

مفتاح لعزل انواع خنافس ورق النبات

(Coleoptera) Chrysomelidae في العراق

(Coleoptera) chrysomelidae

Abstract

This study consists of a certain key to separate fifteen types of (Coleoptera) chrysomelidae family in Iraq. The samples have been collected by making scientific trips to some different Iraqi provinces or by lending from scientific establishments. The researcher has classified and applied them by depending on male-genitalia. The male-productive organs have been fixed on a small lable by glue with each sample that represents its kind, sa as to be sure of these kinds when they are compared to other productive organs. All new kinds have been sent to the British Natural History Museum and have been classified as new kinds for science, but they are not described yet.

chrysomelidae

Weise (1916)

Derwesh (1963)

Derwesh (1965)

Shalaby *et al.*, (1966)

Kaddou (1967)

El- Haidari *et al.*, (1972)

Abdul Russoul (1976)

Al- Ali (1977)

Jebara (1986)

Daccordi (1979)

Bryant (1957)

Aslan, *et al.*, (2002)

		-2
. 3		-
(2) 63 – 6		
	. <i>C. chalcites</i> (Germar)	-3
10 – 8.5		
	. <i>C. grata</i> (falderman) (3)	-
- 8.5		
	. <i>C. rosica</i> sp. Nov. (4) 9	
	<i>Chrysomela</i> Linnaeus	
		-1
	.2	-
	. <i>C. populi</i> Linnaeus..... (5) (11 – 9.5)	-2
	. 3.....	-
	.4.....	-3
	. <i>C. Sacarum</i> wise..... (6) 7.5 – 5.5	-
65 – 60		
	. <i>C prunica</i> sp. Nov. (7)	-4
	.5	

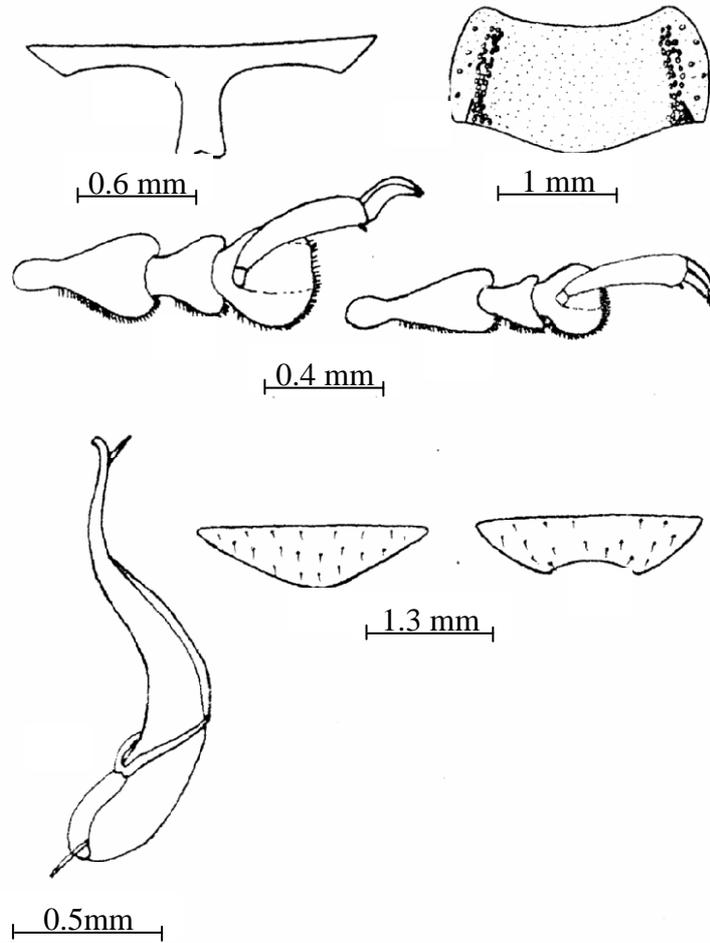
			-
		.6.....	-5
			-
		. <i>C. orientalis</i> oliver..... (8) 8 – 6.5	-
			-
) 8.5 – 7.5	
		<i>C. Sahlbergi</i> meneter.....(9	-6
			-
		9.5 – 7.5	
		<i>C. menthastri</i> Suffrian.....(10)	-
			-
			-
		<i>C. coeruleans</i> Scriba (11) 8.5 – 7.5	
		Colaphellus wise	
			-1
		2.....	-
			-
		<i>C. apicalis</i> menter (12) 5.5 – 4	-2
			-
		3.....	-
			-
		<i>C. Sophiae</i> (Schaller) (13) 5 – 4.5	

4.5 - 3.5

C. alei sp. Nov.....(14)

- 3.7

C. mesopotamicus sp. Nov..... (15) 4.8



Chrysolina marginata

(1)

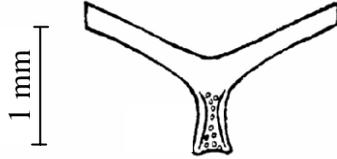
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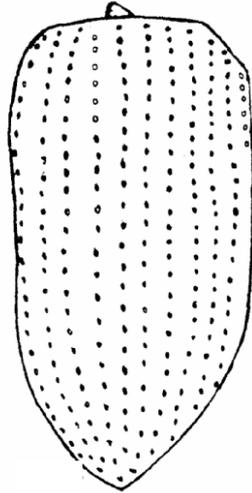
1.3 mm



