

SOMSAK LIMKERD : PATTERNS OF SERUM TESTOSTERONE, CORTISOL AND SOCIAL BEHAVIOURS DURING SEXUAL INTERACTIONS OF MALE Macaca fascicularis IN CAPTIVITY. THESIS ADVISOR : ASSO. PROF.USANEE YODYINGYUAD, Ph.D. 88 PP.

The thesis was designed to study patterns of serum testosterone, cortisol and social behaviours during sexual interactions of male Macaca fasciculrais in captivity. Six male monkeys, 4 - 5 years of age were selected. Each was caged with a mature female having 3 continuously normal menstrual cycles before starting of the experiment. Social behaviour observations were made for a duration of 1 month, testosterone and cortisol levels, using method of Radioimmunoassay (RIA), were also studied. Rhythmic fluctuations in reproductive and aggressive behaviours of males occurred in relation to different phases of the menstrual cycle of female partners. High levels of reproductive and aggressive behaviours were seen near midcycle phase, gradually and obscurely decreased during luteal and follicular phase. There was no correlation between testosterone, cortisol and male behaviour.