

Supplementary Materials

Dyeing of Tussah Silk with Reactive Dyes: Dye Selection,

Dyeing Conditions, Dye Fixation Characteristics, and

Comparison with Mulberry Silk

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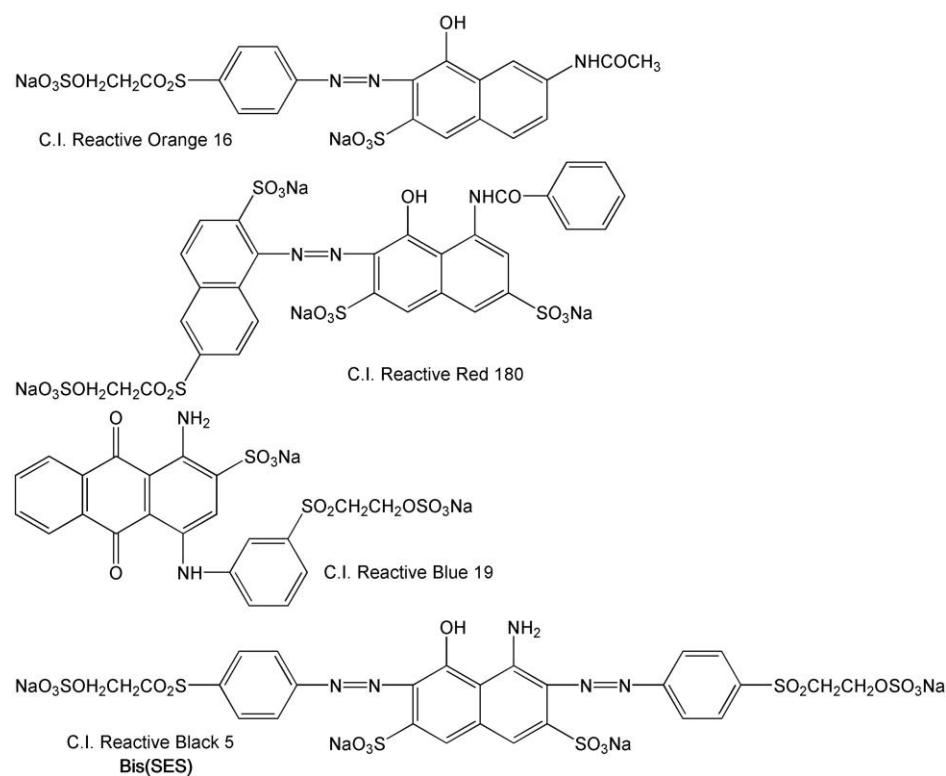
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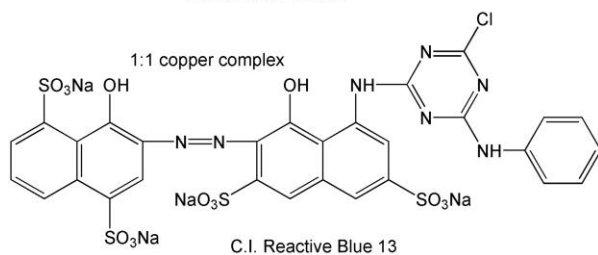
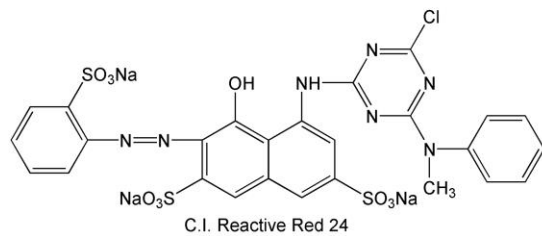
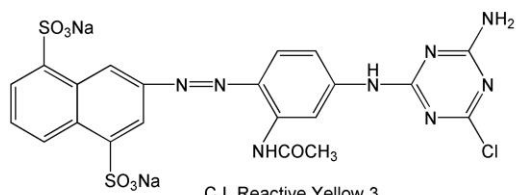
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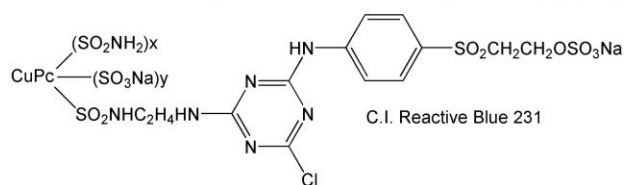
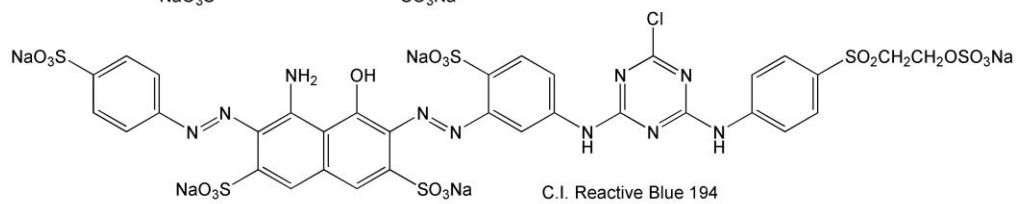
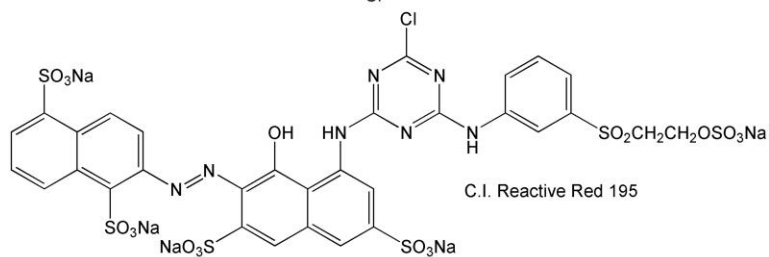
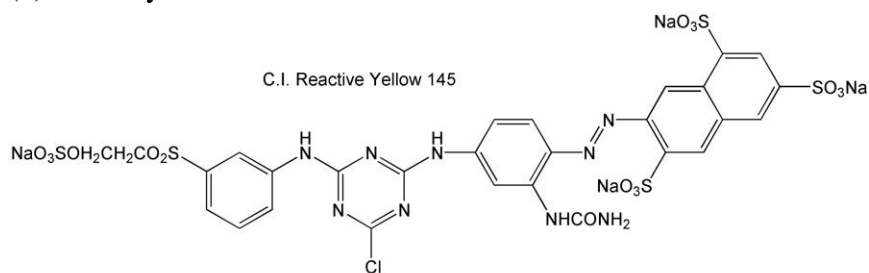
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(1) SES dyes



