ABSTRACT

Problems in the development of mung bean crops in Indonesia are the lack of use superior varieties and low levels of soil fertility, so efforts are needed to overcome these problems. The use of superior varieties and the utilisation of ameliorants such as biochar is one of the efforts that can be made to increase mung bean crop production. The purpose of this study was to determine the effect of different varieties and biochar application on the growth and production of mung bean plants. This research was conducted at the Agroecotechnology Experimental Farm and the Laboratory of the Agriculture Faculty, Universitas Malikussaleh from December 2023 to March 2024 using a two-factor Randomised Blok Design (RBD). The first factor is Mung Bean Variety (V) which consists of V1 = Vima-1, V2 = Vima-4, V3 = Vimil-2. The second factor is Biochar (B) which consists of B0 = Biochar 0 g/plant, B1 = Biochar 75 g/plant, B2 = Biochar 100 g/plant. The results showed that different varieties and biochar application showed significantly different values for the variables of plant height, stem diameter, chlorophyll content, flowering age, number of pods, weight of 100 seeds and production yield.

Keywords: Ameliorant, Legumes, Production, Varieties