

V. CONCLUSION AND SUGGESTION

A. Conclusion

Based on the results of the research, it can be concluded that:

1. The seaweed with the highest cellulose content was *Sargassum* sp. with an average of 49.65%.
2. The biodegradable film with the highest solubility was produced from *Gracilaria* sp. cellulose. Biodegradable films made from *Sargassum* sp., *Gracilaria* sp., and *Ulva* sp. cellulose were easily degraded. In organoleptic test, biodegradable films from *Sargassum* sp. cellulose exhibited the lowest colour quality. The texture and odour of the biodegradable films made from *Sargassum* sp., *Gracilaria* sp., and *Ulva* sp. cellulose were similar. All three films exhibited a faint odour, moderate surface smoothness, moderate durability, and moderate homogeneity.

B. Suggestion

Sargassum sp. seaweed has potential for further utilization due to its high cellulose content (yield). Therefore, in the development of biodegradable film, it is recommended to perform chemical or physical modifications to improve the homogeneity and colour quality of the biodegradable film produced.