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**SOME CHRYSOMELIDAE (COLEOPTERA) FROM
IRAQ**

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ABSTRACT

An annotated list based both on personal collections and on literature records, is presented for twenty species and subspecies of Chrysomelinae from Iraq. Eight of which are newly recorded, bringing the total number of species and subspecies for Iraq to 25. Localities and host data are given for most species .

INTRODUCTION

Chrysomelidae is one of interesting and economically important family of the order Coleoptera. It is of world-wide distribution and rich in species.

Over 25.000 species being known from all over the world (Mohr, 1966). Most of the species are herbivorous attack plant leaves mainly Labiatae and Cruciferae.

The Iraqi species of Chrysomelidae particularly sub-family Chrysomelinae are rather poorly known till now, the total number of species so far recorded approaches twenty. Early record was reported by Weise (1916), who

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referred in his catalogue to the following five species : **Chrysomela polita** L., **Chrysomela rufomarginata** Baly, **Chrysomela sellata** Wse., **Neophaedon pyritosus** Rossi, and **Phytodecta fornicatus** Brugg. Three further species were recorded by Holdhaus (1919) namely **Chrysomela grata** Fald., **Colaphellus apicalis** Mene., and **Entomoscelis berytensis** Reiche. Since then no more chrysomelids were reported until Khalaf (1961) listed six species not recorded before: **Chrysolina coerulans** (Scriba), **Chrysolina menthastri** (Suffr.), **Chrysolina sacarum** (Wse.), **Chrysolina sahlbergi** (Mene.), **Melasoma populi** L. and **Plagi-odera versicolora** (Laich.). Subsequently, six species and subspecies have been added for the Iraqi fauna by Hussain (1963), Derwesh (1965), Kaddou (1967), Knopf (1969) and El - Haidari et al. (1972). These species and subspecies were : **Colaphellus sophiae** Sch., **Chrysomela coerulans angelica** Reich., **Chrysomela orientalis** Ol., **Chrysolina menthastri herbacea** Suffr., **Chrysomela chalcites** (Germ.) and **Chrysolina marginata** (L.). Gruev (1982) recorded two species of Chrysomelinae, the authors were not aware of these two species in time of writing this paper. The first comprehensive account of the Chrysomelinae of Iraq was given by Jebara (1986), he described and classified nineteen species five of which were new to science. In spite of the economic importance of some species of Chrysomelinae, no work has been done on its biology, ecology or control in Iraq

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The purpose of this study is to bring together into one paper all of the species of Chrysomelinae, their distribution and information on their host plants as much as possible .

MATERIALS AND METHODS

Most of the chrysomelid specimens of this study were either collected as adult insects in the field or were reared from infested material in the laboratory. All chrysomelids were individually identified to the generic level and sometimes to the species using keys of Mohr (1966). For final determination, most specimens were sent to Dr. L. N. Medvedev, of Institute of Animal Morphology and Ecology, Moscow, USSR. Specimens of most species recorded here have been deposited in Iraq Natural History Museum .

RESULTS AND DISCUSSION

Twenty species and subspecies of Chrysomelinae, belonging to six genera are reported from different localities of Iraq. Of these thirteen were reported before and the remaining eight (marked with an asterisk in table 1) are new records, bringing the known total number for Iraq to 25 species and subspecies.

The species along with the localities and their host plants are given in table I. The genera arranged according to Mohr's (1966) classification. Species reported by Weise (1916) are not represented in the table I, because the unknown indication of their localities, since we have not succeeded in collecting them in the field .

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It will be seen from the table that the majority of the species found here are rather widely distributed in northern parts of Iraq. They feed on wild plants and few of them attack cultivated plants and forest trees. Some of these species show a host specificity attacking only a particular plant whereas others are capable of breeding on several plants belonging to same group. The host plant of several species were errorily reported in some previous papers due to wrong consideration of the host. Because most of the previous consideration of the host plants were determined on the bases of finding these species sitting on foliage of the various plants reported as host, for instance Hussain (1963), Shalaby et al. (1966) reported that eggplants, celery, and barley to be host plants for both *C. apicalis* and *C. sophiae*. It should be taken in mind that the insect can be found sitting on foliage of various plants but could not be observed causing any damage (Knopf, 1969).