0.6 mm



1 mm



1.5 mm

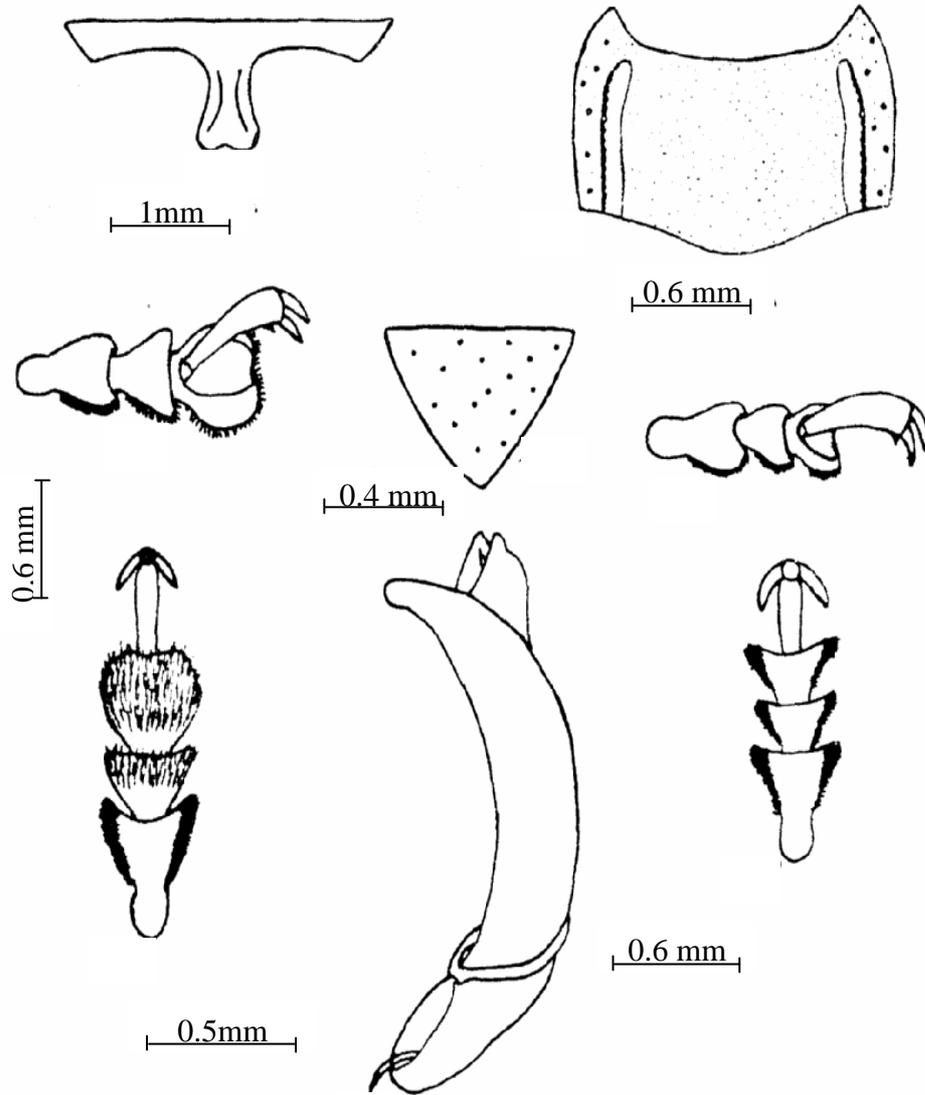


0.3 mm

Chrysolina chalcites

(2)

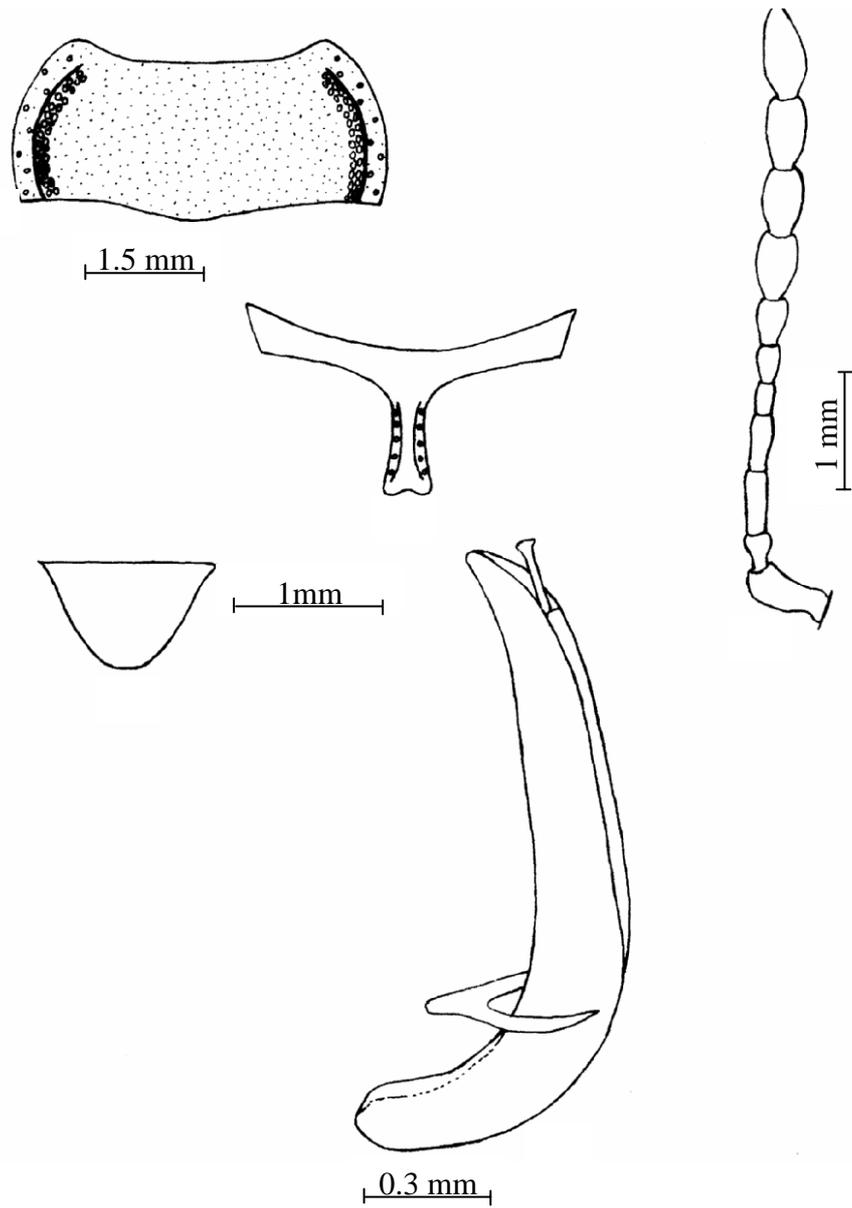
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Chrysolina grata

