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THE EFFECT OF DIFFERENT NITRITE LEVELS ON COLOUR VALUES DURING PASTIRMA PRODUCTION

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This research was carried out to determine the effects of different nitrite levels on colour properties of pastırma. For this purpose, 0, 50, 100 and 150 ppm sodium nitrite ($NaNO_2$) were added to pastırma at curing stage. Amounts of residual nitrite and colour values (L^*, a^*, b^*) were determined in the pastırma production stages (raw material, end of curing, end of second drying, pastırma). The nitrite levels and the production stages had significant effects ($P < 0.01$) on the residual nitrite amount. The residual nitrite amounts decreased during processing, the most reduction was observed at the second drying stage. Also, the most values were determined in the final products. The residual nitrite amounts in pastırma with 0, 50, 100 and 150 ppm nitrite were 2.317, 3.991, 4.744, 6.158 ppm, respectively. The nitrite levels and the production stages had significant effects ($P < 0.01$) on the colour values. The a^* and b^* values were increased ($P < 0.05$) by the nitrite levels while the L* value was decreased ($P < 0.05$). The highest increase in the a^* and b^* values determined between the second drying and pastırma stages. The mean a^* values of pastırma with 0, 50, 100 and 150 ppm nitrite were 32.027, 34.655, 35.502, 39.158, respectively, the mean b^* values were 19,880, 21,354, 20,753, 23,508, respectively, the mean L* values were 42.017, 43.073, 41.303, 41,236, respectively.

Keywords: Pastırma, residual nitrite, colour

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