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# Extract Ethanol of *Anona muricata* Leaves As Antimigration on Widr Colon Cancer Cell Line

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## INTRODUCTION

Sour leaves (*Anona muricata*) has some beneficial substances such as anticancer, antifungus, dan antibacteria. *Anona muricata* contain of alkaloid (ALKs), essential oil and acetogenins. Annonaceous acetogenins in anona was capable as cytotoxic substance on some cancer sell. Malignancy in cancer cells is its ability to move to other tissues. So it is necessary to prove the ability of soursop leaves to prevent the spread of cancer cells. The spread of cancer cells because of their ability to migrate and invasion of other tissue.



*Annona muricata* is an evergreen, terrestrial, erect tree reaching 5–8 m in height and features an open, roundish canopy with large, glossy, dark green leaves. The edible fruits of the tree are large, heart-shaped and green in color, and the diameter varies between 15 and 20 cm

## Objective

This study carried out to prove the effect of extract ethanol of *Anona muricata* leaves as an antimigration substance on Widr colon cancer cells.

## Research Methods

1. MTT test was performed on Widr colon cancer cells to determine IC 50 as a basis for determining antimigration doses.

2. The migration test was carried out with an assay wound healing.

## RESULT

Figure. IC 50 of *Annona muricata* ethanol extract on Widr Colon Cancer cell line

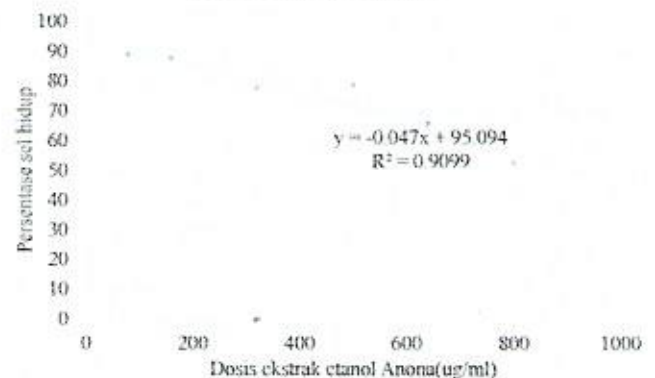


Table Migration Area of Widr Colon Cancer Cell Line depending of time

Groups	Times		
	12hrs	17hrs	24 hrs
control	45788	78568	91988
doxorubicin	-20182	-93194	-129106
1.5IC50	-13760	-75769	-98165
IC50	-5639	-61887	-160990
0.5IC50	22785	25544	-73473
0.33IC50	35760	117881	143319
0.25IC50	5848	149351	78934
0.125IC50	43381	133956	93747

## DISCUSSION

The results showed that the ethanol extract of *Anona muricata* leaves had antimigration potential at a dose of 0.33 IC50 with the ability to reduce migration 4 times after exposure extract anona for 24 hours. Doxorubicin as a cancer cell killer. IC 50 and up also as Cancer killer due to acetogenin in extract *Annona muricata* as well.

## CONCLUSION

The extract ethanol of *Anona muricata* leaves at a dose of 300ug as antimigration on Widr colon cancer cells.

## Acknowledgment

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