

CHAPTER V

CONCLUSIONS AND SUGGESTION



5.1 Conclusion

The research studied the condition of dye extraction from the leaves and bark of eucalyptus, premordanting and dyeing process on silk and cotton fabric. The suitable condition show as below

5.1.1 The suitable extraction

5.1.1.1 Temperature 100^oC

5.1.1.2 Time 1 hour

5.1.1.3 The liquor ratio of material and solvent is 1:40

5.1.1.4 Distilled water

5.1.2 The suitable for pre-mordant

5.1.2.1 Temperature 30^oC

5.1.2.2 Time 10 minutes

5.1.2.3 Quantity of mordant compound 0.1% owf

5.1.3 The suitable for dyeing

5.1.3.1 For silk fabric

5.1.3.1.1 Temperature 90^oC

5.1.3.1.2 Time 40 minutes

5.1.3.1.3 Liquor ratio 1:30

5.1.3.1.4 pH 4.0

5.1.3.2 For cotton fabric

5.1.3.2.1 Temperature 60^oC

5.1.3.2.2 Time 40 minutes

5.1.3.2.3 Liquor ratio 1:30

5.1.3.2.4 No adjusted pH

5.1.4 Silk dyed in the solution from leaves and bark eucalyptus showed the shade of yellow-brown, excepting using ferrous (Fe) showing the shade of dark brown-grey. For cotton fabric showed the shade of yellow-orange, excepting using ferrous (Fe) showed the shade of pale grey-grey.

5.1.5 The fastness properties of silk and cotton fabric after treated with pre-mordant and dyeing process. It presented the fastness, washing, water and perspiration on good to very good level but the fastness to light and rubbing on fair to good level.

5.2 Suggestion for further work

To study dye extraction from eucalyptus leaves and bark on how to modify to be dye powder.