ABSTRACT

Mung beans (Vigna radiata L.) are one of the most widely consumed food commodities. Mung beans are easier to cultivate because they have high adaptability, a relatively short lifespan, and are suitable for planting on dry soil. One of the factors that can cause low production of mung beans is the presence of weeds. Disruption of weed competition from the beginning of plant growth can negatively affect the growth and yield of plants. The presence of weeds throughout the life cycle of crops does not always have a negative impact. There was a period when weeds had to be controlled, and there was a time when weed was also allowed to grow because it did not interfere with plants. The period of plant life that is highly sensitive to the competition of weeds is called the critical period of plants. When weeds are present, crops will lose in competing in exploiting environmental factors because crops are at the weakest point. The growth component of plants and yields decreased with the length of the harvest period and increased as the clean period of weeds increased. To prevent loss of results, it is necessary to know the critical period of mung beans against competition with weeds so that it is known the right time to undertake control. The research was conducted in Tambon Tunong, Dewantara district, and North Aceh district. The duration of the study is from January to March 2024. This research was Random Group Designs (RGD). The research methods covered periods of harvesting and weed cleansing. The results of the study showed that the critical period of green beans occurs in the time range of 3-5 weeks after planting. For that, it was necessary to control the planting before the weeds dominate when the conditions of the plant were at the weakest point. Cyperus rotundus was a dominant weed found in all ages of mung beans.

Keywords: Cleaning weeds, Competition, Critical periods, Mung beans, Weeds