

PARTIALLY HYDROLYZED GALACTOMANNAN FROM *CAESALPINIA PULCHERRIMA* SEEDS IMPROVES TEXTURE AND SENSORY ACCEPTABILITY OF FERMENTED GOAT MILK BEVERAGES

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A partially hydrolyzed galactomanannan from *Caesalpinia pulcherrima* seeds (PHGM) was obtained through a treatment with a commercial cellulase for its application in liquid food products as a novel dietary fiber source. The effects of PHGM on the production of fermented beverages made with goat milk, goat cheese whey and fruit pulps were investigated. Four beverage-making trials were prepared in triplicate: T1 - with guava pulp; T2 - with soursop pulp; T3 - with guava pulp + PHGM; T4 - with soursop pulp + PHGM. The fruit pulps and PHGM were set in the products at 15g/100g and 1.5g/100g, respectively. Instrumental texture and sensory acceptability were evaluated weekly up to 21 days at 4°C. Instrumental firmness, consistency, cohesiveness and viscosity index were significantly increased for beverages containing PHGM ($P < 0.05$). Except for the viscosity index, no significant difference was observed for the effect of the sampling period and between T3 and T4 trials ($P > 0.05$). The acceptability scores for consistency were significantly higher ($P < 0.05$) for T3 and T4 (8.70 and 8.43, respectively) compared to T1 and T2 (7.06 and 6.23, respectively). The mean score for appearance (8.68) was significantly higher for T3 ($P < 0.05$). For beverages containing soursop, the scores of flavor, appearance and overall acceptability were significantly increased when PHGM was present ($P < 0.05$). The use of PHGM from *C. pulcherrima* as fiber ingredient showed to be suitable for the production of fermented milk beverages, improving their quality regarding texture and sensory features.