

Mollusks from Miocene hydrocarbon-seep deposits in the Ilocos-Central Luzon Basin, Luzon Island, Philippines

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We report 35 molluscan species from Late Miocene cold-seep carbonates from the Amlang Formation in the Ilocos- Central Luzon Basin in Luzon Island, Philippines, collected in a large quarry in the province of Pangasinan. The 19 bivalve species are largely representatives of chemosymbiotic families; the six new species are the nuculid *Acila (Truncacila) interferencia* sp. nov., the mytilid *Bathymodiolus labayugensis* sp. nov., the thyasirid *Conchocele pangasinanensis* sp. nov., the lucinid *Megaxinus gorrospei* sp. nov., the vesicomylid *Pliocardia ballesterosi* sp. nov., and *Sisonia frijellanae* gen. et sp. nov., of uncertain taxonomic affinity. The 16 gastropods include one species restricted to seep deposits, the neritid species *Thalassonerita hagai* sp. nov.; the buccinid *Enigmaticolus semisulcata* represents the first fossil record of its genus. Biogeographically, the Pangasinan seep fauna shows several links to Neogene seep faunas in other tropical/subtropical areas, namely the Mediterranean and Caribbean regions. In contrast, shared taxa with nearby but extratropical Japan are few, as are shared taxa with Miocene seep deposits in New Zealand.

Key words: Gastropoda, Bivalvia, chemosynthesis-based ecosystem, deep sea, hydrocarbon seep, Miocene, Philippines.

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