

## Revision of the systematic status of *Helminthoglypta walkeriana morroensis* (Hemphill, 1911) (Gastropoda: Pulmonata)

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### Abstract

Globose-shelled to depressed-helicoid terrestrial snails of the subgenus *Helminthoglypta* (*Charodotes*) occur from the vicinity of Morro Bay to the City of San Luis Obispo in San Luis Obispo County, central California, USA. Populations with intensely papillose shells largely or entirely lacking incised spiral sculpture, originally described as "*Helix* var. *morroensis*," have been regarded as either a subspecies of *Helminthoglypta walkeriana* (Hemphill, 1911) or an infrasubspecific variation without taxonomic significance. Shell form variation is distributed as one would expect if the two major aggregations of individuals were reproductively isolated, biological species, *H. walkeriana* and *H. morroensis* (Hemphill, 1911). Differing penial morphology is also consistent with reproductive isolation. The two species appear to be allopatric.

**Key words:** land snail, Helminthoglyptidae, California, endangered species, dune, scrub, grassland, morphometrics

### Introduction

Revision and refinement of the taxonomy of the land snail clade *Helminthoglypta* Ancy, 1887, is ongoing. Several recent papers have described new species and subgenera in this prominent element of the Californian terrestrial fauna (Miller 1985; Roth 1987a, 1987b, 1988; Reeder and Roth 1988; Roth and Hochberg 1988, 1992), and the description of others is pending (Roth and Sadeghian 2003). The trend has been toward recognition of greater species diversity than the last monograph of the clade (Pilsbry 1939) indicated.

In some cases, this diversity represents newly discovered occurrences of *Helminthoglypta* unknown to previous workers (e.g., Roth and Hochberg 1988). In other cases, known occurrences have been re-evaluated based on additional specimens, analysis of for-