SURVIVAL AND AUTOTOMY RATES IN CUCURBITA MOSCHATA DUCHESNE (PUMPKIN) AFTER TRANSPLANTING

Ji-Young Hwang

Food Science and Technology Major /Dong-eui University, **KOREA** hjy@deu.ac.kr Man Kyu Huh*

Food Science and Technology Major /Dong-eui University, **KOREA** mkhuh@deu.ac.kr

ABSTRACT

Cucurbita moschata Duchesne (pumpkin) is a species originating in either Central America or northern South America. Pumpkin is a multipurpose fruit and leaf vegetable. At the cotyledon or leaf stage when seedlings were approximately 1-10 cm, the young plants were transplanted outdoors. Survival and autotomy rates of pumpkin over time for the different treatments (pH, temperature, transplanting time levels, length of stems, and number of leaves) were analyzed at the end of the experiment. The pH difference between the soil of the greenhouse and the soil of the field decreased the survival rate of the transplanted plants. More autotomy events occurred at lower temperatures than at higher temperatures. When stem length was 1 - 3cm, there was almost no autotomy events. When there was only a cotyledon or a leaf, there was almost no occurrence of autotomy events. This species, *C. moschata* appears unable to change its morphology rapidly in response to the conditions where the seedlings develop. Autotomy of *C. moschata* may signal a limited potential for adaptation.

Keywords: Autotomy, *Cucurbita moschata*, pumpkin, transplanting.