



RE-DESCRIPTION OF NEW RECORD SPECIES OF CLICK BEETLE *NEOCARDIOPHORUS PILICORNIS* PLATIA (COLEOPTERA: ELATERIDAE)

FROM BAGHDAD PROVINCE, IRAQ
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Abstract

A new record Elateridae Species *Neocardiophorus pilicornis* Platia 2008, is re-described from Baghdad Province in Iraq. The entire body Morphological characters and differential diagnosis are given.

Keyword: Elateridae, *Neocardiophorus pilicornis*.

Introduction

Wireworms, the common name for larval click beetles are a serious soil-dwelling pest of many different crops which bore into the underground portions of the plants like seeds, roots and tubers. Many species belong to genus *Agriotes* were recorded in the middle of Iraq and reduced market quality and crop production (Yonus and Al-Jorany, 2010; Al-Jorany, 2011; Al-Jorany and Sadik, 2012; Yonus and Al-Jorany, 2013; Al-Jorany and Sadik, 2014).

Neocardiophorus pilicornis Platia 2008 a Click beetle belongs of subfamily Cardiophorinae Candeze (1860) which is a worldwide family Elateridae Leache (1815) subfamily. It contains 38 genera including 1100 species globally (Akhter *et al.*, 2011). This subfamily includes two tribes, Nyctorini Gurjeva (1996) and Cardiophorinae Candeze (1860), that Nyctorini includes monotype genus *Fleutiaux* (1941) first who raised Cardiophorinae to subfamily. This subfamily also confirmed by Stibick (1979) and Vats and Chauhan (1991). In Palearctic region Cate (2007) inserted 11 Genera consist of six subgenera including 676 species.

N. pilicornis Platia was the first species of the genus that have been described from Iran (Platia, 2008), *N. fausti* Gurjeva (1996), from Turkmenistan and *N. mamajeva* Gurjeva (1996) from Uzbekistan described the third known species (Platia, 2008).

Materials and Methods

The present study was done throughout the years 2013-2014 at the experimental farms, College of Agricultural Engineering Sciences, University of Baghdad, in addition to other special farms in Babylon provenance. Various methods were employed to collect the adult species of Elateridae. Two simple light traps were placed in the field from first of March to the end of July. The light source U.V. was a fluorescent bulb (40 W) and placed at height between 2-3 m from the ground. The insect was gathered weekly and the Elateridae beetles mentioned in 70% alcohol until diagnosis.

Pitfall traps were made to collect click-beetle samples, that traps were manufactured from a half a liter plastic container measuring with Diameter 50 mm and wide 250 mm, 4% formaldehyde solution was used to save the beetle insect. Randomly six Pitfall traps miners were placed in the field with 20 m distance between its. Traps were checked

weekly and the specimens were collected mentioned in 70% alcohol.

Direct gathering was used too, this method presents the advantage of a qualitative gathering and the observation of relationship between insect and host plant.

Results and Discussion

Subfamily: **Cardiophorinae** Candeze, 1859

Tribe : **Cardiophorinae** Candeze, 1860

Neocardiophorus Gurjeva, 1966

Neocardiophorus pilicornis platia, 2008

Material Examined

Description : Medium gloss; tricolored; head color is black except for front margin rufous; pronotum ferruginous with indistinct, different wide misleading, scutellum entirely is completely black or with rufous shadings; The yellowish elytra has a black narrow spot at the bottom extending from Scutellum apex the top to the rear third, in large part, including the first three interstate; the legs, antennae and ferruginous are yellow; Covered with dense yellow rolls, partially set up on elytra, mounted on antennae intense in the front margin, Its thickness is moderate, approx. In the middle directly, above the clypeus is protruding only; small and very dense punctures, adjacent or the intervals are very short. Long Antennae, Overrun of pronotum posterior angles apices by three articles, supplied with twelve complete articles. Second subconical, a little longer than wide; third-seventh subtriangular, approx. 3x longer than wide; eighth eleventh one is more slender, with subparallel sides; another shorter than the last, ellipsoidal.

Pronotum 1.15x longer than wide, at middle is wide, very convex; arcuate sides strongly, lengthily sinuate towards base; posterior angles is rather acute, diverging, with very fine carina; two sizes punctures; larger. Merged and slightly umbilicate punctures are regularly mixed with two or three the finest and simple puncture on entire surface. Scutellum heart-shaped, be wide or slightly more than wide,, moderately impressed and finely punctured. Elytra widest at pronotum base of, 2.5x longer than it; suboval sides, widest at middle; striae well-marked and punctured; interstriae subconvex, with rough surface and dense punctuation. Claws is simple.

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