

نظرا لقلّة الابحاث التي تجري علي الزواحف وندرته خاصة فيما يتعلق بظاهرة البيات الشتوي اجري هذا البحث بغرض القاء الضوء علي التغيرات التي تحدث في نوعين من الزواحف المصرية والتعرف علي التغيرات التي تحدث في نشاط انزيم الاستيل كولين استيريز والمحتوي البروتيني في اعضاء الجسم المختلفة سواء اثناء التغيرات الموسمية او اثناء التعرض المعملّي لدرجتي حرارة 5 و 37 درجة مئوية لفترات زمنية مختلفة وقد خلصت الدراسة الي اختلاف طريقة التأقلم بين النوعين.حيث اظهرت النتائج معدلات مختلفة في القيم المسجلة لاي من النوعين في كل موسم من المواسم التي تم رصدها

Cholinesterase activity and total protein content were studied in the brain, spinal cord, liver and serum of *C. ocellatus* and *P. sibilans* in summer and winter and after the acclimation at 5C and 37 C. After the acclimation at 5C marked decreases of cholinesterase activity and protein content in the brain and a remarkable increase of protein content in the liver of *C. ocellatus* were recorded. In *P. sibilans*, the cholinesterase activity and protein content were increased in the brain and decreased markedly in liver and serum. In winter, in *C. ocellatus*, cholinesterase activity decreased remarkably in the brain and spinal cord and increased in the serum, and the total protein content of the brain decreased while in the liver and serum it increased remarkably. In *P. sibilans*, cholinesterase activity and total protein content in the brain and spinal cord increased markedly whereas in the serum they were decreased. After acclimation at 37C, cholinesterase activity was greatly inhibited in the brain of *C. ocellatus*, whereas the total protein content was decreased. In *P. sibilans*, cholinesterase activity was increased in the brain and spinal cord, while a decrease was noticed in the liver. The total protein content in the brain was increased in the brain and decreased in the

liver. The interpretations of these results are discussed in detail.