

THE EFFECT OF MEDIA AND BACTERIAL FERTILIZER ON THE DEVELOPMENT OF PASSIFLORA (*PASSIFLORA EDULIS* SIMS.) SEEDLINGS

Lokman Altinkaya¹, Hamide Gubbuk^{2,*}, & Beyza Biner³

¹Akdeniz University, Kumluca Vocational School, Turkey

²Akdeniz University, Faculty of Agriculture, Department of Horticulture, Turkey

³Republic of Turkey Ministry of Agriculture and Forestry, Turkey

altinkaya@akdeniz.edu.tr, *gubbuk@akdeniz.edu.tr, beyzabiner@yahoo.com

ABSTRACT

Passiflora (*Passiflora* spp.) is usually propagated by cuttings. After the propagation by cuttings, the acclimatization stage of the plants, the media in which they are grown, and the fertilizer treatments during the growing affect the quality of the seedlings. For this purpose, in this study, the effects of growing media and bacterial fertilizer treatments were investigated on the growth and development of passiflora seedlings after rooting. In the research, two different media were tested as peat: perlite (2:1) and cocopeat: perlite (2:1). On the other hand, a 10000 ppm dose of bacterial fertilizer was tested compared with the control group. Five months after transfer to pots; height, diameter, and internode distance were measured in plants. In addition, the fresh and dry weights of different parts of the plant were determined by considering the media and bacterial fertilizer treatment.

Research results showed that the use of peat: perlite in media trials gave better results than cocopeat: perlite in terms of all the criteria examined. In addition, the treatment of bacterial fertilizer in both media increased the growth and development of seedlings compared to the control. As a result of the research, in relation with passiflora seedling cultivation, the use of peat: perlite mixture as a growing media together with bacterial fertilizer treatment at 15-day intervals during the development stage of the seedlings were recommended.

Keywords: "Possum Purple", growing media, perlite, cocopeat, bacterial fertilizer, seedling development.