(3)

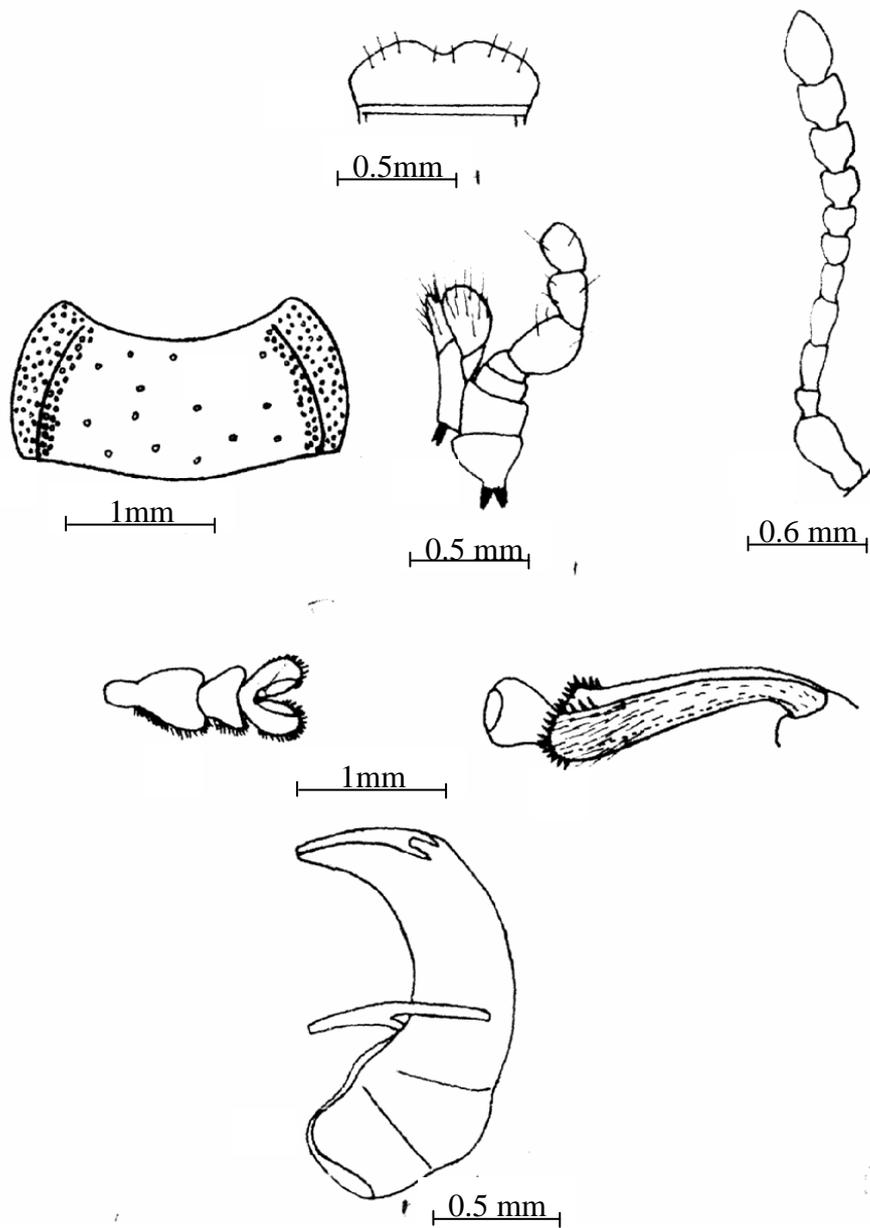
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Chrysolina rosica sp. Nov.

(4)

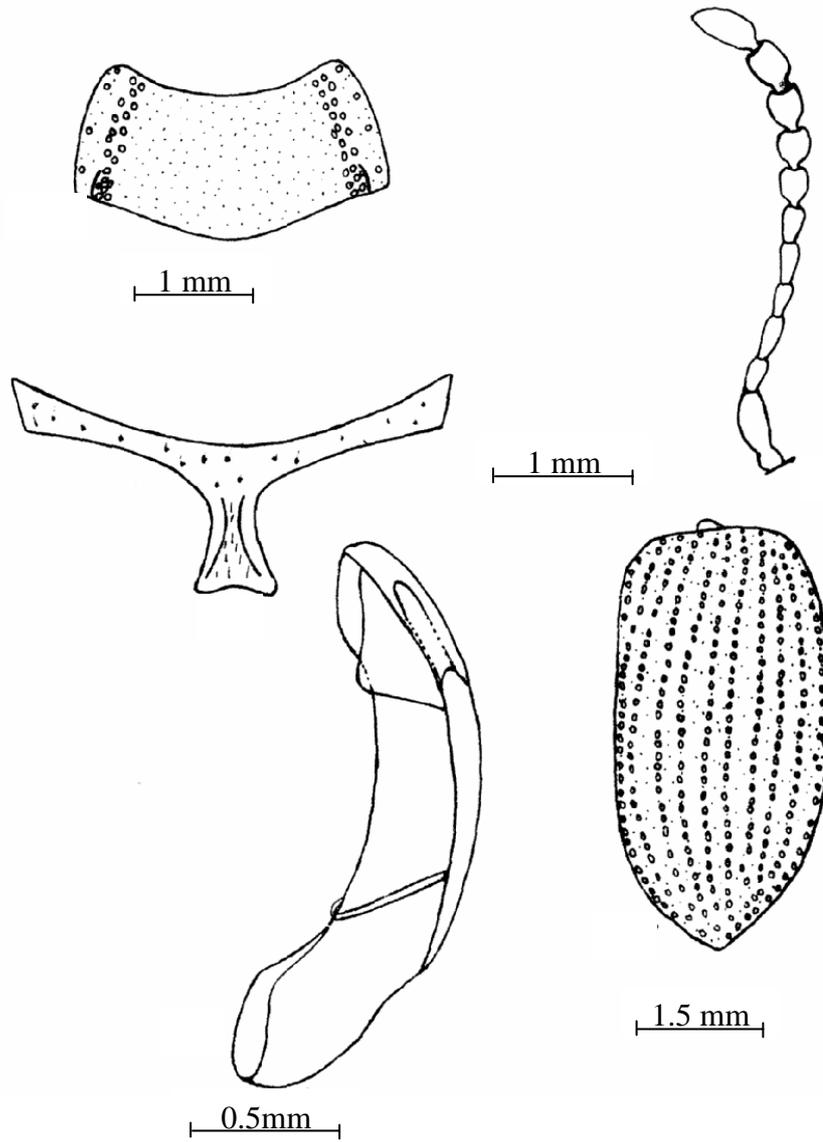
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Chrysolina populi

