

Effects of the oral administration of nonpolar extract from *Ardisia squamulosa* Presl (Myrsinaceae) leaves on spermatogenesis in rats

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ABSTRACT

Background Several *Ardisia* species have been found to possess numerous bioactivities but their reproductive toxicity has been poorly explored. In the present study, the effects of the leaf hexane extract of Philippine indigenous *Ardisia squamulosa* on epididymal sperm count, %viability and %aberration of sperms and weights of seminal vesicle, cauda epididymis, and testes in addition to the weights of liver, kidney, and body were evaluated. **Methods** The extracts at daily dose levels of 1, 10, and 100 mg/Kg BW in 10% polysorbate-80 in corn oil were administered by gavage for 8 successive days to 8-10 weeks old male SD rats and sacrificed after 9 days. Daily body weights and final organ weights were measured. Sperm from the cauda epididymis was extracted and measured according standard sperm parameters (sperm count, morphology, viability and membrane integrity). **Results** Significant findings were the decline of left epididymal sperm count to testis weight ratio and increase in %sperm morphological aberration from both cauda epididymis obtained with the 10 mg/Kg BW dose. **Conclusion** The hexane extract from *Ardisia squamulosa* had significant effect on sperm count but with negligible effect on sperm morphology and viability.

KEYWORDS

Myrsinaceae . spermatogenesis . sperm count . sperm morphology

REFERENCES

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