

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1. Conclusion

The results of this study demonstrate that using herbicide do not affect to the rice growth, because there were non-significant differences, for plant height and number of tillers, among the treatments used or not used herbicide in controlling *Fimbristylismiliacea*.

However, herbicide gave significant differences (5% level) on controlling weed, using herbicide with different dosages help to reduce the number of weed compared with non-weeding. Without weed control, weed biomass increased almost 28 times from 0.6 gram (trans-planting time) to 16.54 grams (six weeks after trans-planting). Plots treated with herbicide was recorded a great decrease of weed biomass.

Rice grain yield had significant differences among treatments. Using herbicide with different dosages help to raise the rice grain yield, compared with no control weed.

Manual weeding, although effective, is becoming difficult due to labor scarcity, cost increase and depend on weather conditions. Moreover, it is incomplete and impractical due to escape or regeneration of perennial weeds having many flushes. Delayed weeding causes crop loss and decreases production.

5.2. Recommendation

Despite advances in science and technology, weed will be continued to threaten rice production. Weed control should be important aspect in rice production, by using different methods depend on the reality situation and farmer condition.

Future researches about effect of this herbicide on broadleaf weeds and the other kind of sedge weeds should be done to find more efficacies of herbicide, analyze about effect of herbicide residual on soil, water source, soil organisms and other environmental factors.

Integrated weed management should be practiced more to avoid weed resistance and increase the effect of weed controls.