(5)

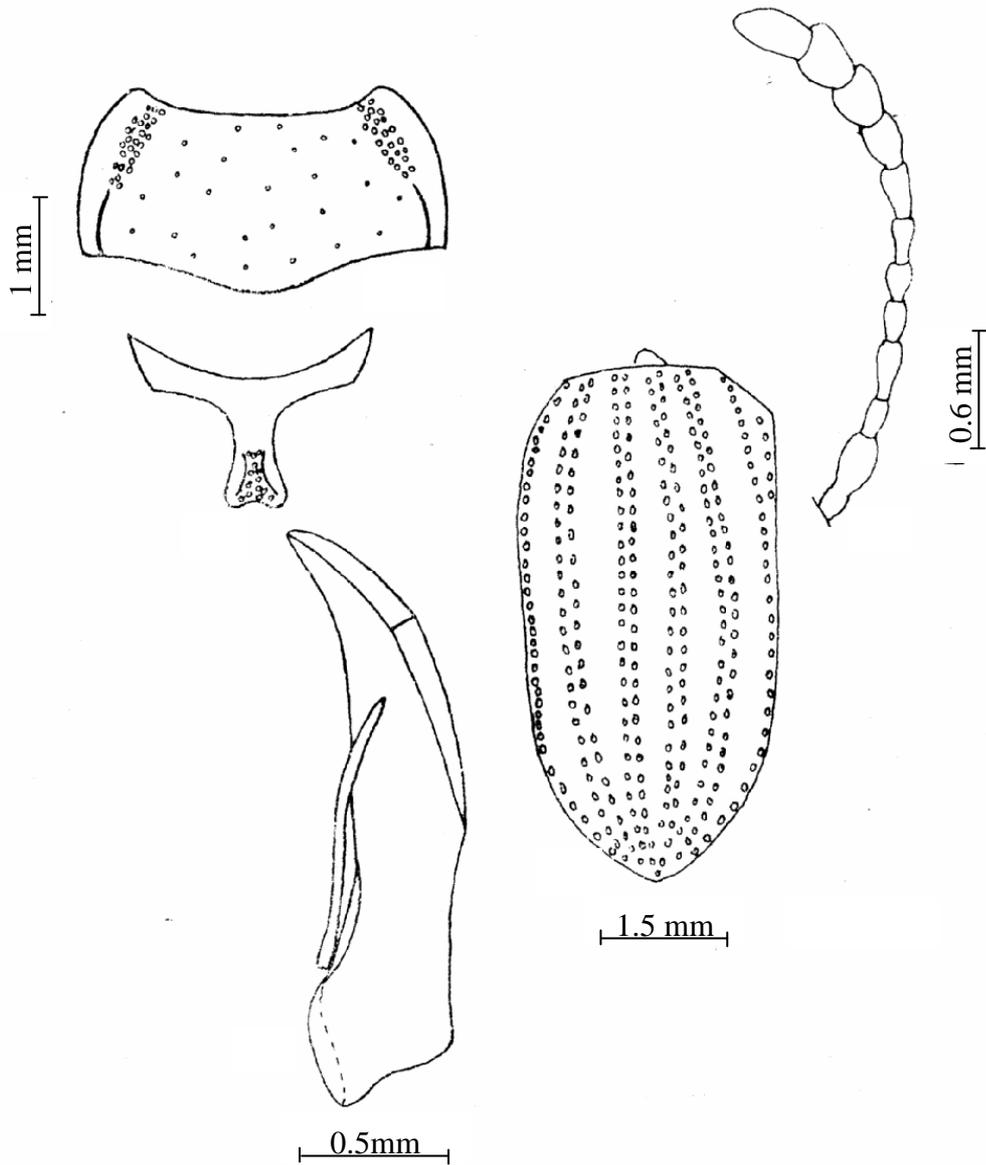
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Chrysolina sacarum

(6)

