

البحث الاول: (منفرد)

Title: Quantitative Assessment of Gamete Production in Two Commercially Harvested Clams, *Venerupis aurea* and *Tapes decussata* (Bivalvia: Veneridae) in Lake Timsah, Suez Canal , Egypt.

Author: Kandeel E. Kandeel

Journal: CATRINA (٢٠٠٦), ١ (١): ٤١-٥٢

<http://eses-catrina.com/index.php?news=١٣٤>

Abstract:

Monthly relationships between shell length and gonad weight for two clams of commercial value; *Venerupis aurea* and *Tapes decussata* from El-Taawen area in Lake Timsah, Suez Canal, were determined between August ٢٠٠٤ and September ٢٠٠٥. Spawning frequency and individual gamete production (fecundity) under natural conditions were assessed by monitoring fluctuations in the gonad weight of standard-sized individuals. The results showed that the gonadal development and spawning continue throughout the year. There is no evidence of clearly defined reproductive cycles. The two species showed no “reproductive senility” and spawned several times per year. Gamete production, expressed as weight loss at spawning, occurred at different rates throughout the consecutive spawning periods and was positively correlated with body size. Spawning efficiency increased or decreased linearly with size. The relative amounts of reproductive material released by examined clams of different sizes reached ٤٥.٣٤ and ٥٣.٦٢% of the gonad weight during December ٢٠٠٤ for *V. aurea* and *T. decussata*, respectively. Both species exhibited remarkable reproductive effort in Lake Timash.

Key words: Fecundity, Lake Timsah, spawning, spawning efficiency, Veneridae, *Tapes decussata*, *Venerupis aurea*.

عميد الكلية

قائم بعمل رئيس مجلس القسم

د/ عادل عبد الحكيم أبو العلا
الفاح

أ.د/ محمد عبد