Morphological characteristics and quality values of Kahramanmaras red pepper population

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Summary

Morphological characteristics, fresh and dried chili yield of 72 lines selected from Kahramanmaras red pepper population were determined with this study. The ASTA colour values, pungency level and processed yield output values were determined as quality characteristics in the study, as a result of cluster analysis genotypes are grouped under five groups. Creation of groups by morphological characters was identified through two-way cluster analysis. The fruit and plant characteristics as well as yield data, contributed to grouping the genotypes in three separate groups. The ASTA colour value was in the group of plant traits. Fruits of the genotypes generally had cone shaped, sharp pointed, oval transverse and triangular longitudinal section and hump-shaped fruit stalks. Fresh red pepper and dried yield of genotypes ranged from 1954 kg da⁻¹ to 3030 kg da⁻¹ and from 419 kg da⁻¹ to 735 kg da⁻¹ respectively. ASTA values varied between 32.39 and 155.39 and processed yield output varied between 57 % and 41 %. Average fruit weight was determined between 3.2 g and 17.8 g, fruit width between 18.3 mm and 34.5 mm, fruit length between 49.3 mm and 103.7 mm, fruit flesh thickness between 1.0 mm and 2.5 mm; fruit number per plant between 56 and 138; plant height between 61 cm and 79 cm, leaf length between 5.2 cm and 10.9 cm, pungency level 7000 SHU between 87000 SHU, leaf width between 2.4 cm and 6.2 cm.

Key words: red pepper, pungency, colour, yield