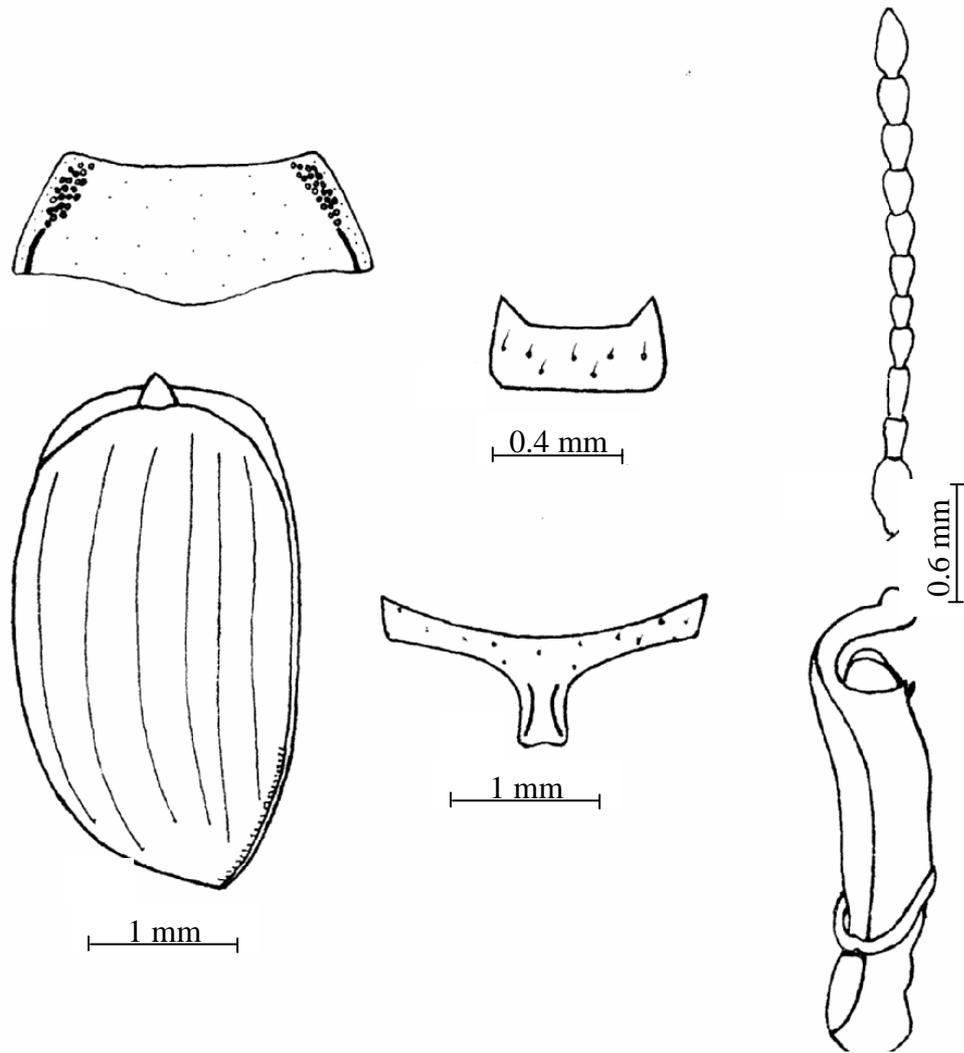
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Chrysolina prunica sp. Nov.

(7)

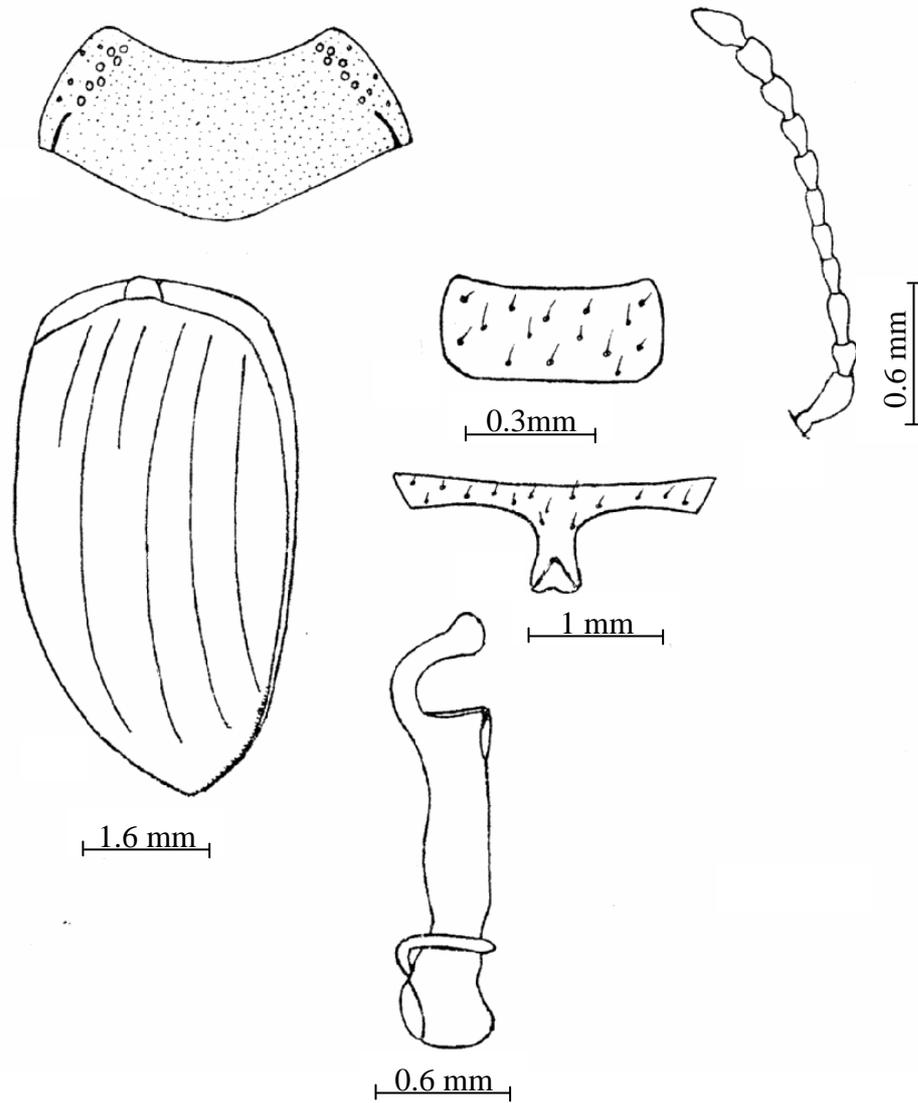
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Chrysolina orientalis

(8)

