Seasonal profiles of sex steroid hormones and corticosterone of Silver Pheasant *Lophura nycthemera jonesi* maintained in captivity
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**Abstract** Plasma levels of sex steroid hormones and a stress hormone were monitored in captive male and female Silver Pheasants *Lophura nycthemera jonesi* once a month for 12 months. The birds were reared in outdoor cages, each containing a male and a female, under natural conditions of temperature and photoperiod. The circulating hormone levels were measured by the radioimmunoassay (RIA) method. Male total testosterone level was clearly bimodal with maxima in February and July. However, male estradiol level remained low throughout the year. Female estradiol level surged significantly in February only and female total testosterone level peaked in February and July at the same time as the bimodal peaks of male total testosterone. Silver Pheasants maintained in captivity had lower corticosterone levels than those restrained in a small enclosure. In February, females in captivity laid 3-6 eggs per clutch. These results suggest that captivity is a valuable route for the better propagation of this species.

**Key words** Captivity, Corticosterone, Estradiol, *Lophura nycthemera jonesi*, Total testosterone

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