

Results of dye analyses on textile samples from Baynard's Castle

All samples were analysed by solvent extraction and spectroscopy. Where the presence of yellow dyes was suspected, paper chromatography was also used.

Underlined results indicate very strong presence of dye, dotted lines weak (but unequivocal) results. Where a weak dye was found in association with a strong, it is probable that one has bled onto the other. N.d.d. indicates no dye detected.

I. samples sent 13.11.83

TA/7.....n.d.d.	TB/207 (a) warps..... <u>madder</u>
TA/63.....n.d.d.	(b) brown band.. <u>madder</u>
TA/64.....n.d.d.	(c) dark stripe. <u>indigotin</u> plus <u>madder</u>
TB/4..... <u>madder</u>	(d) red stripes. <u>madder</u>
TB/9..... <u>madder</u>	TB/208 ground..... <u>indigotin</u> plus <u>madder</u>
TB/11..... <u>madder</u>	stripe.....n.d.d.
TB/21..... <u>madder</u>	(no natural pigment)
TB/22..... <u>madder</u>	TB/220 light.....n.d.d.
TB/28 black..... <u>madder</u>	dark.....n.d.d.
red..... <u>madder</u>	(no natural pigment)
TB/36.....n.d.d.	TB/293..... <u>unidentified yellow</u> plus <u>madder</u>
TB/78.....n.d.d.	TB/308..... <u>madder</u> plus <u>indigotin</u>
TB/91.....?lichen purple*	TB/313..... <u>madder</u>
TB/95.....n.d.d.	TB/339..... <u>madder</u>
TB/129.....n.d.d.	TB/377..... <u>madder</u>
TB/157..... <u>madder</u>	TB/426..... <u>madder</u>
TB/160..... <u>madder</u>	TB/562.....n.d.d.
TB/163.....n.d.d.	(no natural pigment)
TB/180..... <u>madder</u>	TB/563..... <u>madder</u>
TB/182..... <u>madder</u>	TB/573.....n.d.d.
TB/194..... <u>madder</u>	
TB/202 dark..... <u>madder</u>	
light..... <u>madder</u>	

* This dye registered as blue in pyridine and as red in acid.

Lichen purples behave in this way, but the spectra of the TB/91 extracts were different from those of the lichen purples we have so far examined. However, these lichen dyes do show a range of results and it seems more probable that TB/91 is one of them, rather than a combination of unknown red and blue dyes.

II. samples sent 19.12.84

TA/2 wool.....n.d.d.
 silk.....n.d.d.
 TA/4 wool.....n.d.d.
 silk.....n.d.d.
 TA/5.....madder
 TA/10.....n.d.d.
 TA/20.....madder
 TA/29.....n.d.d.
 TA/32.....n.d.d.
 TA/44.....n.d.d.
 TA/45.....kermes
 TA/141.....n.d.d.
 TA/234 warp.....n.d.d.
 dark stripe....n.d.d.
 (some nat.pigm.)
 light stripe...n.d.d.
 TA/236 red.....kermes
 yellow.....n.d.d.
 TA/249 ground.....madder
 stripe.....n.d.d.
 TA/271 ground.....madder
 stripe.....n.d.d.
 TA/274 ground.....madder
 stripe.....n.d.d.
 TA/329madder
 TA/377.....n.d.d.
 TA/378.....madder
 TA/437.....madder
 TB/10.....madder
 TB/13.....madder
 TB/14.....madder
 TB/134.....madder
 TB/337.....n.d.d.

TB/356....unidentified yellow/brown^{*}
 TB/363.....?indigotin
 TB/380.....madder
 TB443.....madder
 TB/491 warp.....madder
 weft.....madder
 TB/539.....madder
 TB/548.....madder
 TB/550....unidentified yellow^{*}
 TC/1.....unidentified yellow/brown^{*}
 TC/7.....n.d.d.
 TC/18.....n.d.d.
 TC/21.....unidentified purple^{**}
 TC/23.....?yellow/brown^{*}
 TC/24.....n.d.d.
 TC/34.....n.d.d.
 TC/60.....?yellow
 TC/65.....unidentified purple^{**}
 TC/67.....unidentified purple^{**}
 TC/88.....madder
 TC/100.....n.d.d.
 TC/108.....n.d.d.

*Yellow, brown and black dyes register at the same end of the spectrum as dirt and stain from the soil and are therefore difficult to detect and identify. In some cases chromatography indicated the presence of a yellow/^{or brown} dye, but its identity could not be determined.

**Three samples from TC gave a strong absorption at approx.580nm in the aqueous residue of the acid-plus-solvent test. This suggests the presence of a purple mordant dye, but its identity (not shellfish purple, lichen purple or alkanet) is unknown.

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 19.3.84