ABSTRACT

Cindy Evelyne (03420120073)

DEVELOPMENT AND BUSINESS PLAN OF ROSELLE (Hibiscus sabdariffa L.) CALYX JELLY CANDY
(xix + 132 pages: 38 tables, 31 figures and 34 appendices)

Jelly candy is syrup-phase, non-crystalline candy made using sugar, corn syrup, and gelling agent such as gelatin, natural gums, pectin, or starch. Jelly candies represent approximately half of sugar confections sold worldwide. Roselle (Hibiscus sabdariffa L.) has red edible calyx with high content of minerals and antioxidants. Objectives of the research were to develop roselle calyx jelly candy and to observe possibility of product commercialization. Effect of different jelly candies made using different concentration of table sugar and dried roselle calyx were analyzed. Concentration of table sugar used was 63.56, 70.62, 77.68, and 84.75%. Concentration of dried roselle calyx used was 6.67, 10.00, 13.33, and 16.67%. Sensory analysis was done with 70 untrained panelists to analyze physical characteristics and preferences toward the jelly candies. Result of scoring and hedonic tests indicated that best formulated jelly candy according to aroma, off-flavor, texture, color, and taste were made using 16.67% of dried roselle calyx and 63.56% of table sugar. Best formulated jelly candy contains 19.5238±0.0008 of moisture, 0.0290±0.0000 of ash, 8.2412±0.0021 of protein, 1.7189±0.0006 of fat, and 70.4872±0.0021% of carbohydrate. Jelly candy has 14.235±0.2345 mg/100g of anthocyanin and IC50 content of 16863.8346±687.8346 μg/mL. Business plan for the first 5 years of the company was included. Business plan consisted of executive summary, industry analysis, company description, market analysis, economics of the business, marketing plan, design and development plan, operations plan, management team and company structure, overall schedule, and financial projections. Target consumer approached was categorized based on customer characteristics and buying behaviors.

Keywords: Roselle calyx, business plan, jelly candy, gummy candy, color, physicochemical properties

References: (103) 1948 - 2016