ABSTRACT

Lampuyangan weed (*Panicum repens*) is a weed commonly found in rice fields that can inhibit growth and reduce crop yields because it competes with plants for nutrients, water, light, and growing space. This study aims to determine the response of paraquat and sodium bispiribac herbicides to the growth of lampuyangan weed (*Panicum repens*) and several doses of paraquat and sodium bispiribac herbicides. This study was conducted from November 2025 to January 2026 at the Screen House of the Faculty of Agriculture, Malikussaleh University using a non-factorial randomized block design, each herbicide consisting of five dose levels with five replications. This study consisted of two experiments, namely the use of paraquat herbicide and sodium bispiribac herbicide. The paraquat herbicide treatment was 0 g/ha as a control, 69 g/ha, 276 g/ha, 552 g/ha, and 828 g/ha. Meanwhile, the treatment of sodium bispyribak herbicide used was 0 g/ha as a control, 3.86 g/ha, 15.45 g/ha, 20.6 g/ha, and 25.75 g/ha. The results of this study indicate that paraquat and sodium bispyribak herbicides are proven to be effective in suppressing the growth of Panicum repens weeds. Paraquat herbicide at a dose of 552 g/ha is the most effective dose because it is able to inhibit weed growth optimally, while sodium bispyribak herbicide at a dose of 15.45 g/ha is the most effective dose because it is able to suppress weed growth optimally. It can be concluded that paraquat and sodium bispyribak herbicides are effective in controlling weeds optimally.

Keywords: Agrochemicals, Herbicide dosage, Rice, Weed management