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COMPARISON OF GLASS AND POLYPROPELENE JARS FOR
CANNING OF SOME SELECTED FRUITS AND
VEGETABLE PRODUCTS

A PROJECT REPORT PRESENTED BY

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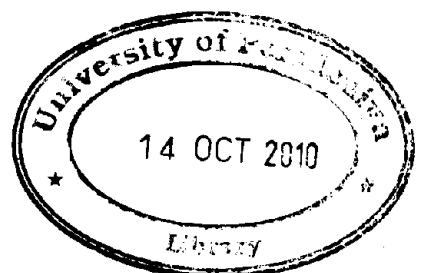
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Processed fruits and vegetables are economically important commodities due to combination of factors such as preservation, containment, convenience, healthiness and desirable sensory characteristics. Suitable packaging ensures these characters and this study was conducted to find out the effectiveness of using plastic jars made up of 1-propene polymer with ethene to can processed fruits and vegetables instead of glass jars. "Polos" curry, mixed fruit jam and fruit pieces in sugar syrup (fruit salad) were used to can. Each product was canned in glass and plastic jars and stored under room temperature for five months. Physico-chemical properties (total soluble solids, pH, colour, and odor) and microbiological quality (yeast mould and bacteria) were evaluated initially and four times at one month interval. All the products were evaluated by a sensory panel using a hedonic scale test in the second month. Differences between pH changes, total soluble solid contents, odor, colour, and appearance in glass and plastic jars were not statistically significant ($p > 0.5$) for all products during first three months. Colour was changed in jam, canned in plastic, after third month whereas the total soluble solids and odor were not changed. pH, total soluble solids, colour and odor were changed both in glass and plastic jars containing fruit pieces in sugar syrup during third month of storage. A slight change of pH in "polos" curry canned in plastic compared to glass was observed. Odor and colour were not changed during five months of storage. Yeast and mould were detected only in fruit salad resulting in off odor and unacceptable quality of the product at the third month of storage. Bacterial population was not observed in any product. Sensory evaluations indicated no difference in products canned in both glass and plastic at the end of second month of storage. Overall, both glass and plastic maintained a good quality and a shelf-life throughout the three months of storage period under the ambient conditions for above products.