INTISARI

Makuto dewo (*Phaleria macrocarpa* (Scheff.)Boerl.) digunakan sebagai alternatif pengobatan tradisional oleh masyarakat, selain berkhasiat, juga terkenal beracun. Berdasarkan peraturan menteri kesehatan No 760/MENKES/PER/1992 tentang fitofarmaka, perlu dilakukan uji toksisitas tak khas dan khas. Salah satu uji toksisitas khas adalah teratogenik, karena itu, dilakukan penelitian teratogenisistas infusa daging buah segar makuto dewo pada tikus putih. Tujuan penelitian untuk mengetahui efek dan wujud efek teratogenik akibat pemberian infusa daging buah segar makuto dewo pada masa organogenesis.

Penelitian bersifat eksperimental murni, rancangan acak lengkap pola searah. Digunakan 40 ekor tikus putih betina galur SD (*Sprague Dawley*), 2,5-3 bulan, 150-200 gram, siklus estrus teratur, dan perawan. Dibagi acak menjadi 4 kelompok (10 ekor). Kelompok I (kontrol negatif (diberi aquades 12,5 g/KgBB), kelompok II, III, IV diberi infusa daging buah segar makuto dewo dengan dosis berturut-turut 2,632; 8,820; dan 29,556 g/KgBB. Diberikan secara oral, 1x sehari pada hari 6-15. Volume pemberian disesuaikan dengan bobot tikus.

Pengujian efek teratogenik meliputi biometrika janin, gros morfologi, sistem skeletal, dan histopatologi. Pengamatan dilakukan pada hari ke-19 kebuntingan tikus. bobot plasenta, angka kematian janin, jumlah janin cacat, bobot hati, ginjal, uterus, lambung, dan usus induk, dianalisis dengan Kolmogorov-Smirnov, ANAVA pola searah, LSD. Resorpsi awal, resorpsi akhir, jumlah janin mati, dan panjang janin, bobot ovarium induk, dan sistem skeletal, dianalisis dengan Kruskal-Wallis, Mann Whitney U test. Semua data dianalisis dengan taraf kepercayaan 95 %. Perubahan bobot badan induk selama kebuntingan (hari 0-19) dianalisis General Linier Model (dengan metode *Split-plot*). Data histopatologi dianalisis kualitatif deskriptif.

Hasil penelitian menunjukkan bahwa pada kelompok II (dosis 2,632), III (dosis 8,820 g/KgBB), dan IV (dosis 29,556 g/KgBB) sama-sama menimbulkan kelainan pada hati janin. Perbedaannya adalah pada kelompok II (dosis 2,632 g/KgBB) menyebabkan jumlah metatarsal tidak lengkap. Pada kelompok III (dosis 8,820 g/KgBB) menyebabkan kongesti, kelainan pada ginjal janin, sakral, sternum, *vertebral bodies*, Kelompok IV (dosis 29,556 g/KgBB) menyebabkan kongesti, kelainan pada ginjal janin, *vertebral bodies*, metatarsal tidak lengkap.

Dengan demikian dapat disimpulkan bahwa pemberian infusa daging buah segar makuto dewo pada masa organogenesis dosis 2,632; 8,820; dan 29,556 g/KgBB pada induk tikus dicurigai memiliki potensi efek teratogenik.

ABSTRACT

Makuto dewo (Phaleria macrocarpa (Scheff.)Boerl.) has becomed one of traditional alternative remedies which was used by society. Beside it has effect, it was well-knowed a toxic plant. Based on "Peraturan Menteri Kesehatan" No 760/MENKES/PER/IX/1992 about phytopharmacon toxicity test has to become (unspesific toxicity and spesific toxocity). Teratogenic is once of spesific toxicity, to fulfill that requirement, the research about teratogenic effect of infusa makuto dewo fruit flesh fresh on female rat was conducted. The research generally aimed to know the teratogenic effect and it's manifestation caused by infusa of makuto dewo fruit flesh fresh on female rat while organogenesis periode happened.

The study is pure experimental with direction completely randomize design. The research used forty female rats, Sprague Dawley species, 2,5-3 month old, 150-200 gram of their body weight, have a periodic estrus cycles, and still virgin. They were divined into four group each 10 rat. Group I as negative control was given aquadest dose 12,5 g/KgBB. Group II, III, and IV were given makuto dewo fruit flesh fresh infus, dose respectively 2,632; 8,820; and 29,556 g/KgBW, by orally route administration, once a day, on 6-15 th days pregnancy (organogenesis period).

Detection of teratogenic effect is biometrica fetus, gross morfology, sceletal system, and histopathology. Fetus weight, embryo death number, amount of congesty, the liver, kidney, uterus, gastric weight, and intestine weight of the mother on 19 th days pregnancy were analyzed with Kolmogorov-Smirnov test, ANOVA, and continued by LSD. Earlyer resorption, ended resorption, death embryo number, embryo length, ovarium weight of the mother, and sceletal system were analyzed on 19 th days pregnancy with Kruskall-Wallis, continued with Mann Whitney U test. All data were analyzed with 95% significancy level, Mother weight on 0 th until 19 th day of pregnancy was analyzed with General Linier Model, Split-plot model. Histopathology data was analyzed descriptive quantitatively.

The experiment result showed group II (dose 2,632 g/KgBW), III (dose 8,820 g/KgBW), and IV (dose 29,556 g/KgBW) has the same defect on embryo liver. The different is group II (dose 2,632 g/KgBW) has defect metatarsal. Group III (dose 8,820 g/KgBW) has defect congesty, embryo kidney, sacral, sternum bones, vertebral bodies, group IV (dose 29,556 g/KgBW) has defect congesty on embryo kidney, vertebral bodies, metatrsal.

The conclusion of the research was the used of makuto dewo fruit flesh fresh infus dose 2,632; 8,820; and 29,556 g/KgBw while organogenesis periode of female rat had suspected of teratogenic effect