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Taxa dedicated to Alberto C. RICCARDI

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INTRODUCTION

Dr. Alberto RICCARDI has greatly impacted in the advance of palaeontological and geological knowledge in several areas of the world, particularly in Latin-America. As a token of appreciation to his outstanding career, contributions, and positive influence, he has been recognized in several instances with the dedication of taxa bearing his name. His former mentor, several of his former students, and colleagues are among the people that have dedicated scientific names to him. This brief contribution summarizes the taxa and the circumstances related to each genus and species dedicated to Dr. RICCARDI of which the authors are aware.

ANNOTATED LIST OF TAXA

Mollusca, Cephalopoda, Ammonoidea

Riccardiceras WESTERMANN, 1995 (p. 109, 112, 113, pl. 17, figs. 1-3; herein Pl. I, figs. 1-4). This stephanoceratacean genus belongs to Stephanoceratidae (or Otoitidae), and is almost pandemic, being widespread in Middle Jurassic (Aalenian-Bajocian) deposits of the western Tethys, particularly from the Mediterranean province. The genus also occurs in England, Germany, Morocco, Thailand, and Alaska (SANDOVAL *et al.*, 2000; DIETZE *et al.*, 2001). Its evolutionary relationships have been further analyzed by MOYNE & NEIGE, 2004 and more recently by KÓVACS & GÉCZY, 2008. The genus was dedicated by the eminent palaeontologist Dr. Gerd WESTERMANN, long-standing friend and research partner of Dr. RICCARDI. There are several species within this genus, including its type species *Riccardiceras longalvum* (VACEK), plus *R. telegdirothi* (GÉCZY), and *R. westermanni* SANDOVAL *et al.*, typical of the Mediterranean area (SANDOVAL *et al.*, 2000). In addition, the following species have also been assigned to this genus: *Riccardiceras biforme* (BUCKMAN), *R. juhlei* (IMLAY), *R. perfectum* (BUCKMAN), *R. planulatum* (BUCKMAN), *R. richardsoni* DIETZE *et al.*, *R. trapanicum* (RENZ) and *R. wysogorski* (HANTKEN in PRINZ). Other species have been included in this genus too, but were later reclassified in other taxa so the list may be subject to taxonomic debate. Incidentally, several of them have been transferred to a homoeomorph of this genus that has been aptly called *Westermannites* by DIETZE *et al.* (2001).

Olcostephanus (Olcostephanus) riccardii COOPER, 1981 (p. 311-314, figs. 160A-B, 162, 163; herein Pl. I, figs. 5, 6). This species of perisphinctacean Olcostephanidae occurs only in the Lower Cretaceous (Valanginian) Sundays River Formation (Uitenhage Group), near Coega, Eastern Cape, South Africa. The name was given by the South African palaeontologist Michael COOPER and stems from his MSc thesis at the University of Natal, Durban.

Spitidiscus riccardii LEANZA & WIEDMANN, 1992 (herein Pl. I, figs. 7, 8). This species of Desmoceratidae was dedicated to Dr. RICCARDI by the well-known ammonite palaeontologists Dr. Héctor LEANZA from Argentina and the late Dr. Jost WIEDMANN from Germany, who regarded it as Early Barremian in age. This species now defines the Lower Cretaceous (Late Hauterivian) *Spitidiscus riccardii* Assemblage Biozone (AGUIRRE-URRETA *et al.*, 1993, 2005) of the Neuquén Basin in Argentina. The species is found in black shales of the Agua de la Mula Member of the Agrio Formation (Mendoza Group).

