



Antimicrobial Activity of Cotton Fruit Wood Stem Extract (*Sandoricum Koetjape Merr*) Against *Candida Albicans*

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ABSTRACT

Research of antimicrobials activity of cotton fruit wood stem extract (*Sandoricum Koetjape Merr*) against *Candida Albicans* has been progressing. Wood stem extraction is done by maceration using methanol solvent. The results showed that antimicrobial activity test of wood extract could inhibit antifungal *Candida Albicans* with MIC value of 10 µg / ml.

Keywords: *Sandoricum Koetcape Merr*, *Candida Albicans*, Antimicrobial/antifungal

INTRODUCTION

Fungal infection of the skin and nails are still common in Indonesia. Various types of medicinal plants have been widely used as a traditional medicine, one of them is cotton fruit (*Sandoricum Koetjape Merr*).

Empirically, the cotton fruit has been used to treat diarrhea, fever and reduce whiteness. This study aims to determine the microbial activity of cotton fruit steam wood against *Candida Albicans*.



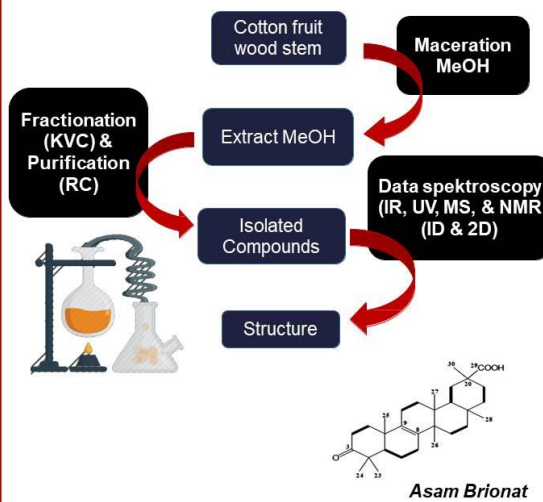
Traditional Treatment

- Fever treatment
- Reduce fluor albus.
- Flatulence treatment
- Diarrhea
- Antiseptic
- Maternity recovery (Heyne, 1987).

OBJECTIVE

To determine the antimicrobial activity of Cotton fruit wood stem extract (*Sandoricum Koetjape Merr*) against *Candida Albicans*.

METHODOLOGY



DISCUSSION

Activity Test of *C. Albicans*

Media Set-up for Saboroud Dektrosa Broth (SDB)

Weighed 30 grams of SDB, then dissolved in 1 liter of distilled water until a homogeneous suspension was obtained and heated for 1 minute. Then the suspension was sterilized in autoflat at 121 degC at 2 atm for 15 minute.

SDA Preparation

Weighed 65 grams of SDA, then dissolved in 1 liter of distilled water until a homogeneous suspension was obtained and heated for 1 minute. Then the suspension was sterilized in autoflat at 121 degC at 2 atm for 15 minute.

Tissue Culture Preparation

C. Albicans culture which has been rejuvenated in inoculation of 1 l to SDB media then culture inoculated at 37 degC for 2 x 24 hours.

Activity Test Using Diffusion Method

A total of 0.1 ml of *C. albicans* inoculum was dripped onto the surface of SDA media, then deposited equally. Paper discs 6 mm in diameter, immersed in the surface of the media. Each culture was inoculated in a 2 x 24 hour at 37C and then measured the diameter of the clear zone.

RESULT

The results showed that antimicrobial activity test of wood extract could inhibit antifungal *Candida Albicans* with MIC value of 10 µg / ml.

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