

Title of Article: Effects of combinations of ethanolic extracts of *Blighia sapida* and *Xylopiya aethiopicia* on progesterone, estradiol and lipid profile levels in pregnant rabbits

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Abstract

The effects of ethanolic extracts of *Xylopiya aethiopicia* fruits and *Blighia sapida* roots, used by some rural dwellers in western part of Nigeria for abortifacient purposes, were investigated using pregnant rabbits. A combination of *X. aethiopicia* and *B. sapida* in a ratio 1:1 at concentrations of 10.0 mg/ kg body weight (group B) and 50.0 mg/ kg body weight (group C), and *X. aethiopicia* alone at 50.0 mg/kg of body weight (group D) were administered by gastric intubations for a period of 14 days from the 12th to 25th day of gestation after which they were fasted for 18 h. Serum levels of reproductive hormones (progesterone and estradiol) and lipids (triglycerides, total cholesterol, LDL-cholesterol and HDLcholesterol) were determined at the end of the treatment. Results showed significant reductions ($p < 0.05$) in progesterone and estradiol levels, significant elevations of triglycerides ($p < 0.05$) and no statistically significant differences ($p < 0.05$) in the levels of total cholesterol in all the treated groups compared with the control (group A). There was a statistically significant reduction ($p < 0.05$) in the levels of HDL-cholesterol in Group B, a significant increase in group C and no significant reduction in group D compared with the control (group A). The levels of LDL-cholesterol in all the treated groups did not differ significantly ($p < 0.05$) from the control (group A). The results suggest that ethanolic extracts of *X. aethiopicia* alone or in combination with *B. sapida* may actually lead to termination of pregnancy due to reduction of progesterone and estradiol. The results also suggest that there is increased risk of hypertriglyceridemia in the users of these plants but this may not predispose them to arteriosclerosis because of the insignificant differences in the levels of LDL-cholesterol in all the treated groups compared with the control.