V. CONCLUSION AND SUGGESTION

5.1. Conclusion

Based on the research that has been carried out, it can be concluded as follows:

1. Modification of MS media had a significant effect on the increment of plantlet height, where 6.73% increment had been observed on MS full strength when compared to MS half-strength macronutrient and 10.34% compared to MS quarter-strength macronutrient.
2. Supplementation of 50 $mg.L^{-1}$ glutamine tends to had significant effect on the first day of root emergence, length of the longest roots, and chlorophyll content of plantlet.
3. Modification of MS media supplemented with 50 $mg.L^{-1}$ glutamine tend to had significant effect on the increment of plant height, first day of roots emergence, and chlorophyll content on MS full-strength, while length of the longest roots on MS half-strength macronutrient.

5.2. Suggestion

Based on the research that has been carried out, it is recommended to use 50 $mg.L^{-1}$ glutamine on the media for shoot initiation and multiplication, and also in other type of media, *i.e.*, shoot multiplication and root induction, related to micropropagation of *C. sumatrana*. Because of the significant effect of MS full-strength and MS half-strength macronutrient on the growth of plantlets, it is also recommended to try another basal media for micropropagation of this species.