

# Premarinal Effect (Estrogen) on Pituitary Gonadal Axis in the Fish, *Clarias Batrachus* (L.)

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**Abstract:** Reproduction is primarily controlled by hypothalamo pituitary gonadal axis. Gonadotropin stimulates growth and development via the synthesis of sex steroids. Estrogen is important for the growth and development of female reproductive system. Premarin was injected 2.5ml/kg body weight at every alternate day for two week intramuscularly in the fish, *Clarias batrachus*. It has been observed that due to estrogen, oogenesis stimulated in the ovary which was mediated through the gonadotrophic hormone in female and in male testicular development was arrested. These findings indicate that premarin is an inducer of spawning reflexes in the fish, *Clarius batrachas* that induces gonadal maturity and used to achieve early breeding in female whereas in male testicular development is arrested.

**Keywords:** Estrogen, gonadotrophin, inducer, sex steroids and spawning reflexes

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