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Discovery of the genus Neotrichoporoides Girault, 1913 (Hymenoptera: Eulophidae) in Iraq, with three new records

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ABSTRACT. Through a survey that was conducted in Basrah Province, Southern Iraq in 2021, specimens were collected from alfalfa fields (Medicago sativa L.) using a sweep net. These specimens were identified as Neotrichoporoides Girault, 1913 (Hymenoptera: Chalcidoidea, Eulophidae), which is a new report of the genus in Iraq. Three species were collected and identified, i.e. Neotrichoporoides basiflavus Li & Li, 2021; N. cavigena Graham, 1987; and N. viridimaculatus (Fullaway, 1955). An illustrated key for identifying Neotrichoporoides species in Iraq and notes on diagnostic characters of the newly recorded species along with illustrations are provided. The distribution map of the Iraqi species is presented. Furthermore, a preliminary checklist of recorded species of Eulophidae from Iraq is provided.

Keywords: Chalcidoidea, checklist, Medicago sativa, parasitoid, taxonomy, Tetrastichinae

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INTRODUCTION

The family Eulophidae (Hymenoptera: Chalcidoidea) is the largest in the superfamily with more than 6000 species in 328 genera (UCD Community, 2023). Nevertheless, only a few studies have been done on these important wasps in Iraq (Bouček & Askew, 1968; Al-Azawi, 1967, 1971; OILB, 1971; Swailem et al., 1975; Abdul-Rassoul, 1976; Awadallah et al., 1979a, 1979b; Hassan, 2012; Mansowr et al., 2024). Tetrastichinae Förster, 1856 (Hymenoptera, Eulophidae) is the largest in the family (UCD Community, 2023). The genus Neotrichoporoides Girault, 1913 (Hymenoptera: Eulophidae) has 73 species worldwide, and 28 species in the Palaearctic region (UCD Community, 2023; Jafarlu et al., 2023). Neotrichoporoides species are primary parasitoids of Diptera (Insecta) in the families Anthomyiidae and Diopsidae (Bouček, 1988; La Salle, 1994). Diagnostic characters of Neotrichoporoides are as follows: Body in majority of species with a metallic tint, and occasionally with some parts of the body yellowish; pronotum almost always elongate; mesoscutellum subequal to mesoscutum; funiculars usually elongate; propodeum clearly longer than dorsellum; fore wing with marginal vein 6.5-9.5× as long as stigmal vein; stigma with a short stem (Graham, 1987).

Alfalfa, Medicago sativa L. (Fabaceae) is one of the most economically important crops which grows worldwide (Bolton, 1962; Hirsh, 2014). This crop is attacked by many important pests (Miller & Jensen, 1970; Sisterson et al., 2018), and some natural enemies are their parasitoids (Lotfalizadeh et al., 2015; Sisterson et al., 2018; Jafarlu et al., 2022; Mansowr et al., 2024). One of the most important of these parasitoids is the family Eulophidae. Considering these issues, the objectives of this research are (1) to