

Performance and Post-Harvest Evaluation of Sweet Pepper Genotypes

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Abstract

The study evaluated the novel six-open pollinated sweet pepper genotypes for yield, quality and self-life at Khumaltar conditions during 2078-79. The experiment was laid out in RCB design with 6 treatments and 4 replications. Each plot was mulched with 25-micron plastic and 43 days old seedlings were planted by making a hole at the distance of 60 cm x 45 cm. The result showed that there was a significant effect of sweet pepper genotypes on the different yield attributing and quality parameters. The highest number of fruits per plot was recorded in HRDCAP004 (575.1) and HRDCAP003 (527.9). However, the highest yield was recorded in genotype HRDCAP001 (37.8 t/ha). The lower yield in genotype HRDCAP003 (24.7 t/ha) even though having the highest number of fruits per plot was due to the smaller fruit size of this genotype. There was a significant effect of sweet pepper genotype on the quality attributing characters. The content of titratable acidity (0.6 %), Vitamin C (21.1 mg/100g) and fruit firmness (4.1 kg/cm²) was found significantly highest in HRDCAP001 compared to other genotypes. In addition to this, fruits were wrapped in 25-micron plastic bags and stored under coolbot conditions at 8 oC and 95% relative humidity. The result indicates significant effect of genotypes on self-life, having longest self-life (20 days) in genotypes HRDCAP001 wrapped in 25-micron plastic bags. Hence, the genotypes HRDCAP001 will be further recommended for farmers filed trial and variety registration process.

Keywords: capsicum variety, fruit quality, low energy storage, post-harvest, vegetable crop