ANALYSIS OF YIELD AND SOME PHYSICOCHEMICAL PROPERTIES OF TALLOW RENDERED FROM LEATHER INDUSTRY WASTE.

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ABSTRACT

Flesh samples collected from fleshing waste of leather factory were oven dried, heated and tallow was collected as melted fat. The tallow yields were compared on the basis of gender, region, and species. There are significant differences ($P < 0.05$) in tallow yields obtained from cattle with respect to gender and region (Up country and low country). Considering buffalo, there is no any significant difference ($P < 0.05$) among tallow extracted from males and females. There is no any significant difference between the tallow from cattle (Low country) and buffalo (LC). Tallow was evaluated for iodine, saponification, acid value, free fatty acid, ash and moisture. The iodine, saponification, acid value, free fatty acid, content of crude fat were169.2, 301 (mg KOH/g), 51.78 (mg KOH/g), 0.5 as oleic acid %by wt, 37.665% respectively. Ash value and moisture content was 0.16 (mg/g) and 1.38% respectively. Extracted tallow cannot be suggested as a edible for human consumption (Codex).Higher saponification values lower the stability of tallow for soap production.

Key words: Tallow; Rendering, yield, quality