

TESTICULAR INFLUENCE ON THE ADRENOCORTICAL ACTIVITY  
IN A SAHARA DESERT RODENT, *PSAMMOMYS OBESUS*

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In the sand rat, *Psammomys obesus*, live trapped in the field in the Algerian Sahara desert, the castration carried out during the breeding season (in autumn), induced important modifications in the adrenal cortex. Despite the slight variations observed in the morphometry of fasciculata zona (-3.2%) vs reticularis zona (+74.8%), we found an increase in adrenal cortisol content (+155.3%) and a decrease in plasma cortisol level (-41.7%), while sensitivity to ACTH remained unchanged. These results suggested a direct action of androgens which would be implicated, at least in part, in the endogenous determinism of the glucocorticoid seasonal cycle in this desert rodent.