EFFICACY OF HUMAN CHORIONIC GONADOTROPIN (HCG) AND CRUDE PITUITARY EXTRACT OF FISH AND FROG IN OOCYTE MATURATION AND OVULATION IN AFRICAN CATFISHES, CLARIAS GARIEPINUS BURCHELL, 1822 AND CLARIAS ANGUILLARIS LINNAEUS, 1762.

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The recorded successes in induced breeding of African Clarias are not repeatable when attempted elsewhere as the variable parameters affecting the success have not been defined. One of such parameters is the dosage of the inducing agent required. This study was undertaken to establish the efficacy and total dose of Human Chorionic Gonadotropin and crude pituitary extract of Clarias albopunctatus and Rana elegans required to induce maturation and ovulation in Clarias gariepinus and Clarias anguillaris.

After recording the initial mean oocyte diameter of each female low doses of each hormone were administered intramuscularly at 24 hours intervals until ovulation occurred. Ovulated eggs were stripped and fertilized artificially. Duncan's multiple range test was used to test any significant difference in percentage hatching in relation to different hormones used.

There was no significant difference ($p>0.05$) between the mean values of percentage hatching resulting from the administration of different hormones in both species of Clarias. The cumulative specific dose of each hormone required to induce final maturation and ovulation was inversely proportional to the initial mean oocyte diameter in both species of Clarias. The regression equations obtained in this study could be used to estimate the minimum amount of hormone required to induce ovulation in C. gariepinus and in C. anguillaris with known mean oocyte diameter.

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