

## Mollusks and a crustacean from early Oligocene methane-seep deposits in the Talara Basin, northern Peru

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A total of 25 species of mollusks and crustaceans are reported from Oligocene seep deposits in the Talara Basin in northern Peru. Among these, 12 are identified to the species-level, including one new genus, six new species, and three new combinations. *Pseudophopsis* is introduced for medium-sized, elongate-oval kalenterid bivalves with a strong hinge plate and largely reduced hinge teeth, rough surface sculpture and lacking a pallial sinus. The new species include two bivalves, three gastropods, and one decapod crustacean: the protobranch bivalve *Neilo altamirano* and the vesicomid bivalve *Pleurophopsis talarensis*; among the gastropods, the pyropeltid *Pyropelta seca*, the provannid *Provanna pelada*, and the hokkaidoconchid *Ascheria salina*; the new crustacean is the callianassid *Eucalliax capsulasetaea*. New combinations include the bivalves *Conchocele tessaria*, *Lucinoma zapotalensis*, and *Pseudophopsis peruviana*. Two species are shared with late Eocene to Oligocene seep faunas in Washington state, USA: *Provanna antiqua* and *Colus sekiuensis*; the Talara Basin fauna shares only genera, but no species with Oligocene seep fauna in other regions. Further noteworthy aspects of the molluscan fauna include the remarkable diversity of four limpet species, the oldest record of the cocculinid *Coccapigya*, and the youngest record of the largely seep-restricted genus *Ascheria*. *Eucalliax* is recorded for the first time from a seep and from the Oligocene.

**Key words:** Gastropoda, Bivalvia, Crustacea, Decapoda, biogeography, cold-seep, Paleogene, South America.

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