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A FIRST RECORD OF *EOBANIA VERMICULATA* (O. F. MÜLLER, 1774), TERRESTRIAL SNAIL (GASTROPODA-HELICIDAE) FROM BAGHDAD, IRAQ

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ABSTRACT : The terrestrial snail *Eobania vermiculata* (O. F. Müller, 1774) were collected from three station in Baghdad Al-Karkh, Iraq between the period from June 2016 to July 2017. Then we studied the life cycle from the egg to maturity. We studied and photographed the external morphology of it's shell to identified the species. This species was recorded for the first time in Baghdad.

Key words : *Eobania vermiculata*, gastropoda, terrestrial snail, helicidae.

INTRODUCTION

The mollusca are a large phylum of the kingdom Animalia, they are forming a major part of the world fauna (Desoky, 2018). The gastropoda perform an important class in molluscans, and from the terrestrial gastropoda a family Helicidae, which our species belong *Eobania vermiculata*, which is an important land snail, causing a harmful damage in aagriculture (Ali *et al*, 2015).

So, Esraa (2013) was recorded that this species are attacking various plants. In addition, the mucous of this snail causes an unwanted smell which prevent other animals to eating the plants (Sallm *et al*, 2009). Some studies focusing on this species as abiological indicator (Itziou, 2011; Khalil, 2013; Ali *et al*, 2017; Mobarak *et al*, 2017).

Eobania vermiculata spread in many countries, in Saudi Arabia (Amr and AL-Shammary, 2013), Qatar (Al-Khayat, 2010), Japan (Ueshima *et al*, 2004) and Georgia where six or seven species of Helicidae was presented and *E. vermiculata* is a new species in this country (Mumladze *et al*, 2014; Mumladze and Paposhvili, 2016) as well as this species was recorded in United states of America (Robinson, 1999), Belgium, Germany, Hungaria, Australia, Japan, South Africa, Egypt, Jordon, Spain, Greece, Ukraine, United kingdom, USA (Notton, 2016; Ronsamans and Vanden, 2016) and in Al-Basrah, Iraq (Al-Khafaji *et al*, 2016) as a first record where sited at 433 Km away from Baghdad, Iraq.

MATERIALS AND METHODS

The specimens of terrestrial snail *E. vermiculata* were studied in three stations in Baghdad Al-Karkh from June 2016 to July 2017 in it's habitat (the three stations) to study their life cycle from the eggs to the maturity. The height, width, aperture width and aperture height of the shell were measured using a ruler, about 50 specimens cleaned with water then were preserved in 70% alcohol. The classification by using Al-Khafaji *et al* (2016) and Francisco (2012) after that snail alive and it's shell photographed by using a mobile camera.

RESULTS AND DISCUSSION

The taxonomy

Phylum : Mollusca

Class : Gastropoda

Order : Stylommatophora

Family : Helicidae

Eobania vermiculata (O. F. Müller, 1774)

The snail habitat

The terrestrial snail *E. vermiculata* were lives in citrus orchard and it may protect itself under stones or plants leaves or clay (Mohamed and Ali, 2013). The result of present study found that the highest population in spring then in summer, but Yaakoub *et al* (2016), Ismail *et al* (2017) found that the highest population in summer then spring this is due to environmental differences a mong the countries.

Fig. 1: *Eobaniavermiculata* (O. F. Müller, 1774) whole amount.

Fig. 2 : *E. vermiculata* (Shell dorsal view).

Fig. 3 : *E. vermiculata* (Shell ventral view).

The life cycle

The development of the snail affected by temperature variations, so in spring we found the snail laidit's eggs in cluches, each one contained from 20-29 eggs, putting them in a hole at the soft soil, then after 14 days appears the Juvenile. The Juvenile period about 121 days. The life cycle about 392 days. This result is almost similar to what it found by Heikal (2015).

The snail description

The snail alive having yellowish foot and brown head (Fig. 1). The shell : it was 5 convex whorls with brown to chocolate spots, on it. The shell height was (15.3-16.5) mm shell diameter was (29-30) mm (Fig. 2) with inconspicuous umbilicus. The apertural with white margin cyclically or circularly shape, with width (16.9-17.1) mm (Fig. 3).

This measurements are similar to what Rada *et al* (2012), Korabek *et al* (2015), Ali (2017) found, especially when Korabek *et al* (2015) believes that the snail shell morphology is important to diagnostic the species characters.

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