

CHAPTER V

CONCLUSION AND RECOMMENDATION

The alcoholic extract of *Paramichelia baillonii* stem bark yielded 0.29 % of fresh weight. This crude extract has been examined for the presence of 4 components, dihydroparthenolide (PB-1) 0.99 %, parthenolide (PB-2) 0.04 %, bisparthenolidine (PB-3) 1.58 %, and liriodenine (PB-4) 0.09 %. The latter three components are displaying as cytotoxic agents while the former one is inactive. As bisparthenolidine is a new and unusual sesquiterpene lactone, it is demonstrated for its activity in KB cell culture assay. Result that it has $ED_{50}=0.73$ mcg/ml. This present investigation has led to conclude the activity of this new alkaloid in the form of sesquiterpene lactone dimer that it is 2.5 times of standard 5-FU potency.

From this result, it should be recommended for further *in vivo* studies of bisparthenolidine with P-388 lymphocytic leukemia (PS) or Walker 256 carcinosarcoma (WA) and for devising extraction procedure to maximize the isolation yield while minimizing the cost.