(2) MCT dyes



(3) SES/MCT dyes

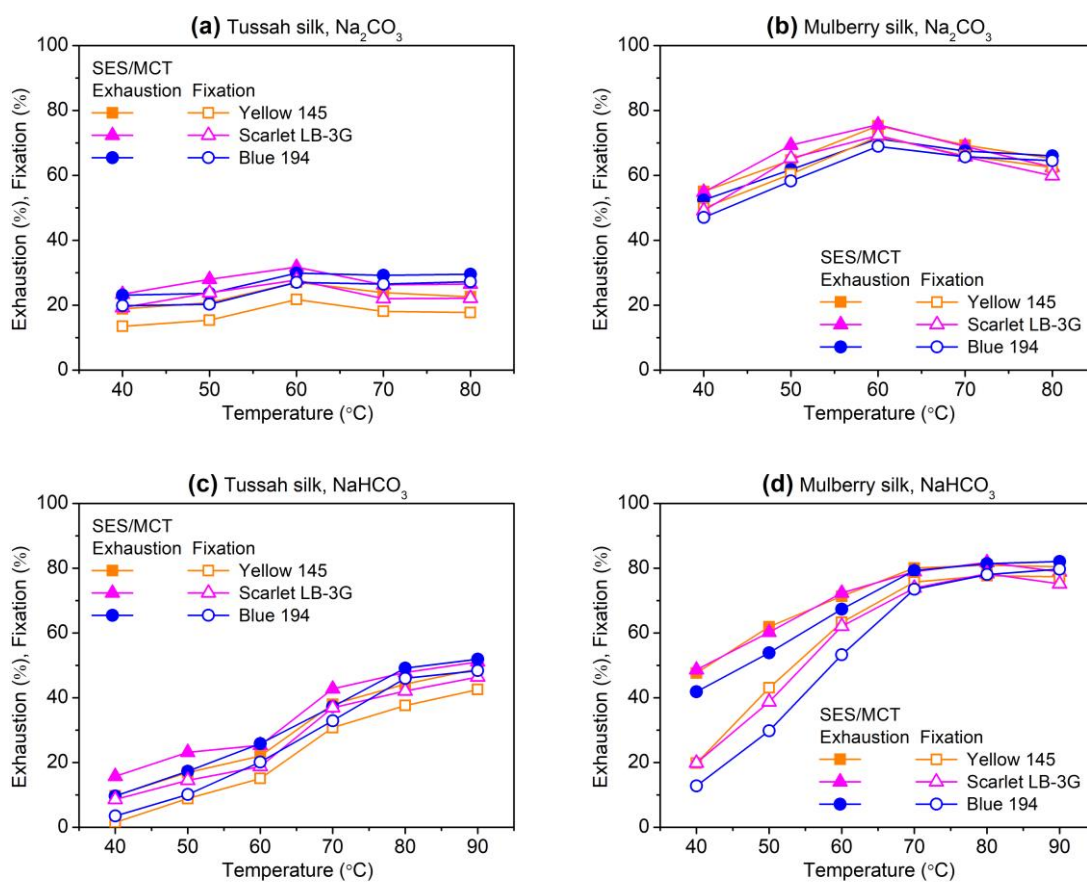


Figure S2. Exhaustion and fixation of SES/MCT dyes on tussah and mulberry silks dyed at various constant temperatures with the addition of an alkali (3%owf dye, 60 g/L Na₂SO₄, and 3 g/L Na₂CO₃ or NaHCO₃; soaping at 90 °C for 20 min).

