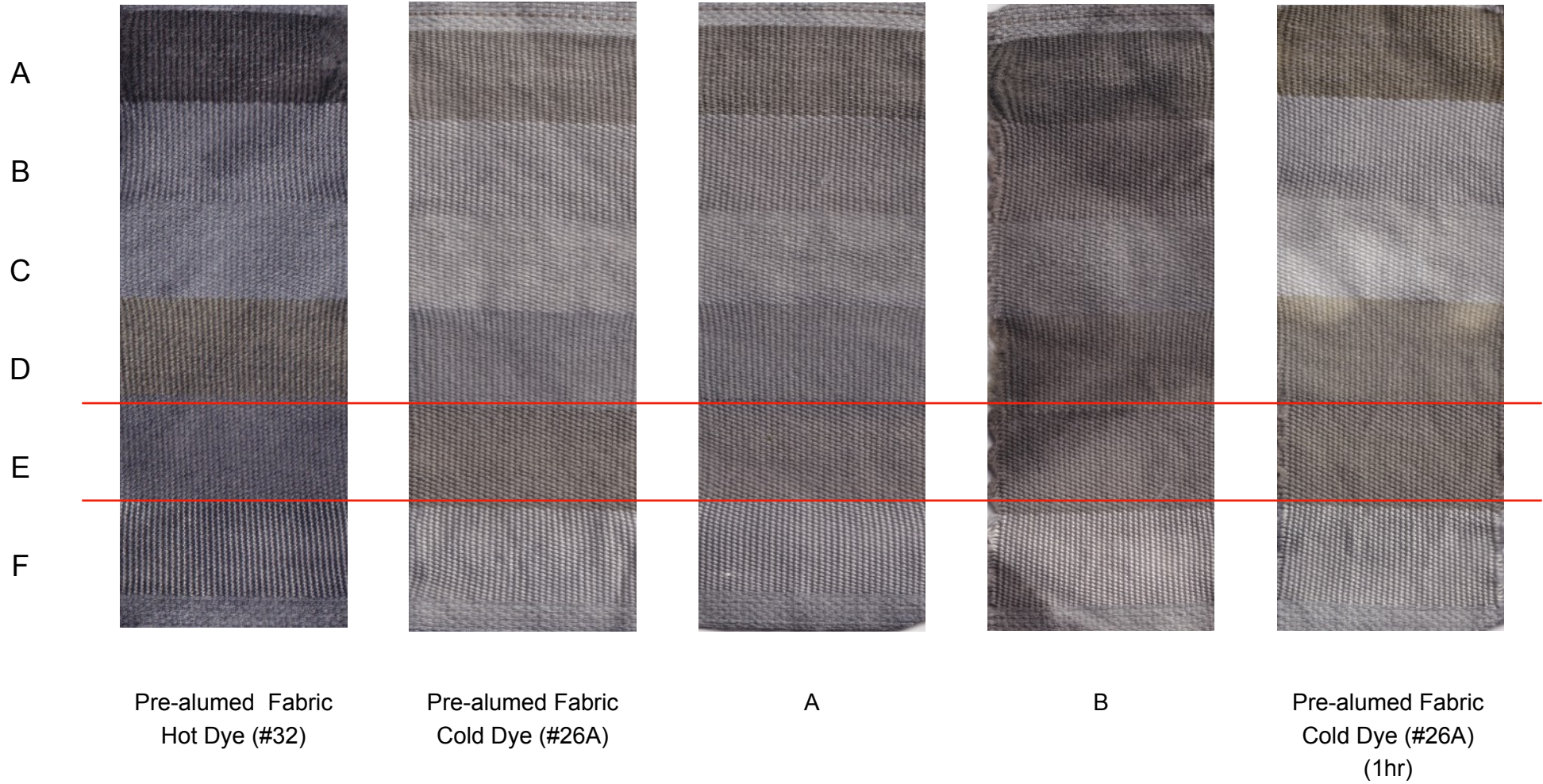
Elephant Ears Leaves, CUBG – (*Bergenia crassifolia*)



