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RANGE AND DISTRIBUTION OF BELEMNITES IN THE JURASSIC AND CRETACEOUS OF MEXICO - A PROGRESS REPORT

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Since more than one century, belemnites are cited sparcely from the Mexican Jurassic and Cretaceous (e.g. CASTILLO & AGUILERA, 1895) being seldom determinated and never investigated. During the last twenty years, Northamerican, Mexican, and German colleagues collected belemnites at Jurassic and Cretaceous sites especially in Northern and Central Mexico and entrusted them to the authors, so that own collections were enlarged to be of biostatistical value. First results were published by SEIBERTZ (1986), SEIBERTZ & BUITRON (1987a, b), SPAETH (1988), and SEIBERTZ & SPAETH (1995, 1998).

From the uppermost Middle Jurassic (Upper Callovian) of central northern Mexico, a single specimen of *Cylindroteuthis puzosiana* (D'ORBIGNY 1842) has been described for the first time. More specimens of this species were found in the Upper Jurassic (Middle Kimmeridgian) together with acroteuthid belemnites. With a gap in the record, belemnites then occur sparcely from the Lower Cretaceous Hauterivian onwards represented by the genus *Hibolites*. In the Upper Aptian, a flood occurrence of typical *Neohibolites wollemanni* STOLLEY 1911 is traceable over the whole Northeast Mexican area, followed by another acme in the Middle Albian with *N. minimus* (MILLER 1826) including the subspecies *N. m. pinguis* STOLLEY 1911, *N. m. obtusus* STOLLEY 1911, and *N. m. clavaformis* SEIBERTZ & BUITRON 1987 (1987 b). This subspecies is considered to be restricted in its distribution to Mexico being the ecologic substitute of the European *N. m. minimus* but ranging higher than the latter. The Upper Albian is represented by the species *N. praeultimus* SPAETH 1971. The last member of the neohibolitids occurs in the basal Upper Cretaceous (Lower Cenomanian) with *N. ultimus* (D'ORBIGNY 1842). With a further gap in belemnite record, *Actinocamax manitobensis* (WHITEAVES 1889) represents the basal Lower Turonian and at the same time the youngest occurrence of belemnites in Mexico known until now. While *Cylindroteuthis* and *Neohibolites* are typical forms of the European boreal regions, *A. manitobensis* indicates faunal immigration from the northerly neighbouring boreal Western Interior seaway. On the other hand, the genus *Hibolites* indicates tethyal influence. In Mexico, belemnites are restricted mainly to shallow water areas in relation to palaeogeographic reconstructions.

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