E2-20: Anti-fertility activity of *Jatropha curcas* fruits

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Anti-fertility agents obtained from indigenous plants could be highly acceptable to people in the rural areas of the developing countries. According to ethnomedical information, the seed of Jatropha curcas (Family: Euphorbiaceae) has been used as an abortifacient and an emmenagogue in various countries, while the seed has been used as an oral contraceptive.

The extracts of fruit of *Jatropha curcas* were investigated for anti-fertility activity, using WHO bioassay protocol MB 30. Ten female Sprague-Dawley rats were used in each experimental and control group. Only 1 group of animals was assayed for each experiment.

The cold methanol extract of the fresh fruit and the hot methanol extract of the dried fruit were found to have anti-fertility activity at 0.8 g/kg (pregnancy rate: 10%) and 0.6g/kg (pregnancy rate: 20%), respectively. The hot petroleum ether extract of the dried fruit also possessed anti-fertility activity (pregnancy rate: 0%) at a higher dose of 1.84 g/kg with some toxic effects. The cold petroleum ether and the cold dichloromethane : petroleum ether (1:1) extracts of the fresh fruit as well as the hot dichloromethane : petroleum ether (1:1) extract of the dried fruit were found to be inactive at doses 0.37 g/kg (pregnancy rate: 100%), 3.05 g/kg (pregnancy rate: 100% and 0.12 g/kg (pregnancy rate: 90%), respectively.

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