



كلية الزراعة

قسم الكيمياء الحيوية



جامعة الفيوم

## **Desmettianosides A and B, bisdesmosidic furostanol saponins with molluscicidal activity from *Yucca desmettiana***

### **Abstract**

Bioactivity-guided separation of the aqueous methanolic extract of *Yucca desmettiana* leaves, which in a preliminary screening exhibited significant molluscicidal activity, led to the isolation and structure elucidation of two new steroidal saponins (1 and 2). The structures of desmettianosides A and B, identified as bisdesmosidic furostanol glycosides with six and five sugar units, respectively, were established by detailed spectroscopic analyses of their NMR and MS data. Compounds 1 and 2 exhibited high molluscicidal activity against *Biomphalaria alexandrina* snails with LC<sub>100</sub> values of 6 and 11 mg/L, respectively.

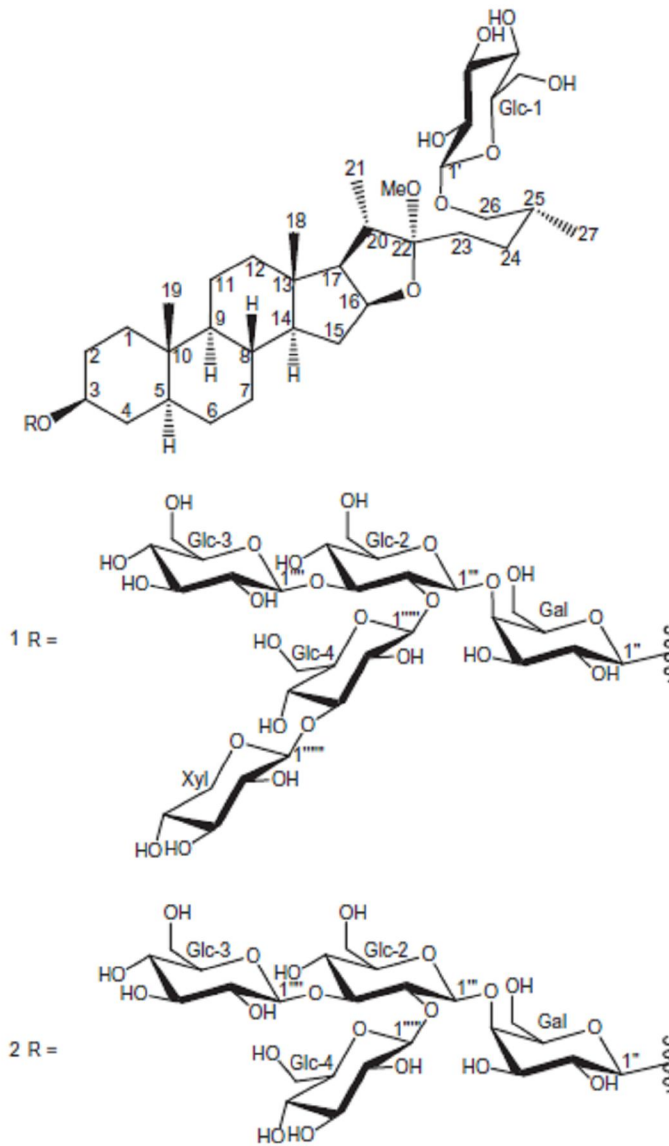


كلية الزراعة

قسم الكيمياء الحيوية



جامعة الفيوم



Chemical structure of compound 1 and 2.