

# Comparative Studies on Offseason Seedlings Production of Local Variety of Cucumber (*Cucumis Sativus*) under Poly-tunnel of different Heights

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**Abstract**—*The present investigation was carried out during the year 2015-16 in the field of Nandok Village, East Sikkim, India for offseason seedlings production of local cucumber in polytunnels of 2 ft., 2.5 ft., 3 ft. and open field condition to observe the effects of different dates of sowing and different heights of poly-tunnel on seedlings growth and also to observe the physiological parameters of seedlings before transplanting. Seeds were sown in three different dates i.e. on 15<sup>th</sup> December, 1<sup>st</sup> January and 15<sup>th</sup> January. During the course of investigation no more variations were observed in different parameters within the different heights of polytunnel on different dates of sowing but there was highly significant variation found in between the seedling established inside the poly tunnel as compared to the open field. The seedlings that were developed from 15<sup>th</sup> January sowing under 2.5 ft. polytunnel were found early, uniform healthy with maximum survivability and highest germination percentage as compared to all other seedlings that were developed from 2 ft. and 3 ft. and open field conditions. There may be more chances of best yield that can be obtained from those seedlings in offseason to fetch better economic returns to the marginal farmers and it can be promoted for commercial cultivation over wide area.*