Petunia plants are characterized by a short life cycle, color diversity, compact plant size, and relatively easy growth. The findings of this study will help to increase floral longevity of petunia as well as other potted flowering plants which will create a significant value to further develop the floriculture industry. Besides that, the petunia flower has short longevity and floral longevity has received very little attention from ornamental plant breeders. It has been reported that the optimum amount of nutrient and environmental factors affect the plant growth, development and flowering of petunia (Zhanga et al 2012) Petunia seedlings are commonly produced in the greenhouse in mixtures of commercial soilless bedding plant growth media, and sometimes the growth and flower production of petunia plants is low due to unsuitable growing media. It has been reported that flowering capacity of petunia plants can be influenced by breeding and cultivation technologies (Nishijima et al 2006).