ABSTRACT BOOK

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Migration Inhibition Activity of Secang (*Caesalpinia sappan* L.) Ethanolic Extract on 4T1 Breast Cancer Cells by Scratch Wound Healing Assay

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Secang (*Caesalpinia sappan* L.) contains brazilin and brazilein compounds that have been proven to have cytotoxic activity on breast cancer cells. The objective of this study is to observe secangethanolic extract (SE) activity on breast cancer cells migration inhibition. In this study, 4T1 breast cancer cells were used as model of metastatic breast cancer. Cytotoxic assay was done by MTT assay and anti-metastatic effect of SE was determined by scratch wound healing assay. The results showed that SE had cytotoxic activity on 4T1 with IC_{50} value of 51 µg/mL. Furthermore, SE also inhibited % closure of wound area on 4T1 cells. In conclusion, SE is potential to inhibit 4T1 breast cancer cells migration and further study about molecular mechanism of SE as anti-metastatic agent needs to be elucidated.

Key words: secang, cytotoxic, migration, 4T1 cells