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Effects of major secondary metabolites of *Ricinus communis* on porcine uterine contractility

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Uterine contractility is essential for maintaining reproductive function and fertility. Some medicinal plants are reputed for their effects on fertility and reproduction [1]. *Ricinus communis* L. (Euphorbiaceae), commonly known as 'castor oil plant', is one of those plants well known for its ethnopharmacological usage in controlling reproductive functions and fertility [2,3]. Except for the triglyceride isolated from the beans of this plant, the mechanisms underlying fertility related pharmacological effects of its secondary metabolites remain elusive. Previously, it was shown that the stem bark extracts of castor oil plant could interfere with ovarian cell functions and secretory activity [2]. In continuation of that work, the current *ex vivo* study was undertaken to evaluate the effect of an alkaloid and a triterpene obtained from the stem bark of *R. communis* on porcine uterine contractility. The results indicated the involvement of these tested secondary metabolites in the excitement and depolarisation of the uterine smooth muscle cells.

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References

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