

## Pengaruh faktor keruangan dan masa dalam menentukan kadar pintasan hujan di kanopi hutan dipterokarpa, Tasik Chini Pahang.

### ABSTRACT

The reduction of rainfall by interception process is influenced by two mechanisms namely climate and plant physiographic features. Climate features that affecting the interception loss including total rainfall (mm), wind speed (m/s) and temperature (°C). Meanwhile plant physiographic features that affect interception loss consists of tree's height, skin, diameter, canopy, twigs and branches. Looking the role of climate and plant physiographic features in the interception process, this study was conducted in order to measure the throughfall, stem flow and interception loss and the factors that influence it. The assessment of throughfall and interception loss were carried out on study plot sized 100 x 100 meter in Dipterocarp Forest of Tasik Chini, Pahang. The study was conducted from October 2009 until January of 2010. Thirty tree samples are used and each tree is well-identified based on their species, family, diameter breast height (DBH), canopy size and its density. Four sets of throughfall were used to do throughfall measurements. Results of this study found that the value of throughfall and stem flow collected based on four rainfall events namely in October 2009 where 0.66 % (TF) and 99.34 % (SF), November 2009 – 0.54 % (TF) and 99.46 % (SF), December 2009 – 0.72 % (TF) and 99.28 % (SF) and January of 2010 – 0.49 % (TF) and 99.51 % (SF). Statistical analysis also indicates the existence of the relationship between total rainfall and interception loss with significant levels in 0.571 (r<sup>2</sup>) in December of 2009. This study provides important information that related to the hydrological cycle and how plant's canopy can be acted as a medium of water balance in the environment.

**Keyword:** Troughfall; Stem flow; Interception; Dipterocarp; Spartial and temporal.