V. CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the results mentioned above, significant positive correlations were found between soil conservation parameters and tree architecture Stone and Petit models. The relative correlation of each variable demonstrated that throughfall and runoff are far more important than rainfall and stemflow for explaining the variation in soil erosion.

Stemflow for Castanopsis argentea (4.73 mm) was slightly smaller than stemflow for Michelia montana (6.20 mm). The values of throughfall indicate 7.82 and 640.91 mm for Castanopsis argentea and Michelia montana respectively. Runoff measured was 49.32, 15.74 and 10.87 mm for the Control, Castanopsis argentea and Michelia montana respectively. Soil loss was quantified in 1.98, 0.82 and 0.76 ton ha\(^{-1}\)year\(^{-1}\) for the Control, Castanopsis argentea and Michelia montana respectively. The Infiltration rate is observed to be higher with Michelia montana compared to Castanopsis argentea. These results show that Michelia montana is better than Castanopsis argentea to be developed in soil and water conservation.

5.2 Suggestion

We suggest that more attention be directed to the position and form of individual tree architecture models in studies of soil erosion. Such information is important because it provides a more precise picture on how or in what manner rainfall is received and distributed within an ecosystem.