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The teratogenic effect of the ethanolic leaf extract of *Momordica foetidasc* hum (Cucurbitaceae) on the morphology of foetal sprague dawley rats

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The teratogenic effects of the ethanolic leaf extract of *Momordica foetida* on the morphology of foetal Sprague Dawley rats was studied using 30 cyclic females and 5 males Sprague Dawley rats (weighing 200-300g) for the study. Vaginal lavage was taken daily to monitor their estrous cycle for 4 weeks. On the proestrous day of the cycle of each rat, a male rat was introduced into the cage; the presence of spermatozoa in the vaginal lavage was taken as day 1 of conception. The pregnant female Sprague Dawley rats were randomly divided into six groups, which include group A_1 and A_2 (control), group B1 and B2 (anti-implantation) and group C_1 and C_2.Treated rats in group B_1 and B_2 received a double and single oral doses of 500mg/kg and 250mg/kg bw of the extract from post-coital day 1 to 10, while the control animals (A1) in this group received an equal volume of distilled water. All the animals were sacrificed on the day 12 of gestation to assess for anti-implantation effect. Treated rats in group C_1 and group C_2 received double and single oral doses of 500mg/kg and 250mg/kg bw of the extract from the 6th-19th day of gestation while the control animals (A1) in this group received an equal volume of distilled water. All the animals were sacrificed on the 12th day of gestation to assess for anti-implantation effect. All pregnant rats were sacrificed, fetuses were examined for malformation and gestational parameters monitored were: number of total implantation; resorption and dead fetuses. Live fetuses were weighed and examined for external malformations and variations. Fetal parameters recorded were: Fetal numbers and weight, crown rump length, trans-umbilical cord length and placental weight. The results showed that there was prevention of implantation, abortion and significant reduction of parameters: Crown rump-length, trans-umbilical cord length compared to the control ($P<0.05$). In conclusion, the above result suggest that the ethanolic extract of *Momordica foetida* leaf at 500mg/kg body weight prevents implantation, induces abortion and significantly reduces fetal parameters in Sprague-Dawley rats.

Biography

A K Odunlade completed his PhD in Animal Biotechnology from Federal University of Agricultural,Abeokuta Ogun State, Nigeria. He is the Head of section of Environmental Biology Unit of the Department of Biological Science, Yaba College of Technology, Yaba Lagos, Nigeria. His areas of specialization are in Animal biotechnology,Reproductive Genetics and Environmental management. He has attended both local and international conference in his area of specialization, also he has published in some reputable journals of learning both locally and internationally.He has attended series of Workshop on Animal Biotechnology both locally and internationally.He has supervised a lot of student's projects and seminar and Co-supervisors. He is a member of Biotechnology society of Nigeria, Genetics society of Nigeria and Member of international Research and Development institute. He has also been an external examiner to some institution of higher learning and paper reviewer.

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