

Sensory and Texture Profile Analyze of Bulgur Samples

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Abstract

Sensory and textural characteristics have a great influence on consumers' purchasing and consumption decisions and the food product should have a certain level of sensoral and textural profile to be preferred by the consumers. The main aim of this study was to compare the sensory and texture profile of the bulgur samples produced by two pea cultivars and commercial bulgur as a control sample. The hardness, adhesiveness, springiness, cohesiveness, gumminess, chewiness, and resilience characteristics were determined to assess the texture profile of the bulgur samples. There were statistically significant differences between samples in terms of hardness ($p<0.05$). Hardness values of bulgur samples produced using cv. Deren and Irmak-01 were 2132 and 1801 g, respectively, while the value of the control bulgur sample was 682 g. In terms of adhesiveness and springiness, the differences between samples were not statistically significant ($p>0.05$). In terms of cohesiveness, gumminess, chewiness and resilience values, cv. Deren had the highest values ($p<0.05$). Sensory analyses of bulgur samples were conducted by fifteen panelists. Panelists were asked to score the cooked bulgur samples in terms of appearance, color, smell, texture, taste and overall acceptability. They were evaluated with the 9-point hedonic scale ranging from 1 = Dislike extremely and 9 = Like extremely. The sensory profile of pea bulgur samples produced with cv. Deren and Irmak-01 had lower scores as compared to the control bulgur (7.47) in all characteristics with an overall acceptability value of 4.47 and 4.43, respectively. The color, smell and taste values of the bulgur produced with cv. Irmak-01 had slightly higher scores rather than those of cv. Deren (4.67), however, the differences were not statistically significant ($p>0.05$). It can be concluded that the sensory profile of pea cultivars had almost similar sensory profiles. However, textural profiles of bulgur samples varied depending on the variety.

Key Words: Bulgur, Food Legumes, Pulses, Sensory, Texture

