

Influence of maturity stages and post-harvest ripening on seed quality in chilli genotypes

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SUMMARY :

The present study was conducted at Department of Seed Science and Technology, University of Agricultural Sciences, Gandhi Krishi Vignana Kendra, Bangalore during 2011-12 to reveal the influence of maturity stages and post-harvest ripening on seed quality among ten (Bhut jolokia, Merkera local, Sweet baccatum, Gandhari, Biligiri local, Majjige menasu, Chinense habanero, Hot cherry, Cherry pepper and Shivani) chilli genotypes belonging to *Capsicum chinense*, *C. frutescence* and *C. annum*. The results revealed that among maturity stages, fruits harvested at red ripe stage and subjected for 20 days post-harvest ripening (M_4) has recorded higher seed quality parameters viz., 1000 seed dry weight (6.95 g), seed germination (66.0 %), seedling length (9.9 cm), seedling dry weight (1.50 mg), seedling vigour index-I (748), total dehydrogenase activity (1.314), α -amylase activity (34.9 μg maltose $\text{ml}^{-1} \text{min}^{-1}$) and field emergence (56.0 %). Also minimum electrical conductivity (1.743 dSm^{-1}) and moisture content of fresh seed (10.93 %) was noticed.

KEY WORDS : Maturity stages, Seed quality, α -amylase activity, Total dehydrogenase activity

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