In the present work, the host plant of chrysomelid beetles was determined on the bases of the precenc of their larvae on the plants recorded as a host here. As well Khalaf (1961) reported that *C. populi* was collected from Baghdad area. It appear that this location is doubtful to this species. The largest number of the species is found from late March until October although some found to exist during winter time such as *C. apicalis* and *C. sophiae* .

This report we cited here hoping that will furnish a good base for further and more detailed studies in the future

Table I. Chrysomelid species, their distribution and host plants in Iraq

Chrysomelid species	Localities	Host plants
Chrysolina Motsch.		
* <i>C. aeneipennis</i> (Reiche)	Shaqlawwa, Ser-i Rash (Arbil)	Unknown
<i>C. chalcites</i> (Germ.)	Arbil	<i>Pinus brutia</i> (Pinaceae)
<i>C. coerulans angelica</i> Reiche	Diana, Rowanduz (Arbil); Mugdadiya (Diyala); Sinjar, Agra (Mosul).	<i>Mentha longifolia</i> (Labiatae)
* <i>C. c. splendorifera</i> Motsch.	Jindian (Arbil); Sa'diya (Diyala)	<i>Mentha longifolia</i>
* <i>C. didymata syriaca</i> Wse.	Salahaddin, Hejran (Arbil)	<i>Hypericum perforatum</i> (Hypericaceae)
* <i>C. dohrni</i> Farim	Hatra (Mosul)	Unknown
<i>C. grata</i> (Fald.)	Salahaddin, Ser-i Rash (Arbil); Mosul; Tawila, Derbendikhan (Sulaimaniya)	Unidentified weed
<i>C. marginata</i> (L.)	Akashat (Ramadi); Mosul	<i>Achillea conferta</i> (Compositae)
<i>C. menthastri herbacea</i> (Duft.)	Sikrin, Sersank, Sulaf (Dohuk); Hejran, Haj Omran (Arbil); Mosul	<i>Mentha longifolia</i>
<i>C. orientalis</i> (Ol.)	Ramadi; Abu Ghraib (Baghdad)	<i>Platanus orientalis</i> (Platanaceae)

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<i>C. saccharum</i> (Wse.)	Sinjar (Mosul) ; Husaiba (Ramadi)	Unidentified weed
<i>C. sahlbergi</i> (Men.)	Adhaim, Delli Abbas (Diyala)	
<i>Chrysomela</i> L.	Sikrin (Dohuk)	Unknown
<i>C. populi</i> L.	Rowanduz, Shaqlawa, Kora, Choman Rayat (Arbil) ; Zakhó (Dohuk); Mosul ; Dokan (Sulaimaniya)	<i>Populus nigra</i> (Salicaceae)
* <i>C. coelestina</i> Baly	Salahaddin. Ser-i Rash (Arbil)	Unknown
<i>Chrysochlea</i> Hope	Salahaddin (Arbil)	
* <i>C. tristis</i> (F.)		
<i>Colaphellus</i> Wse.	Country-wide	<i>Brassica rapa</i> , <i>Rhaphanus sativus</i> , <i>Lepidium sativum</i> (Cruciferae)
<i>C. apicalis</i> Men.		
* <i>C. sophiae</i> hoefti Men.	Country-wide	<i>Sinapis arvensis</i> , <i>Brassica rapa</i> , <i>Rhaphanus sativus</i> , <i>Lepidium sativum</i> (Cruciferae)
<i>Plagiodera</i> Redt.		
<i>P. versicolora</i> (Laich.)	Mosul ; Shaqlawa (Arbil) ; Baghdad	<i>Salix</i> spp., <i>Populus</i> spp. (Salicaceae)
<i>Entomoscelis</i> Chev.	Country-wide	<i>Sinapis arvensis</i> (Cruciferae) and unidentified weed
<i>E. berytensis</i> Reiche		
* <i>E. sacra</i> L.	Hatra (Mosul) ; Gali Awa (Arbil)	<i>Sinapis arvensis</i>

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