GROWTH OF SUGARCANE CUTTINGS (*Saccharum officinarum* L.) ON VARIOUS ORIGINS OF CUTTING MATERIALS AND DURATION OF SOAKING IN NATURAL SHALLOT ZPT

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ABSTRACT

The decline in domestic sugar production is the background to improve sugarcane cultivation. The research aims to determine between the length of immersion of natural ZPT shallot extract and cutting material on the growth of sugarcane cuttings. The research was conducted from February to April 2024 at the Faculty of Agriculture UPN "Veteran" Yogyakarta. The study used a factorial completely randomized design (CRD) with 3 replications. The first factor is the origin of sugarcane cuttings from shoots, middle and base stems. The second factor is the length of immersion in natural ZPT shallot extract without treatment, 30 minutes, 45 minutes, and 1 hour. The results of research showed that there was an interaction between the treatment of the origin of the cutting material and the soaking time on the parameters of time and root length, a combination of the treatment of the origin of the shoot cuttings with a soaking time of 45 minutes and the origin of the middle stem cuttings with a soaking time of 30 minutes and the middle stem cuttings with a soaking time of 45 minutes. Origin of shoot cutting material, middle and base stems provide equally good growth and soaking times of 30 minutes, 45 minutes and 60 minutes provide growth in shoot length at 4 WAP, 5 WAP and 6 WAP

Keywords: Sugarcane plants, natural ZPT, shallots, soaking time