

APPLICATION OF MINCING MACHINE TO MANUFACTURE GREEN TEA

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ABSTRACT

Green tea manufacturing process in Sri Lanka is practiced using both panning and steaming methods, which involve a laborious process. Thus food graded mince machine can be adopted in miniature green tea processing in which heat generated due to friction can be utilized in order to inactivate the enzymes. This study was conducted to determine whether the mince machine can produce quality green tea by comparing its quality characteristics with panning method green tea produced commercially in Sri Lanka in small scale production. Green tea manufactured by mince machine and by panning method were evaluated by trained tea tasters. Sensory characteristics evaluated were color, flavor and aroma of liquor, appearance and colour of dry leaf, colour of infused leaf and overall acceptability. Liquor color, and the dry leaf color do not have a significant difference in green tea produced using these methods and the liquor flavor, liquor aroma, infused leaf colour, dry leaf appearance and overall acceptability have a significant differences. Green tea produced by the Panning method is acquired all acceptable quality characteristics on liquor colour, liquor flavor, liquor aroma, dry leaf appearance, dry leaf colour, infused leaf colour and overall acceptability. Green tea manufactured by using mince machine is acceptable quality characteristics on liquor color and the dry leaf color. Non graded green tea can be manufactured by using the food grade stainless steel mince machine, and it can be taken as an alternative rolling machine for the rolling process in green tea production with enzyme deactivation by the heat generated itself in the rolling process.

Key Words: Mince Machine, Green Tea, Manufacturing, Quality, Sensory Characteristics.