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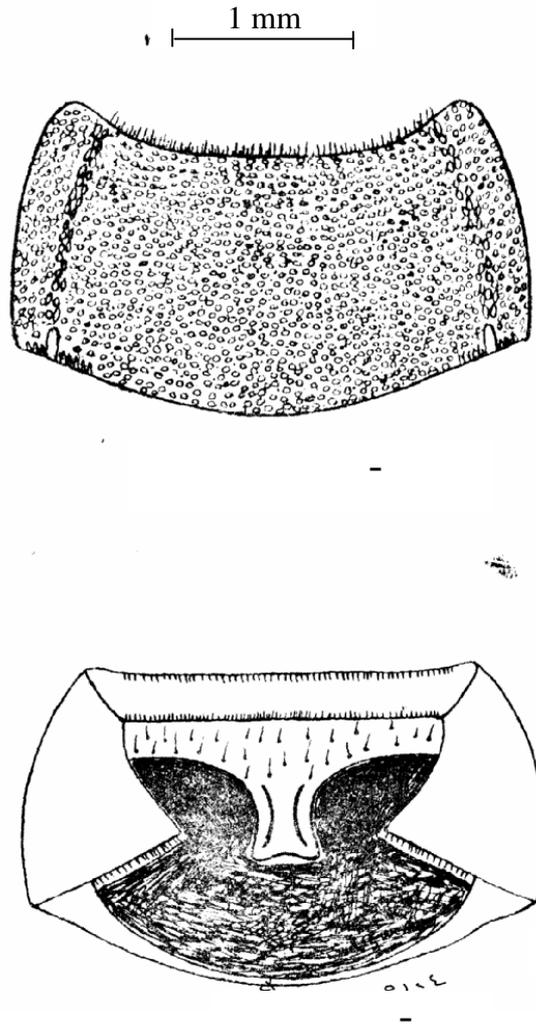


Chrysolina sahlbergi

(9)

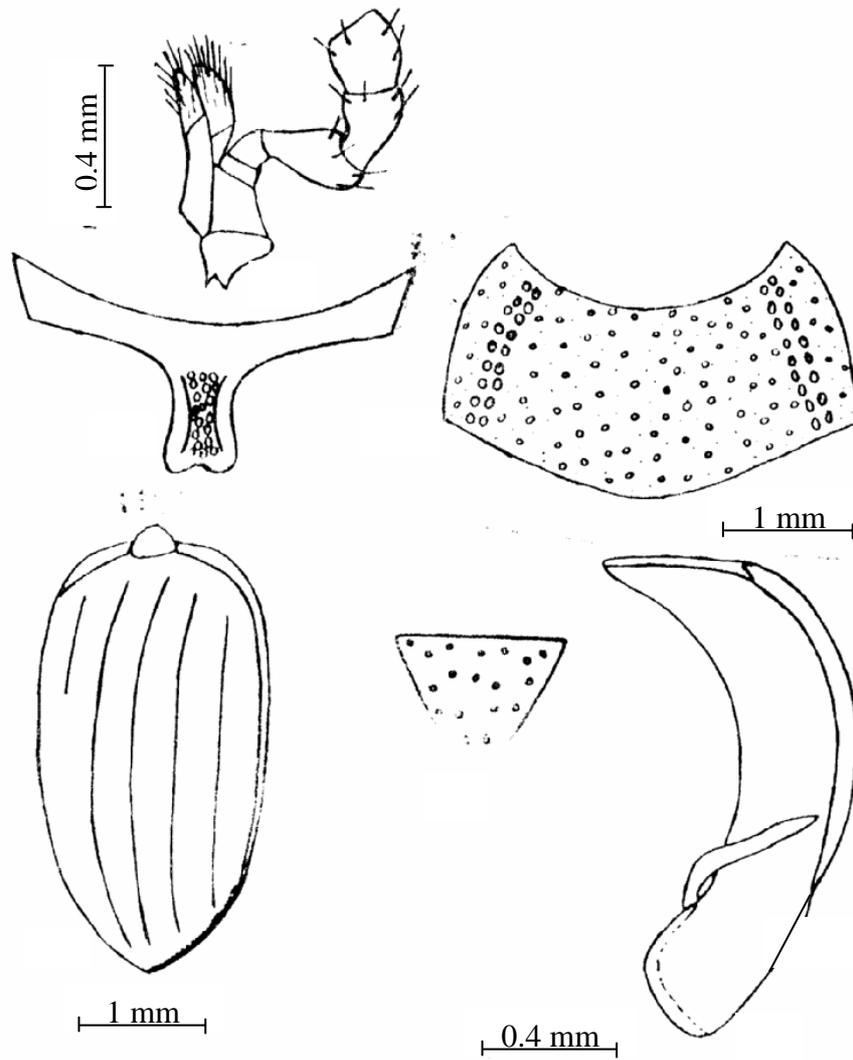
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Chrysolina menthastri

