

## INTISARI

Jahe telah banyak digunakan untuk mencegah mual muntah selama kehamilan, sehingga diperlukan pengkajian terhadap tingkat keamanannya bila digunakan selama kehamilan. Salah satu uji ilmiah yang perlu dilakukan untuk mengetahui keamanan jahe selama kehamilan adalah uji keteratogenikan. Produk X adalah satu produk ekstrak etanolik jahe (*Zingiber majus* Rumph.). Penelitian ini bertujuan untuk mengetahui potensi keteratogenikan dari gambaran histopatologi organ pada pemberian sediaan oral ekstrak jahe dalam produk X secara oral sekali sehari selama masa kebuntingan.

Penelitian dilakukan berdasar metode OECD 414. Pengujian dilakukan terhadap tikus betina galur *Sprague-Dawley*, yang dibagi dalam kelompok kontrol dan kelompok perlakuan dengan tiga peringkat dosis, dimana setiap kelompok terdiri dari 20 ekor tikus. Kelompok kontrol dipejani CMC-Na 0,5% secara oral dan kelompok perlakuan dipejani ekstrak jahe dengan dosis 37,8 mg/kg BB (dosis I), 75,6 mg/kg BB (dosis II), dan 151,2 mg/kg BB (dosis III) secara oral. Pemejanaan dilakukan dari H1 hingga H17 masa kebuntingan. Analisis kualitatif dilakukan terhadap gambaran histopatologi organ plasenta, hati, ginjal, paru, jantung janin serta ovarium dan uterus induk.

Hasil pengujian menunjukkan bahwa pemejanaan ekstrak jahe secara histopatologi tidak menimbulkan efek toksik pada organ plasenta, hati, ginjal, paru, jantung janin serta ovarium dan uterus induk. Pemejanaan ekstrak jahe dalam produk X sekali sehari selama masa kebuntingan tidak menunjukkan perubahan histopatologi yang berarti.

Kata kunci : teratogenik, *Zingiber majus* Rumph., histopatologi, OECD 414

## ABSTRACT

Ginger has been widely used to prevent nausea and vomiting during pregnancy, so it is necessary to assess the safety level when used during pregnancy. One scientific test that needs to be done to determine the safety of ginger during pregnancy is the test of teratogenicity. Product X is a product of ginger's ethanolic extract (Zingiber majus Rumph.). This study aims to determine its teratogenicity potential on the histopathology picture on oral administration of ginger extract in product X once a day during pregnancy.

The study was conducted based on OECD 414. The tests were performed on the Sprague-Dawley strain female rats, which were divided into a control group and a treatment group with three dose ratings, each group consisting of 20 rats. The control group was treated with 0.5% CMC-Na orally and the treatment group was treated with ginger extract at 37.8 mg / kg BW (dose I), 75.6 mg / kg BW (dose II), and 151.2 mg / Kg BW (dose III) orally. The administration of ginger extract given from day 1 to day 17 of pregnancy. Qualitative analysis is performed on histopathologic images of the placenta, liver, kidneys, lungs, and heart from the fetus and ovaries and uterus from the parent.

The test results show that the administration of ginger extract, histopathologically does not cause any toxic effect on the placenta, liver, kidneys, lungs, and heart from the fetus and ovaries and uterus from the parent. The administration of ginger extract in X products once daily during pregnancy did not show significant histopathological changes.

Keywords: teratogenic, Zingiber majus Rumph., Histopathology, OECD 41