

COMPARISION OF ANIMAL GLUE AND COMMON ADHESIVE

A dissertation submitted to the
Faculty of Animal science and Export Agriculture

Uva Wellaasaa University

In partially fulfillment of the requirement of

The degree of

Bachelor of Animal science

By

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UWU/ANS/08/0008

Animal Science Degree programme (B.ASc)

Faculty of Animal Science and Export Agriculture

Uva Wellassa University of Sri Lanka

2012

ABSTRACT

Hide trimming waste was main waste generated in leather manufacturing industry. Any industry waste mean lost. Through value addition of that waste that waste can be convert in to another income for company. This study those hide trimmings were used as raw material for animal glue manufacturing. So major objective was to value addition of hide trimming waste generate in leather manufacturing process. Soaking process was main initial step of glue manufacturing. Bonding power was major character of glue. Bonding power means which force need to breaking the glue joint. This study, through the increasing soaking time period checked bonding power value variation in animal glue. Common adhesive values were used as standards for comparison. Glues were distributed in a completely randomized block design, with three treatments in the soaking time (sample A = 2 weeks; sample B = 4 weeks; sample C = 6 weeks). Leather crust was used for preparation of adhesive joints. Each treatment three adhesive joints were prepared. According to peel test spring balance was used for measuring bonding power and p^H meter used for p^H measuring. Glue moisture content (%) and ash content (%) were measured according to proximate analysis. Soaking period of animal glue directly influenced the bonding power of animal glue. Because increasing soaking period the glue bonding power was increased (sample A = 110 g; sample B = 213.33 g; sample C = 333.33 g). During increasing soaking period of animal glue bonding power value closed to common adhesive bonding power value (523.33 g). But increasing soaking period did not affect to the p^H value, moisture content and ash content of animal glue.

Key words: Hide trimmings, Leather crust, Bonding power, Peel test, Adhesive joints