RESEARCH PAPER

Influence of fruit harvesting stage on seed quality of cucumber [Cucumis sativus (L.)] cv. HASSAN LOCAL

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Abstract : The supply of quality seeds is the constraint in getting higher fruit yield for consumption. Raising of the seed crop for good quality cucumber seed, the stage of harvest is most important to maintain the quality of seeds. Immature and over mature fruits results in inferior seed quality. Hence, the study on influence of stage of fruit harvest on seed quality of cucumber cv. Hassan local was carried out in the Dept. of Seed Science and Technology, University of Agricultural Sciences, GKVK, Bangalore. Crop was raised at the Vegetable Seed Production Unit, Department of Horticulture, during *Kharif*, 2010 by adopting Randomized Complete Block Design with four replications following recommended package of practices. The study comprised of five treatments *viz.*, M₁: 20 DAA (Days After Anthesis), M₂: 30 DAA, M₃: 40 DAA, M₄: 50 DAA and M₃: 60 DAA. The results revealed that test weight (34.3g) were significantly higher with fruits harvested at 50 days after anthesis. Whereas, the highest filled seeds per fruit (288) was more when harvested at same treatment and filled seeds (93.96%) were significantly higher when harvested at 60 days after anthesis where, as other parameters were like germination (95.25%), mean seedling length (26.34cm), mean seedling dry weight (12.85 mg), vigour index-I (2508), vigour index-II (1224) and field emergence (93%) with low electrical conductivity (343 µSm⁻¹). The study can concluded that the seed test weight was recorded maximum with fruits harvested at 50 days after anthesis, while, the seed quality parameters in fruits harvested at 50 days after anthesis, except filled seeds per cent. Hence, the treatment with fruits harvested at 50 days after anthesis is optimum for better seed quality in cucumber.

Key Words: Cucumber, Vigour index, Seed quality, Seed testing, Anthesis

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