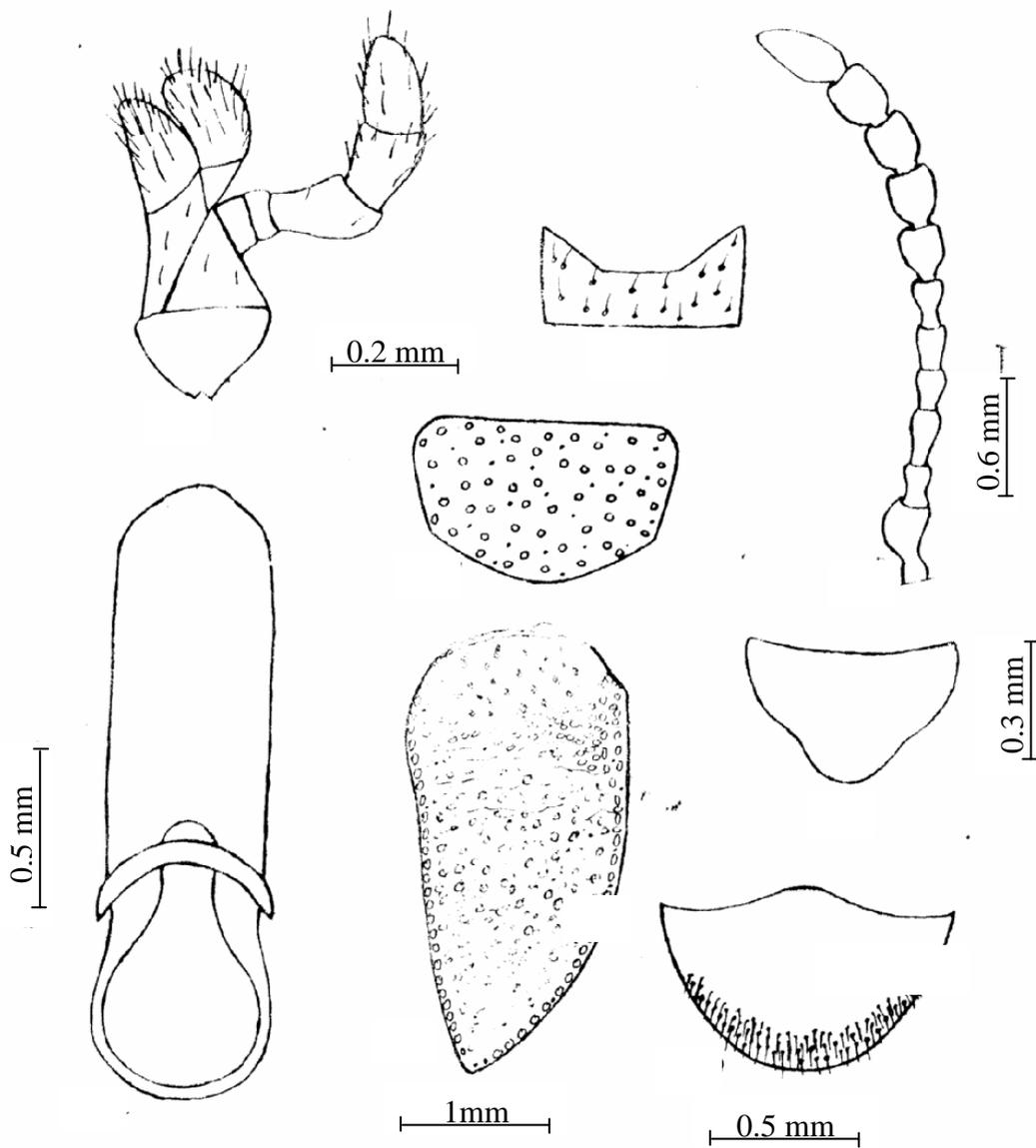
(10)



Chrysolina coeruleans

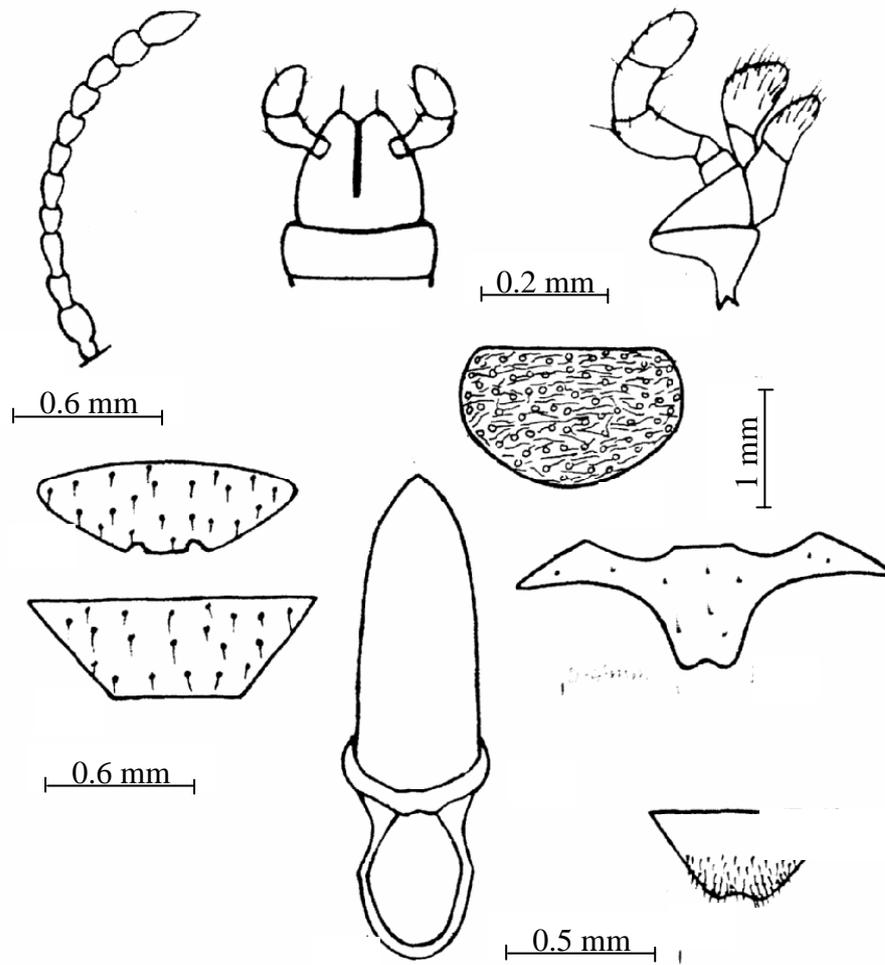
(11)

