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A NEW SPECIES OF *ARCHITECTONICA* FROM THE SANTA SUSANA MOUNTAINS, VENTURA COUNTY, CALIFORNIA

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DAVID K. CALDWELL
Editor

A NEW SPECIES OF *ARCHITECTONICA* FROM THE SANTA SUSANA MOUNTAINS, VENTURA COUNTY, CALIFORNIA

By J. ALDEN SUTHERLAND[1]

ABSTRACT: *Architectonica llajasensis;* a new species of gastropod from the Llajas formation, Middle Eocene, Santa Susana Mtns., Ventura Co., California.

A new species of *Architectonica* has been recognized during the study of material from Las Llajas Canyon, Santa Susana Mountains, Ventura County, California. Two locations have been of primary interest: LACMIP 461-A, in the lowest exposed layer of Las Llajas Canyon, and LACMIP 461-B, on the northern slope of a small canyon intersecting Las Llajas Canyon from the east. LACMIP 461-B is stratigraphically 70 feet higher than 461-A, and is 200 feet from the top of the Llajas formation. (see McMasters, 1933; Stipp & Tolman, 1934) The new species of *Architectonica* is from LACMIP 461-B. The faunal differences of the two locations are quite distinct and constant. LACMIP 461-A is characterized by *Cylichnina tantilla* Anderson & Hanna, and *Lyria andersoni* Waring; while 461-B is characterized by *Venericardia hornii* (Gabb) forma *calafia* Stewart, and *Eucrassatella semidentata* (Cooper). Other species common to both locations are *Cernina hannibali* (Dickerson), and *Amaurellina clarki* Stewart.

Architectonia llajasensis, new species
Figures 1 and 2

Diagnosis: Architectonica llajasensis differs from any other described species in that it has eight tuberculate spiral ribs with one intercalary thread on the body whorl, in the extreme acute peripheral carina, and also in the order of sculpture of the undersurface, and umbilical whorls.

Description of holotype: Shell medium size for genus; carinate; low conic; walls thin; suture impressed; aperture oblique, quadrate; umbilicus broad; whorls six. First three whorls not sculptured, fourth whorl sculptured by six tuberculate spiral ribs, penultimate whorl sculptured by eight tuberculate spiral ribs, body whorl sculptured by eight tuberculate spiral ribs, with one tuberculate intercalary thread. Growth lines appear on body whorl behind aperture; whorls convex below suture, concave above; peripheral carina acute, tuberculate; undersurface concave at peripheral margin, convex from middle to basal keel; undersurface sculptured by nine spiral ribs, one or two intercalaries, two ribs nearest basal keel tuberculate; umbilical whorls sculptured by five tuberculate spiral ribs, with one tuberculate intercalary thread.

Diameter 26.5, altitude 14, aperture height 7, width 7 mm.

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Type locality: LACMIP 461-B, Middle Eocene, Llajas formation, Las Llajas Canyon, Santa Susana Mountains, Ventura County, California.

Holotype: LACMIP 1140. Collected by author, February 5, 1966.

Architectonica llajasensis is named for the geologic formation at the type locality. A single specimen is known.

Figure 1. Architectonica llajasensis, new species. Holotype, LACMIP 1140. Diameter 26.5 mm.

Discussion: This species occurs in the same sediments with *A. cognata* Gabb, which it resembles only in general configuration. It differs chiefly in spiral sculpture. It resembles *A. elaboratum* Conrad (see Conrad, 1833), of the Claiborne, Alabama, Eocene, to a greater degree than any western Eocene species. Both species are low conic, and sculptured by tuberculate spiral ribs. *A. elaboratum* differs in being uniformly convex; the peripheral carina is not as acute, and the sculpture of the basal keel is more ornate.

ACKNOWLEDGMENTS

I wish to thank Mr. James Runkle of Simi, California, for his kind permission to collect paleontological material from his property. I also wish to

Figure 2. Architectonica llajasensis, new species. Holotype, LACMIP 1140. Diameter 26.5 mm.

thank George P. Kanakoff, formerly Curator of Invertebrate Paleontology of the Los Angeles County Museum of Natural History, for his encouragement and guidance in preparing this description.

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