DYEING SILK FABRICS USING DYESTUFF FROM FLOWERS

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ABSTRACT

Malaysia has abundance plants that can be utilised to produce natural dyes. However, the potential usage of these plants as dyestuff has never been recorded. In this study, twenty (20) flowering plants available locally are used as the dye source. The flowers are then extracted with water using a liquor ratio of 1:10 until a suitable dyestuff solution is obtained. Water is chosen as the solvent because the dyeing process is normally done in aqueous solution. Mordants such as potassium permanganate (KMnO₄), potassium dichromate ($K_2Cr_2O_7$), copper (II) sulphate (CuSO₄) and others are used to produce various colour. After extraction, dyeing and mordanting of fabric are done simultaneously in one bath. The dyeing and mordanting process are done initially at 50 °C and then the temperature is raised to the boil within 45 minutes. The fabrics are then separated according to the flowers and mordants used. Each dyed fabric is then analysed to determine the dyeability, colourfastness properties (based the on Malaysian Standards) and suitability of the dyestuff on the fabric. From the results, it was found that these flowers do have some potential as dyestuff. Some of the flowers produced colours that are attractive and fast enough to be used in a larger scale.