This study was carried out to develop and evaluate the cookies in terms of color, aroma, flavor, taste, and general acceptability as effect by varying levels of calamansi (Citrofortunella microcarpa) peel and juice vesicles and sugar; determine the quality and general acceptability of cookies in terms of color, texture, flavor, aroma ; identify the best treatment in terms color , textures, flavor, aroma and general acceptability of cookies; assess or evaluate the physico-chemical properties of cookies; and determine the cost of production of cookies.

Treatment include Treatment 1(3% calamansi peel and juice vesicle, 18% sugar), Treatment 2 (3% calamansi peel and juice vesicle,21 % sugar), Treatment 3 (3 % calamansi peel and juice vesicle24% sugar), Treatment 4 (6% calamansi peel and juice vesicle 18 % sugar), Treatment 5 ( 6 % calamansi peel and juice vesicle 21 % sugar), Treatment 6 (6 % calamansi peel and juice vesicle 24 % sugar), Treatment 7(9% calamansi peel and juice vesicle18 % sugar), Treatment 8 ( 9 % calamansi peel and juice vesicle21 % sugar).

The finished product was subjected to sensory evaluation using the 9-point Hedonic Scale employing 32 panelists. Analysis of variance (ANOVA) revealed that cookies with calamansi peel and juice vesicle has a significant difference on the color, aroma, flavor and general acceptability while taste and texture was not significantly affected by level of calamansi peel and juice vesicle and level of sugar. In terms of production cost, Cookies with 3% Calamansi peel and juice vesicle and 18% sugar had the lowest production cost while cookies made from 9% calamansi peel and juice vesicle and 24% sugar had the highest production cost.