Title:

Elevation of sex steroids and inhibition of UDP-glucuronyltransferase are out of

phase during gonadal maturation in the common carp

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Abstract: Plasma sex steroid concentrations, onset of gonadal maturation, and hepatic microsomal UDP-glucuronyltransferase (UDPGT) activities were followed under natural temperature and photoperiod in outdoor tanks, and under controlled laboratory temperature and photoperiod regimens in common carp (Cyprinus carpio). Decreased activity of UDPGT was out of phase with elevations in plasma testosterone and 17βestradiol during gonadal maturation. Injection of pituitary extract induced final gonadal maturation and transient elevations (within 24 hrs) of both plasma sex steroid concentrations and UDPGT activities. There were no simple relationships between plasma sex steroid concentrations and activity of hepatic microsomal UDPGT in common carp.

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