Fruit Leather from Woodapple (*Feronia limonia* L.) Pulp: Formulation, Production and Quality Evaluation

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Woodapple **(***Feronia limonia* L.) is a delicious tropical fruit, which belongs to family Rutaceae. Seasonality of the fruit limits to substantial level of postharvest losses and usage for producing value added products throughout the year. Development of fruit leather is a promising alternative to preserve pulp as a delicious stable product at ambient temperature and to reduce the losses during the season. The best formulation was selected out of four treatment formulations. The developed fruit leathers were subjected to sensory evaluation with 30 un- trained panelist using 9-point hedonic scale and keeping quality tests. The best formulation for the woodapple leather was 80 % pulp, 20 % sugar, 1.5 % liquid glucose, 3 % gelatine and 0.2 % preservative (Sodium metabisulphite (SMS), E223). Woodapple pulp with the ingredients were mixed and heated until reached 30 ^{o}Bx followed by dehydration using air convection tray dryer with 5 - 6 mm thickness at 65 ±1^{o}C for 8 hours. SMS was added and mixed just after heating the mixture. Physico-chemical parameters were moisture content (14.55 ±0.40%), titratable acidity (4.48%), pH (3.18), texture (1.78 kg) and colour (0.96 Hue and 6.05 Chroma). The thickness of the leather, 4 mm and polyethylene (300 gauge) packages were selected. The shelf life was two months at ambient temperature (28 ±2 ^{o}C). Microbiological quality parameters; TPC 30 cfu/g and yeast & mould count 20 cfu/g were compatible with the standards for fruit leather. Mean scores of the sensory attributes were colour 3.70 ±0.18, flavour 3.80 ±0.19, texture 4.50 ±0.17, aroma 4.13 ±0.20 and overall acceptability 3.82 ±0.15.In conclusion the above best formulation is recommended for woodapple pulp leather production with 2 months storability at (28 ±2 ^{o}C). Wood apple pulp mixed fruit leathers and extended storability test and degradation kinetics of nutrients are recommended for further studies.

Keywords: Woodapple, dehydration, fruit leather, shelf life, pulp