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**PALEOCENE DECAPOD CRUSTACEA FROM NORTHEASTERN MEXICO:
ADDITIONS TO BIOSTRATIGRAPHY AND DIVERSITY**

José Luis Martínez-Díaz¹, Martha Carolina Aguillón-Martínez², Javier Luque³ and
Francisco J. Vega^{4,*}

¹Posgrado en Ciencias Biológicas, Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Coyoacán, 04510, México DF, Mexico

²Secretaría de Educación y Cultura, Museo del Desierto, Departamento de Paleontología, Prol. Pérez Treviño 3745, Parque las Maravillas. Saltillo, Coahuila, Mexico, 25015

³Department of Biological Sciences, University of Alberta, Edmonton, Alberta T6G 2E9, 29 Canada, and Smithsonian Tropical Research Institute, Balboa–Ancón 0843–03092, Panamá, Panamá

⁶Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Coyoacán, 04510, CdMx, Mexico
*vegver@unam.mx

ABSTRACT

New decapod specimens from mid-Paleocene shallow marine deposits of NE Mexico represents an important addition to the diversity, paleobiogeography and evolution of the Crustacea record. In this work, we describe additions to the decapod assemblage from the Paleocene (Selandian) Rancho Nuevo Formation (Difunta Group, Parras Basin, Coahuila). Due to the evident size differences with other decapod assemblages, we compare the new assemblage with those from the Lower Paleocene (Danian) Mexia Clay Member of the Wills Point Formation, Texas, and the Lower Eocene (Ypresian) El Bosque Formation in Chiapas. Species reported from the mid-Paleocene (Selandian) assemblage of the Porters Creek Formation (Alabama), are correlatable to the decapod species from NE Mexico in age, size and systematic composition. The erymid lobster *Enoploclytia gardnerae* (Rathbun, 1935) is represented by several carapaces and chelae remains. One isolated palm of Callianassidae is included. Numerous carapaces of *Linuparus wilcoxensis* Rathbun, 1935 are described, representing the most abundant lobster. A new record for the raninid *Notopoides* sp., and presence of *Quasilaeviranina* sp. cf. *arzignagnensis* and *Quasilaeviranina ovalis* are here reported. New raninids, *Claudioranina latacantha* sp. nov. and *Claudioranina* sp. (Cyrtothininae) are also part of this assemblage. *Paraverrucoides alabamensis* (Rathbun, 1935), and *Tehuacana americana* (Rathbun, 1935) are represented by several carapaces exhibiting intraspecific morphological variation. Different sizes among the Early and Middle Paleocene and Early Eocene decapod populations suggests a possible effect of variation in seawater temperatures and/or a Lilliput effect after the K/Pg event.

Key words: Crustacea, Decapoda, Paleocene, Northeastern Mexico.

INTRODUCTION

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