

ABSTRACT

Bobontengan weed (*Leptochloa chinensis*) is one of the harmful weeds because it competes with rice plants for nutrients, water, sunlight, and growing space. This study aimed to determine the effect of paraquat herbicide and sodium bispyribac on the growth of bobontengan weed. The research was conducted from November 2025 to January 2026 at the Screen House and Laboratory of the Faculty of Agriculture, Malikussaleh University used a non-factorial randomized block design, where each herbicide consisted of five dosage levels with five replications. This study consisted of two experiments, namely the application of paraquat herbicide and sodium bispyribac herbicide. In the paraquat herbicide experiment, five dosage levels were used: 0 g/ha as control, 69 g/ha, 276 g/ha, 552 g/ha, and 828 g/ha. Meanwhile, in the sodium bispyribac herbicide experiment, five dosage levels were applied: 0 g/ha as control, 3,86 g/ha, 15,45 g/ha, 20,6 g/ha, and 25,75 g/ha. Each dosage level was applied once to one-month-old *Leptochloa chinensis* to evaluate its effect on weed growth and toxicity level. The observed parameters included weed height, number of leaves, number of tillers, percentage of toxicity, and dry weight. The results showed that paraquat herbicide had a highly significant effect on all observed parameters, where doses of 276-828 g/ha were able to control *Leptochloa chinensis* completely, with toxicity percentage reaching 100% and dry weight of 0.00 g. Meanwhile, sodium bispyribac herbicide also showed significant to highly significant effects on weed growth, particularly at a dose of 3,86 g/ha, which effectively suppressed weed height, number of leaves, toxicity percentage, and dry weight gradually. In conclusion, paraquat herbicide was effective for rapid weed control, while sodium bispyribac was effective for systemic control of bobontengan weed (*Leptochloa chinensis*).

Keywords: Bobontengan weed, herbicide dosage, *Leptochloa chinensis*, paraquat, sodium-bispyribac.