

## Two New Species of The Ostracode Genus *Buntonia* Apostolescu of The Paleocene- Eocene From West and North Iraq

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### ABSTRACT

Two new species of the Ostracode genus *Buntonia* Apostolescu ,1961 have been described for the first time from the Rataga Formation (Lower- Upper Eocene) and Aaliji Formation ( Lower Paleocene-Lower Eocene) west, north of Iraq , namely ; *Buntonia desrtensis* sp.nov., *Buntonia aalijiensis* sp.nov.

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بعض الانواع الجديدة لجنس البونتونيا (اوستراكودا) من الباليوسين - الايوسين من غرب  
وشمال العراق

### الملخص

في هذا البحث تم وصف نوعين جديدين من الاوستراكودا يعودان للجنس *Buntonia* من تكوين  
الرتكة (الايوسين الاسفل - الاعلى) وتكوين العليجي (الباليوسين الاسفل - الايوسين الاسفل ) من غرب  
وشمال العراق وهما :

*Buntonia desrtensis* sp.nov., *Buntonia aalijiensis* sp.nov.

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### INTRODUCTION

The present work is based on the subsurface samples collected from Aaliji Formation Mushora well (Msh.1) NW. Iraq (fig.1). This formation was first described by Henson,1950.It mainly consists of marly and chalky limestone sometimes dolomitized.Its age is Lower Paleocene - Lower Eocene. Rataga Formation in boreholes KH7/7 western Iraq was first described by Jassim *et al.* , 1984, in type areas consists of Nummulitic limeston (sometimes dolomitized).Its age is Lower- Upper Eocene.

All figured specimens deposited, at Geology Department,Mosul University, Aa=Aaliji,Rt=Rataga.

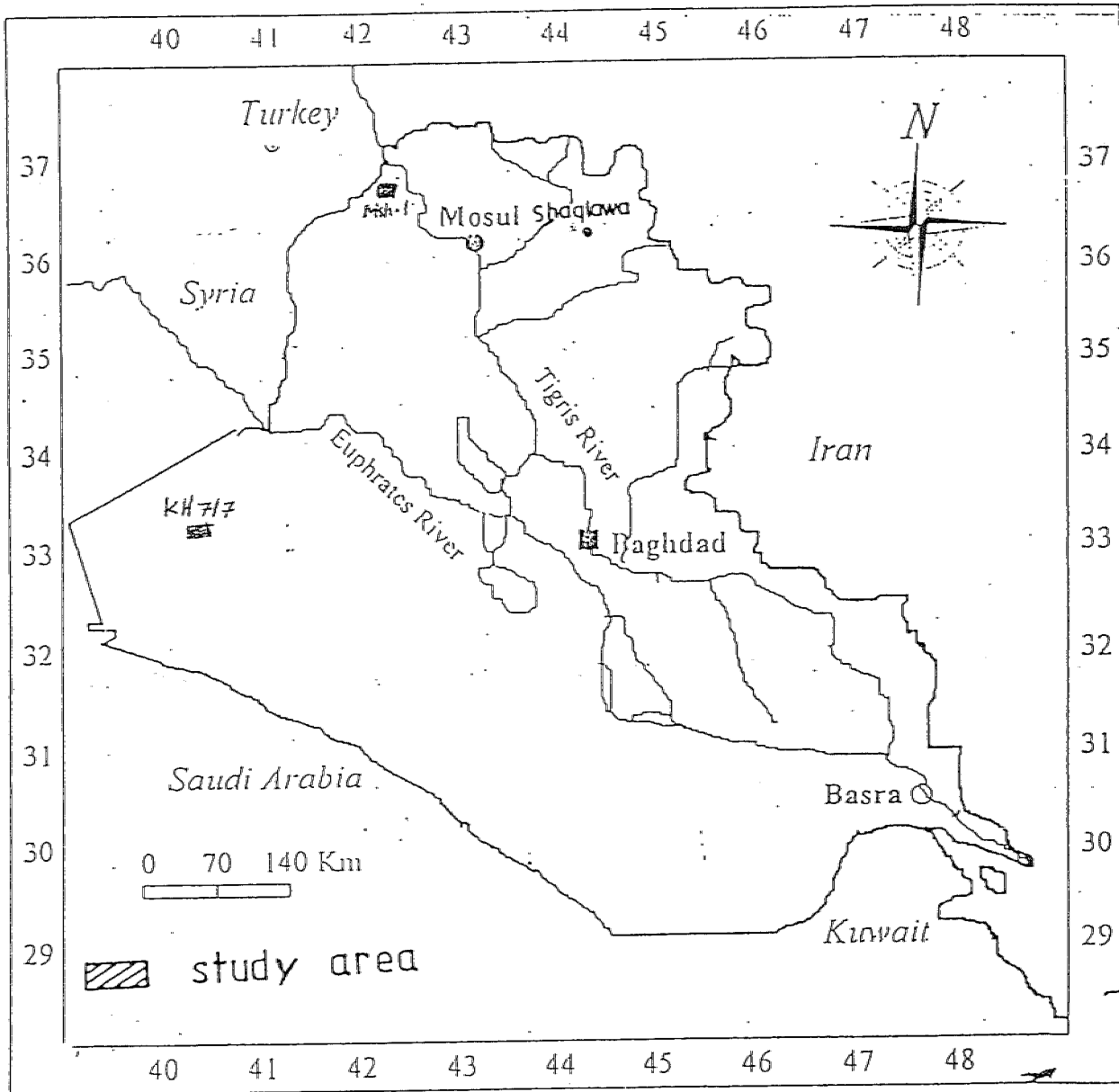


Fig.1 Location map

## SYSTEMATIC DESCRIPTIONS

The classification followed is that of Hartmann and puri, 1974 and Ahmad *et al.*, 1991.

