

PALEOGEOGRAPHICAL IMPLICATIONS OF PENNSYLVANIAN
BRACHIOPODS AND BIVALVES FROM IXTALTEPEC FORMATION,
OAXACA, SOUTHEAST MEXICO.

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Several species of brachiopods and bivalves were collected in the type section of Ixtaltepec Formation. This formation crops out in Nochixtlan municipality, Oaxaca State, at lat. 17° 33' N and long. 97° 07' W. The brachiopods species collected are: *Orbiculoidea missouriensis*, *Orthotetes* sp., *Derbyia crassa*, *Neochonetes granulifer*, *Neochonetes* sp., *Simuatella* sp., *Echinaria semipunctata*, *Reticulatia huecoensis*, *Linoproductus echinatus*, *Linoproductus planiventralis*, *Leiorhynchus carboniferus*, *Composita ovata*, *Anthracospirifer occiduus*, *Neospirifer dunbari*, *Neospirifer* sp., and *Punctospirifer transversus*; the bivalves found are: *Nuculopsis* sp., *Palaeoneilo* sp., *Paleyoldia* sp., *Phestia bellistriata*, *Parallelodon tenuistriatus*, *Myalinella meeki*, *Septimyalina* sp., *Leptodesma* sp., *Pterinopectinella* sp., *Aviculopecten* sp., *Limipecten* sp., *Streblopteria* sp., *Euchondria* sp., *Schizodus* sp., *Permophorus spinulosa*, *Astartella concentrica*, *Edmondia ovata*, and *Ectogrammysia prolata*.

The analysis of this fauna indicates a Pennsylvanian age (Morrowan-Desmoinesian), with reefal conditions for the calcareous beds at the base of the formation and peri-reefal environments for the middle-upper portion, composed of terrigenous sediments.

Species mentioned above have been reported in Pennsylvanian outcrops of North America, and there is a great similarity with faunas from the "Mid-Continent" province. These data allow to establish that, during Carboniferous times, existed some sort of geographical connection and similar climatic and paleoenvironmental conditions between the central region of the United States and southeast Mexico. In order to clearly establish paleobiogeographical relations between both regions, it is necessary to know in detail the paleontological and paleoenvironmental features of the other carboniferous-permian outcrops in Mexico, specially those ones of Tamaulipas, Hidalgo, Puebla and Guerrero states, which might give more information about transition zones.