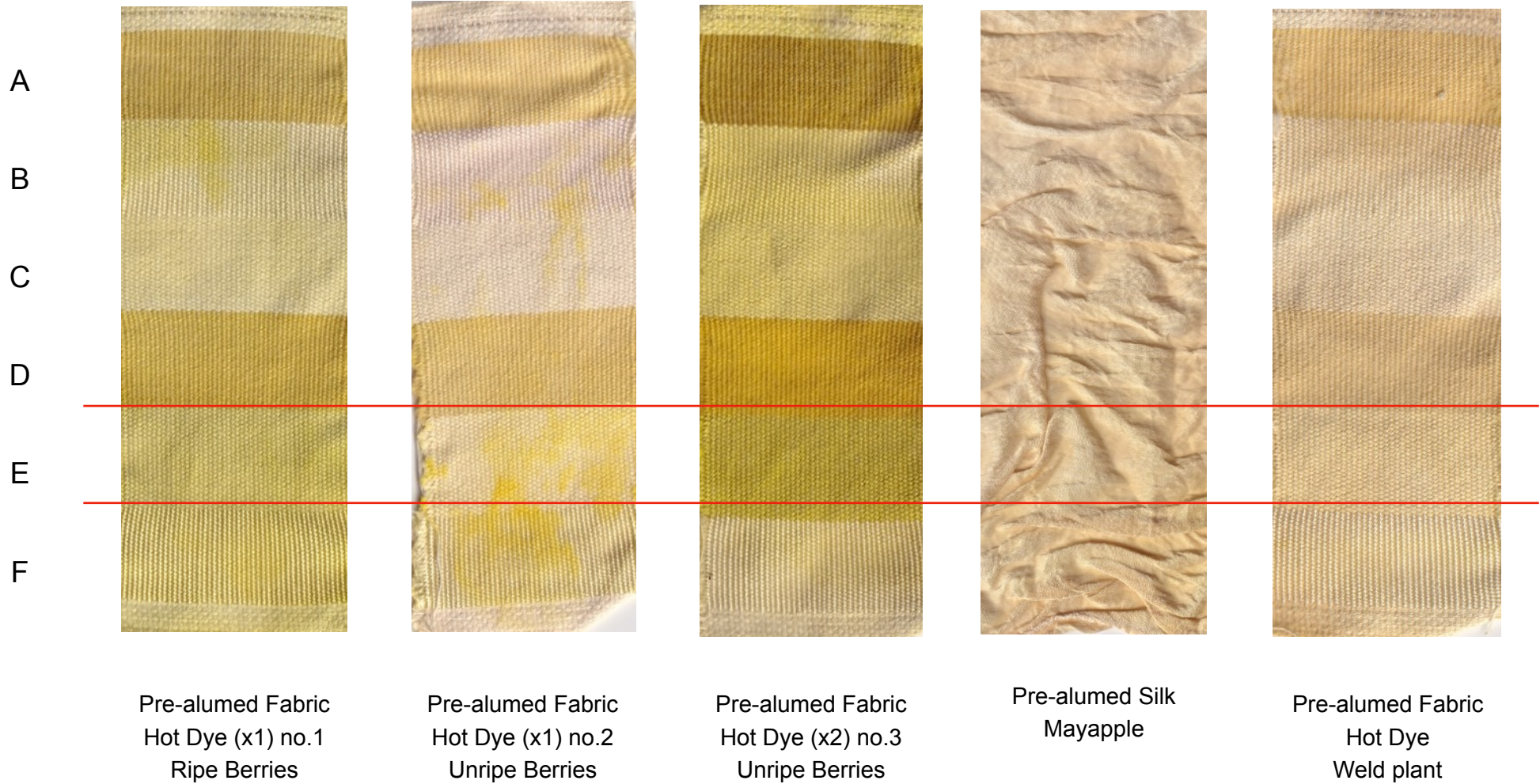
Pomegranate Skins – (*Punica granatum*)



Staghorn Sumac Leaves, CEB (*Rhus typhina*)



Buckthorn Berries (*Rhamnus.spp*)



Safflower Petals (*Carthamus tinctorius*)



Pre-alumed Cotton
Water; Potash; Alum
(no.1)



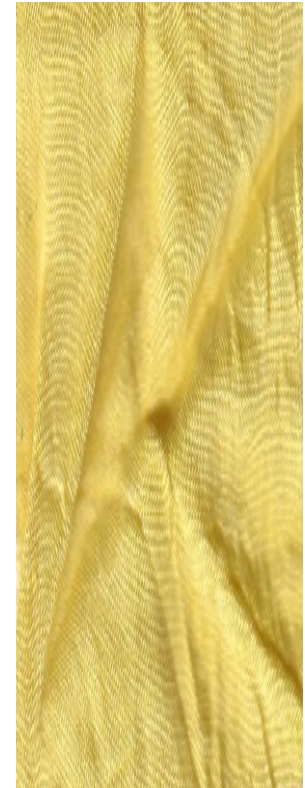
Pre-alumed Cotton
Water; Potash; Alum
(no.2)



Pre-alumed Cotton
Water; Alum
(no.3)



Pre-alumed Wool
Hot Dye
(no.1)



Pre-alumed Silk
Hot Dye
(no.1)

Madder Root (*Rubia tinctorum*)

A

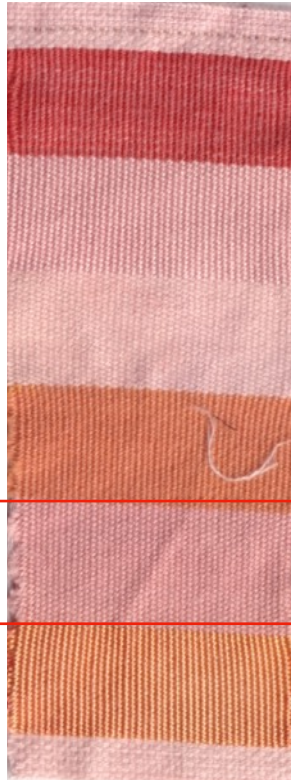
B

C

D

E

F



Pre-alumed Fabric
Water; Potash
(x1)



Pre-alumed Fabric
Water; Potash
(x2)



Pre-alumed Silk
Water; Alum
(x2)



Pre-alumed Wool
Water; Alum



Pre-alumed Wool
Water; Alum

Artist Research Residency from September 2024 to October 2025

Fruk Lab, Department of Chemical Engineering and Biotechnology, University of Cambridge.

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Surface Engineering and Pigment Tailoring for Sustainable Dyeing of Cellulosic Materials.

Some of the plants were collected from Cambridge University Botanic Garden.

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