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Colaphellus apicalis

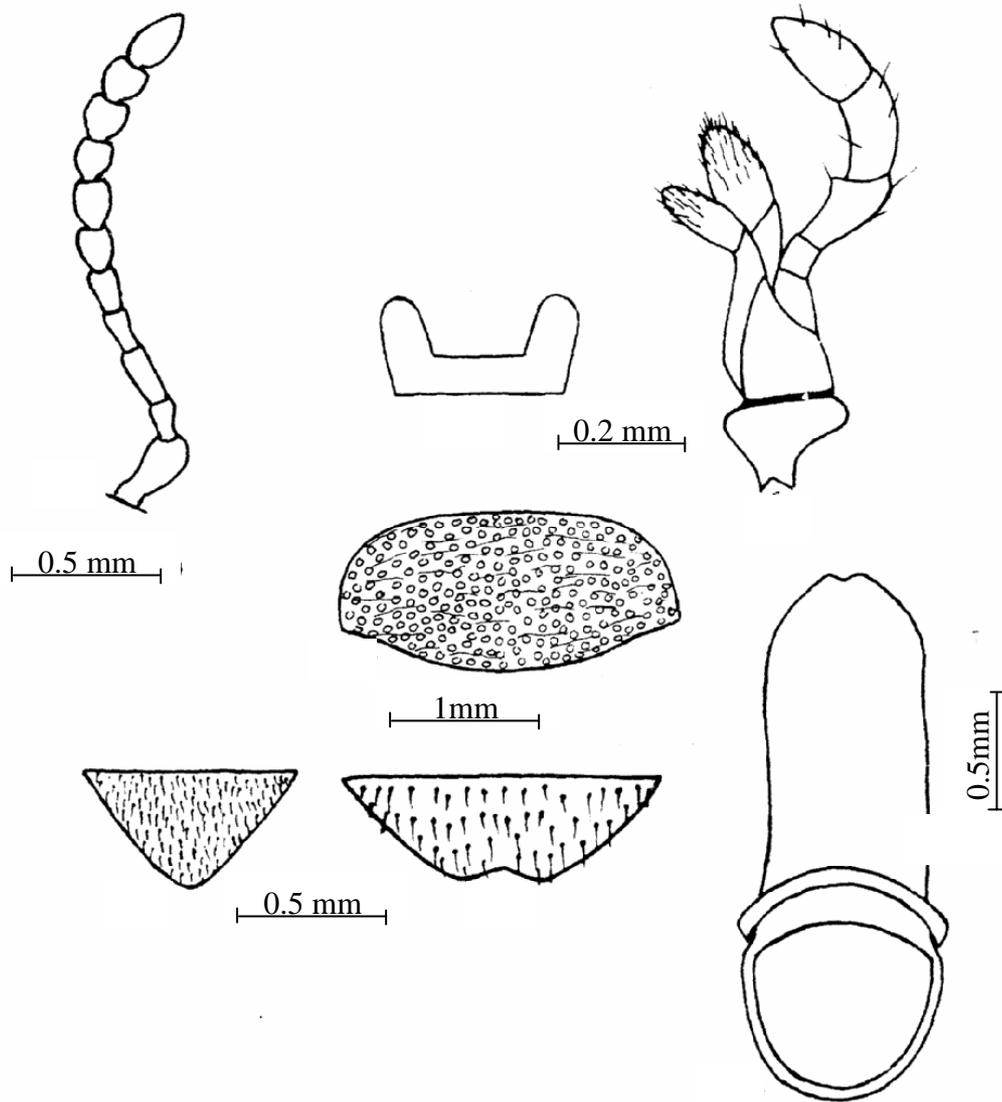
(12)



Colaphellus sophiae

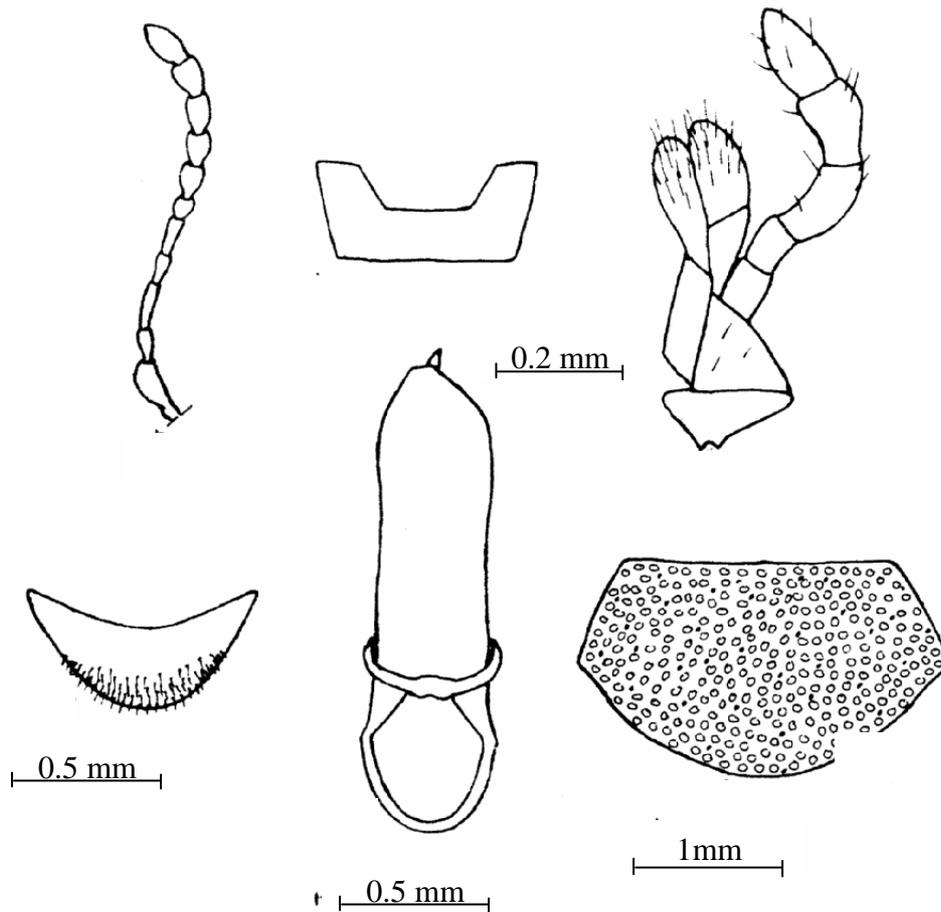
(13)

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Colaphellus alei sp. nov.

(14)



Colaphellus mesopotamie sp. nov.

(15)

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(Coleoptera) Chrysomelidae

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