Gunnarites riccardii NULLO, PROSERPIO & BLASCO, 1981 (*nomen nudum*) (herein Pl. I, figs. 9, 10). This desmoceratacean Kossmaticeratidae was named after Dr. RICCARDI by Francisco NULLO, César PROSERPIO and Graciela BLASCO DE NULLO, geologists from the National Geological Survey of Argentina, an institution to which Dr. RICCARDI has been attached in early stages of his career, and more recently as member of the National Geological Mapping Committee. The material was collected in Upper

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Cretaceous deposits referred to the so called "Rio Guanaco Fm." (actually Cerro Toro Formation), to the south of the Lago Argentino, Patagonia, Argentina, associated to an early to late Campanian fauna. Originally the specimens where classified as *Kossmaticeras (Natalites)* sp. by BLASCO *et al*., 1981 (for 1980), but later reclassified by the same authors as *Gunarites riccardii* n. sp. (*sic*) (NULLO *et al*., 1981, p. 216, pl. 4, figs. 1-2). Subsequently these specimens were reinterpreted as *Kossmaticeras (Natalites)* cf. *hauthali* (PAULCKE) and *Kossmaticeras (Karapadites) centinelaense* BLASCO *et al*. by RICCARDI (1983, p. 336, 330) and MACELLARI (1988, p. 896) (see also MACELLARI *et al.*, 1989; RICCARDI, 2002).

Pachydiscus (Pachydiscus) riccardi MACELLARI, 1986 (p. 48-49, figs. 37.3-4, 38.1-3, 39; herein Pl. I, figs. 11, 12). This species of desmoceratacean Pachydiscidae was described from the Unit 9 of the Lopez de Bertodano Formation in Seymour (= Marambio) Island and is conspicuous for its usually large size, excellent preservation and abundance. It is the index fossil of the *Pachydiscus riccardi* zone, a "middle" to Late Maastrichtian biozone recognized in the Antarctic Peninsula. The species was dedicated by Carlos MACELLARI, a former student of Dr. RICCARDI in the course of his PhD dissertation at the Ohio State University.

Mollusca, Bivalvia

Parallelodon riccardii DAMBORENEA, 1987 (p. 65-66, figs. 12, 13a, pl. 1, fig. 14; herein Pl. I, fig. 13). This species of arcoidean Parallelodontidae was described from the Lower Jurassic (Pliensbachian) Piedra Pintada Formation, in southern Neuquén, Argentina, and it is of palaeoecological interest for it co-occurs with hermatypic corals. It was dedicated to Dr. RICCARDI (who collected the holotype specimen) by Susana DAMBORENEA as part of her PhD thesis at La Plata University. The fossiliferous locality was found at the dawn of the 20th century by S. ROTH, while conducting an expedition from the La Plata Museum organized by its founder, F.P. MORENO.

Kalentera riccardii DAMBORENEA, 2004 (p. 191-194, figs. 2.A-B, 3.A-U, 4.A-F; herein Pl. I, fig. 14). This species of modiomorphoidean Kalenteridae has been described from Lower Jurassic strata, attributable to the El Cholo (or Puesto Araya) Formation in southern Mendoza and to the Los Molles (or Sierra Chacaico) Formation in central Neuquén, Argentina. It appears to be restricted to a latest Sinemurian-early Pliensbachian bivalve assemblage zone, having thus considerable biostratigraphic potential (RICCARDI *et al*., 2011), in addition to palaeobiogeographic interest for revealing Maorian to circum-Pacific affinities (DAMBORENEA & MANCEÑIDO, 1992; DAMBORENEA, 2004)

A new species of *Pseudolimea* is currently being proposed by DAMBORENEA (in DAMBORENEA & MANCEÑIDO, 2012, p. 339, Pl. I, figs. 15-17, this volume). This limid is a characteristic element of the Late Triassic fauna from the Arroyo Malo Formation, in southern Mendoza, Argentina. It seems to be present also in the Rhaetian of northern Chile, thus it may prove to be useful for regional correlations.

Mollusca, Gastropoda

A new species of *Ananias* is being described by PINILLA, 2012 (p. 361-362, Fig. 4-6, this volume). This Eotomariidae (Vetigastropoda) was based on material preserved in the La Plata Museum collections, coming from Lower Permian beds of the Pampa de Tepuel Formation, within Tepuel Genoa Basin, in western Chubut, Argentina. It was collected by Dr. T. SUERO and forms part of ongoing research for the thesis of Karina PINILLA, a disciple of Dr. Nora SABATTINI, La Plata University, Argentina.

