ALKALOID FRACTION ACTIVITY OF JARONG LEAF (*Achyranthes aspera linn*) FOR PROLIFERATION OBSTACLE OF BREAST CANCER CELLS

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ABSTRACT

This study aimed to determine the activity from jarong leaf alkaloid fraction (*Achyranthes aspera linn*) for proliferation obstacle of breast cancer cells. This study used 20 female mice that positive breast cancer and four female healthy mice were divided into six group treatments, namely K-: healthy mice were given 0.5% CMC Na; K+: mice with breast cancer were given methotrexate 15 mg/kgbb; P0: mice that suffered breast cancer were given by jarong leaf alkaloid fraction doses of 0 mg/kgbb; P1: mice that suffered breast cancer were given by jarong leaf alkaloid fraction doses of 124 mg/kgbb; P2: mice that suffered breast cancer were given by jarong leaf alkaloid fraction doses of 167 mg/kgbb and P3: mice that suffered breast cancer were given by jarong leaf alkaloid fraction doses of 207 mg/kgbb. Measurement histopathologic grade proliferated cancer cells were using scoring method according to Nottingham Modification of Bloom Richardson System. Data analysis were using Kruskal Wallis and Mann Whitney test. The results showed jarong leaf alkaloid fraction (*Achyranthes aspera linn*) had an activity to inhibit the proliferation of breast cancer cells in mice induced by benzo[a]pyrene with the effects that approached the anticancer standard drug namely methotrexate.

**Key words:** alkaloid fraction, jarong leaf, *Achyranthes aspera linn*, proliferation, breast cancer