SUMMARY

ANTICANCER AND APOPTOSIS INDUCTION ACTIVITY OF CHLOROFORM FRACTION OF DAUN PEPAYA (CARICA PAPAYA L) AGAINST CANCER CELLS CULTURE

(Sukardiman, Wiwied Ekasari, 2004, 49 pages)

The cancer diseases are the second causing of human death after the cardiovascular diseases, and the many of anticancer chemotherapy causing side effect, which their killing cancer and normal cells. Now, many development and research to discovery of the bioactive compounds from Indonesian medicinal plants which have potential and selective anticancer activity.

The objective of this research was evaluated activity of chloroform fraction of daun papaya (*Carica papaya* L) against anticancer and apoptosis induction activity against mieloma cells in vitro.

These research has been carried out by the first step is fractionation activity with chloroform by extraction with step method and to identification compound by Thin Layer Chromatography (TLC) and densitometry . The mileoma cells were incubated in RPMI media, Fetal Bovine Serum 10%.The concentration of chloroform fraction were made many concentrations 25 ; 50 ; 75 ;100 ;150 ; 250 µg/ml, with initially dissolved in DMSO, and their solution to addition into mieloma cells culture and then to incubated for 24 hours, at 37°C in CO_2 incubator. Determination of anticancer activity are calculated by cell viability method with trypan blue exclusion. Determination of apoptosis induction activity are calculated by ethidium bromide and acridine orange exclusion and analysis by fluorescent microscope. The data analysed by analysis of variant and determination of IC_{50} by percent probit.

The result of these research showed that chloroform fraction of daun papaya (*Carica papaya* L) have anticancer and apoptosis induction activity against mieloma cells culture in vitro.

Researcher was suggested to planed future research of the isolation and identification of chloroform fraction of daun papaya (*Carica papaya* L) have anticancer and apoptosis induction activity .

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