

Variation of Heat -character of Cucumber Seedlings in Different Temperature and Culture mode

Min-Li Liu¹ Ching-Hsiang, Hsieh² Wen-Shin Lin³

Abstract

The optimum growth temperature of small cucumber is 20 ~ 30 °C. However, during summer time, the temperature goes beyond the optimum growth temperature. Thereby, breeding cucumber with heat tolerance is an important investigation. If the characteristic is selected during seedling stage, the cost of breeding can be reducing, and the efficiency of breeding screen can be improved. During the cucumber seedling heat tolerances test if the temperature and humidity in the environment are similar, it can improve the test accuracy. The vitro cultural and plug seedling method are used to conduct this test, and later we selected the best methodology to further test the plant under higher growth temperature. In the end, the plug seedling method is chosen due to the reaction of the plant, and the efficiency on the growth. Reaction temperature was set at 28 ~ 43°C of cucumber seedlings as the best selection temperature.

Key words: small cucumbers, heat tolerance, variation

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1. Asistant Researcher, Kaohsiung District Agricultural Research and Extention station, council of Agriculture, and PH.D. candidate of Institute of Plant Science, National Pingtung University of Science and Technology, Pingtung, Taiwan, ROC.
 2. Professor, Associate Professor, Department of Plant Industry, National Pingtung University of Science and Technology, Pingtung, Taiwan, ROC