Brachiopoda, Spiriferinida

A new species of *Bolilaspirifer* is presently being named by MANCEÑIDO, 2012 (in DAMBORENEA & MANCEÑIDO, 2012, p. 341, Pl. II, figs. 2a-g, this volume). This pseudocyrtinine Lepismatinidae is a conspicuous component of the Late Triassic fauna from the Arroyo Malo Formation, in southern Mendoza, Argentina, which has been discovered under the leadership of Dr. RICCARDI. It is one of the index fossils chosen to denominate a newly recognized brachiopod assemblage zone.

Echinodermata, Echinoidea

A new species of *Brissopsis (Kleinia)* is now being introduced by PARMA, 2012 (p. 420, Fig. 2; p. 425, Pl. I, figs. A-D, F-I, this volume). This Tertiary spatangoid Brissopsiidae occurs in Upper Eocene to Lower Miocene sediments of Patagonia, Argentina, that in SE Chubut and NE Santa Cruz are assigned to the Chenque Formation (or equivalent units), and in W Río Negro, are attributed to the Río Foyel Formation. Since the holotype of the species was collected from Rada Tilly (by Dr. J. FRENGUELLI), this dedication by the doctorand S.Graciela PARMA is likely to evoke in Dr. RICCARDI nice recollections from his early excursions in Comodoro Rivadavia and its vicinities.

Insecta, Mecoptera

A new species of *Orthophlebia* is likewise being described by PETRULEVICIUS & REN, 2012 (p. 313-314, Figs. 1-3, this volume). This orthophlebiid comes from Middle Jurassic lacustrine deposits of the Jiulongshan Formation, in Inner Mongolia, China. It belongs to the Daohugou mecopterofauna, reputedly one of the richest in the world for this typically Mesozoic group

in particular. The description has been jointly made by a Chinese author, Dr. REN Dong, and an Argentinian one, Dr. Julián PETRULEVICIUS who wrote his thesis on a palaeoentomological subject supervised by Dr. RICCARDI, to whom the species is dedicated.

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Plate I

Figs. 1, 2: *Riccardiceras longalvum* (VACEK), lectotype, GBA 1886/05/0046, lateral and ventral views, from DIETZE *et al*., 2001, fig. 6.

Figs. 3, 4: *Riccardiceras richardsoni* DIETZE, CHANDLER, SCHWEIGERT & AUER holotype, SMC X 29058, lateral and ventral views, from DIETZE *et al*., 2001, fig. 2.

Figs. 5, 6: *Olcostephanus (Olcostephanus) riccardii* COOPER, holotype, SAM-PCU 1577, lateral and ventral views, from COOPER, 1981, figs. 160A-B.

Figs. 7, 8: *Spitidiscus riccardii* LEANZA & WIEDMANN, holotype, P 1749 MOZ, ventral and lateral views, from AGUIRRE URRETA, 1995, pl. 1, figs. 8, 9.

Figs. 9, 10: *Gunnarites riccardii* NULLO, PROSERPIO & BLASCO DE NULLO *(nomen nudum)*, lateral and ventral views of SGNP 15499, from RICCARDI, 2002, pl. 6, figs. 2a-b, same specimen as BLASCO *et al*., 1981, plate 5, figs. 3, 4.

Figs. 11, 12: *Pachydiscus (Pachydiscus) riccardi* MACELLARI, lateral and apertural views of OSU 38357, from MACELLARI, 1986, figs. 38.1, 3.

Fig. 13: *Parallelodon riccardii* DAMBORENEA, holotype, MLP 16251, right valve, from DAMBORENEA 1987, plate 1, fig. 14b.

Figs. 14, 15: *Kalentera riccardii* DAMBORENEA, 14, holotype, MLP 24294, left valve, 15, MLP 24306, right valve composite mould, from DAMBORENEA, 2004, figs. 3A, 3R, respectively.

(Scale bars indicate 10 mm)

Repositories: GBA: Geologisches Bundesanstalt Museum, Vienna, Austria; MLP: Natural Sciences Museum, La Plata, Argentina; MOZ: Juan Olsacher Museum, Zapala, Argentina; OSU: Orton Museum, Ohio State University, USA; SAM: South African Museum, Cape Town, South Africa; SGNP: Servicio Nacional Minero Geológico, Buenos Aires, Argentina; SMC: Sedgwick Museum, Cambridge, UK.

Plate I