With the advent of Tea in the Philippines market, lots of locally available herbal leaves are available and can be utilized in the region. Generally, this study was conducted to develop and evaluate the acceptability of Squash Tea Leaves as affected by drying time and pre-drying method. The study was conducted at the Food Technology Laboratory Room of Capiz State University, Mambusao Satellite College, Mambusao, Capiz on March to May 2023 to evaluate the quality of squash leaves tea in terms of color, aroma, taste, texture, and general acceptability. Specifically this aimed to evaluate the sensory acceptability of squash leaves tea as affected by varying levels of color, aroma, taste, texture, and general acceptability: determine the physico-chemical properties of Squash tea in terms of pH content and Total Soluble Solid (TSS) as affected by drying time and pre-drying method if there is a significant difference on the sensory characteristics of Squash tea, and to determine the cost production of squash tea leaves as affected by drying time and pre-drying method. The study was composed of 9 treatments and the data gathered in the study was analyzed through Analysis of Variance (ANOVA). Data was also subjected to response surface regression (RSREG) analysis to determine the effects of independent variables on the sensory qualities of the product. A total of ninety-six (96) panelist composed of BFST students of Capiz State University - Mambusao Satellite College evaluated the products. The Analysis of Variance results revealed that the varying levels of drying time and pre-drying method did not significantly affect the sensory attributes of the product such as color, aroma, taste, viscosity, flavor and general acceptability of the product. Physico- chemical properties as pH and TSS were also not significantly affected by both drying time and pre-drying method. However, optimization of the experiment suggests that squash leaves should be blanched prior to drying using any levels of drying time (3-Shrs). The cost of production of squash leaves tea in all treatments amounted to P200 only.