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EFFECT OF STORAGE ON PROPERTIES OF NATURAL RUBBER SHEETS IN TRIPURA

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Packed ribbed smoked sheets (RSS) as (50 kg bales) were stored at different locations of Tripura under normal conditions for a period of 18 months and changes in the quality parameters were compared with bales stored under controlled conditions. Sheets kept under normal conditions were affected with mould after five months of storage. No mould growth was observed in bales stored under controlled conditions even after one year of storage. However, slight mould growth was observed on the surface of the bales after one year. Mooney viscosity, initial plasticity, strength and gel content of the sheets increased with storage whereas the plasticity retention index decreased on storage. Acetone extractables were decreased slightly due to storage.

Keywords: Controlled conditions, Natural rubber, North-East India, Storage, Sheet bales

INTRODUCTION

Rubber tree (*Hevea brasiliensis)* is the most important source of natural rubber, which has commercial importance in the production of more than 45,000 items. *H. brasiliensis*, a native of the Amazon river basin, is traditionally cultivated in Kerala and Kanyakumari district of Tamil Nadu in India. The agroclimatic conditions of north-east region are unique and are suitable for rubber cultivation. Among north-eastern states, Tripura has 50070 ha plantation with an average production of 23280 t (Rubber ?? ???? ?? ? ?? ?? ? ?RRr r??? ? • ????•??? •??? respect of area as well as production of natural rubber.

In India, natural rubber is available as ribbed smoked sheets, technically specified rubber, crepe rubber, centrifuged latex, creamed latex and preserved field latex. Among these, the major marketable form is ribbed smoked sheets (about 71%) as it can be produced by the simplest method of processing. Rubber sheets are sometimes stored for long periods by growers, dealers and also by government agencies anticipating better price while manufactures store rubber for ensuring sufficient stock for production (Mohankumar, 1999).

The storage of raw natural rubber affects its properties, the most important being an increase in Mooney viscosity, commonly referred to as storage hardening (Wood,

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