Subclass Ostracoda Latreille, 1806  
 Order Podocopida Muller, 1894  
 Superfamily Cytheracea Baird, 1850  
 Family Trachyleberididae Sylvester-Bradley, 1948  
 Genus *Buntonia* Howe, 1935  
 Type species *Buntonia shubutaensis* Howe, 1935.

*Buntonia deserti* sp.nov.

Pl. 1, figs.( 1-3 )

**Derivation of name** : from the type locality western desert .

**Holotype**: Male carapace, left valve , Mo.T.Rt.1, pl.1, fig.1.

**Paratypes**: Five carapaces, Mo.T.Rt. 2,3.

**Type horizon**: Rataga Formation, Iraqi western deseret, well (KH.7/7), dep.(127-125)m.

**Material**: Thirty carapaces.

**Dimensions(mm)**:

	<u>L.</u>	<u>H.</u>	<u>W.</u>	<u>L/H</u>
Male carapace, Mo.T.Rt.1, pl.1, fig.1.	0.52	0.29	0.22	1.79
Male carapace, Mo.T.Rt.2, pl.1, fig.2.	0.51	0.29	0.22	1.75
Female carapace, Mo.T.Rt.3, pl.1, fig.3.	0.50	0.34	0.25	1.47

**Diagnosis**: Carapace subtriangular, tapering posteriorly in lateral view, compressed anterior, posterior end, with prominent cardinal angle in the right valve, three longitudinal grooves, decorated with row of small pits present posteriorly.

**Description**: Sexual dimorphism pronounced, the presumed males are more elongate, less in high than the presumed females, greatest length at the middle, greatest heigh at the anterior cardinal angle, left valve slightly larger than right, the ornamentation consist of three short longitudinal ridges ventrally separated by rows of small pits, anterior angle at the maximum height.

**Remarks**: The present species show similarities to *Buntonia virgulata* Apostolescu, 1961 from the paleocene of Sudan, reported by Barasotti, 1963 from the paleocene of Libya but differs in having well developed ridges and coarsly pitted surface. *B. bruensis* Riha, 1985 differs from the present species in the presence of distinctive spine at the end of the ventrolateral rib.

*Buntonia aalijiensis* sp.nov.

Pl. 1, figs.( 4-6 )

**Derivation of name** : from its occurrence in the Aaliji Formation ( Lower Paleocene- Lower Eocene), north-west. Iraq.

**Holotype**: Female carapace, left valve, Mo.T.Aa.1, pl.1, fig.4.

**Paratypes**: Two carapaces, Mo.T.Aa. 2,3.

**Type horizon**: Aaliji Formation, Mushora well no.1, north- west.Iraq, dep.(1450-1445)m.

**Material**: Twenty carapaces.

**Dimensions(mm):**

	<u>L.</u>	<u>H.</u>	<u>W.</u>	<u>L/H</u>
Female carapace, Mo.T.Aa.1,pl.1,fig.4.	0.50	0.32	0.25	1.56
Male carapace, Mo.T.Aa.2,pl.1,fig.5.	0.53	-	0.22	-
Male carapace, Mo.T.Aa.3,pl.1,fig.6 .	0.51	0.29	0.23	1.76

**Diagnosis:** Thick carapace, subrhomboidal in lateral view, tumid at the middle, broadly convex dorsal margin .

**Description :**Carapace subrhomboidal in lateral view, anterior end obliquely rounded posterior end truncated at the middle .Dorsal margin broadly convex,ventral margin concave anteriorly. Sexual dimorphism pronounced, the presum males elongate and less height then the presum females, surface ornamented with four ventrolateral longitudinal ridges with rows of pits in between the rest of the surface finally pitted .

**Remarks:** The present species is fairly similar to *Buntonia semitecta* Apostolescu ,1961 from the Eocene of Dahome but differs in having more elongate ventrolateral ridge and coarsly pitted surface . *B. sp.1* Fatmi,1995 (U.Paleocene )of Pakistan ,differs from present species in having narrower subtriangular posterior end and well developed ridges and coarsly pitted surface . *B. sp.?* Dingle,1976 from south Africa (Natal) differs in having strongly pitted surface and narrower posterior end .*B.ghalilae*

Waer,1992 from NW offshore, Libya (Middle Eocene)differs in having well developed ribs and numerous pits covered surface except anterior and posterior margins.

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## EXPLANATION OF PLATE 1

**Figures (1-3) *Buntonia deserti* sp.nov.**

- 1- Holotype ,male carapace, lateral view, left valve, Mo.T.Rt.1,X.130.
- 2- Paratype ,male carapace, lateral view, right valve, Mo.T.Rt.2,X.130.
- 3- Paratype ,female carapace, lateral view, right valve, Mo.T.Rt.3,X.125.

**Figures (4-6) *Buntonia aalijiensis* sp.nov.**

- 4- Holotype ,female carapace, lateral view, left valve, Mo.T. Aa.1,X.110.
- 5- Paratype ,male carapace, dorsal view, Mo.T.Aa.2,X.114.
- 6- Paratype ,male carapace, lateral view, right valve, Mo.T.Aa.3,X.104.

PLATE 1

