

في هذا لبحث تم الوصول علي نوع من انواع شقائق النعمان من منطقة الغردقة بالبحر وتم تعريفه العلمي بالاستعانة بالمركز العلمي بالمتحف البريطاني . بعد اتمام عملية التعريف تم اختبار الفاعلية السمية للمستخلص الخام علي كل من الفئران وبعض الحشرات وقد اثبتت الدراسة فاعلية المستخلص ضد الفئران والحشرات مثل الذبابة المنزلية والبعوض ويرقات دودة القطن وعدم فاعليته ضد كل من البكتريا والطحالب .

The scientific names of the collected sea anemone samples were confirmed as *Entacmaea quadricolor* (Rueppellx Leuckant, 1828) or *Gyrostoma helianthus* (Hemprich and Ehrenberg 1834). The collected samples were obtained from the Red Sea at the vicinity of Hurghada. The crude aqueous ethanolic extract of the collected sea anemone was freeze-dried to be used in the determination of the Dose Response Curve in mice after i.p. injection. The profile of this curve showed that the threshold was at 20 mg/ml and a plateau at 28 mg/ml. The estimated LD₅₀ values of the Sea Anemone crude extract were " 19.28, 24.7 and 27.3 µg/insect for *M.domestica*, *C.pipens* and *S.littoralis* respectively while it was 732.8 mg/kg for mice when i.p. injected. On the other hand, the tested crude extract at the dose level 1/8 LD₅₀ when i.p. injected in 20 g mice showed potent inhibitory effect against AchE activity in both brain and blood of mice. Maximum inhibition was recorded 30 min after treatment. Throughout the test period the enzyme activity showed tendency to restore its original value. No activity was detected against the tested bacterial and fungal species as well as against brine shrimp.