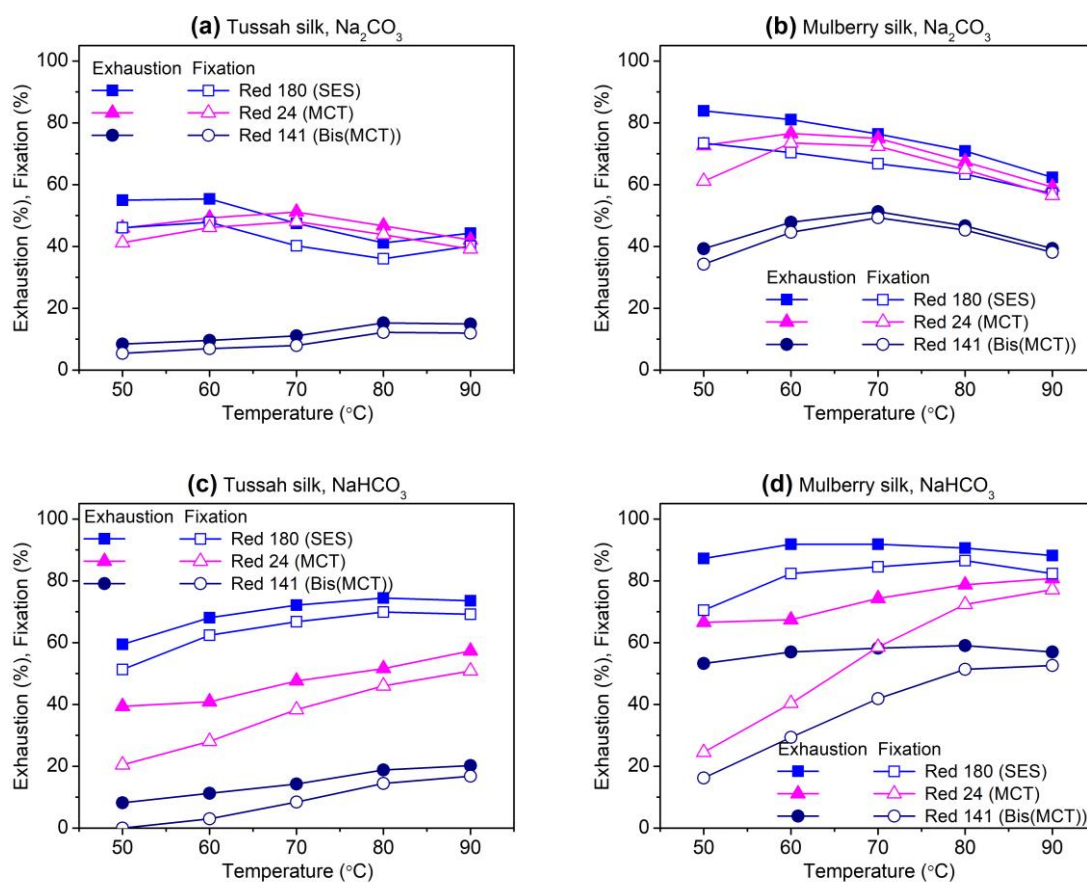
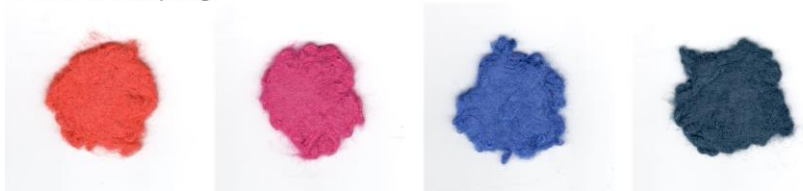


Figure S3. Exhaustion and fixation of SES, MCT, and Bis(MCT) red dyes on tussah and mulberry silks dyed at various constant temperatures with the addition of an alkali (3%owf dye, 60 g/L Na_2SO_4 , and 3 g/L Na_2CO_3 or NaHCO_3 ; soaping at 90 °C for 20 min).

Before soaping



After soaping



Orange 16

Red 180

Blue 19

Black 5

Tussah silk dyed at 90 °C with the use of NaHCO_3

Before soaping



After soaping



Orange 16

Red 180

Blue 19

Black 5

Tussah silk dyed at 90 °C with no use of NaHCO_3

Figure S4. Images of dyed tussah silk samples before and after the soaping color fastness test (dyeing was carried out with 4%owf SES dyes at 90 °C in the presence and absence of NaHCO_3)