ABSTRACT

This study aimed at producing chia seed-fortified pineapple jam and evaluation of its physicochemical and sensory characteristics. Five pineapple jam formulations were developed, starting with the basic formulation (jam 1/control) containing sucrose and added pectin. The other jams (jam 2, jam 3, jam 4, and jam 5) had sucrose and pectin but with chia seeds added at rates of 6.25, 12.5, 25, and 50% w/w, respectively. Crude protein of the jams was analyzed through macro Kjeldahl method, and the crude fiber was estimated by the Weende method. Thirty-two semi-trained panelists performed sensory evaluation test of the developed jams using 5-point hedonic scale. Chia pineapple jam had golden color compared to control pineapple jam, which had yellow color. The fresh chia pineapple jams had significantly ($p < 0.05$) different protein and crude fiber contents in each sample. The protein content in the control was 0.53%, while it ranged between 1.60 and 8.60% for the chia seed-fortified jams. For crude fiber, the values were 4.83% for the control and 5.38, 9.08, 13.33, and 21.02% for jam 2, jam 3, jam 4, and jam 5, respectively. General acceptability and sensory evaluation (flavor, color, and texture) showed significant ($p < 0.05$) differences compared to the control, while spreadability had no significant ($p > 0.05$) differences. The information obtained from this study indicates that chia-fortified pineapple jam could be produced with favorable sensory attributes that could be used for jam making and other processed products to benefit from the functional components in the chia seeds.