

REPTILIA: SQUAMATA: SAURIA

IGUANIDAE PHRYNOSOMA SOLARE

Catalogue of American Amphibians and Reptiles.

PARKER, WILLIAM S. 1974. *Phrynosoma solare*.

Phrynosoma solare Gray
Regal horned lizard

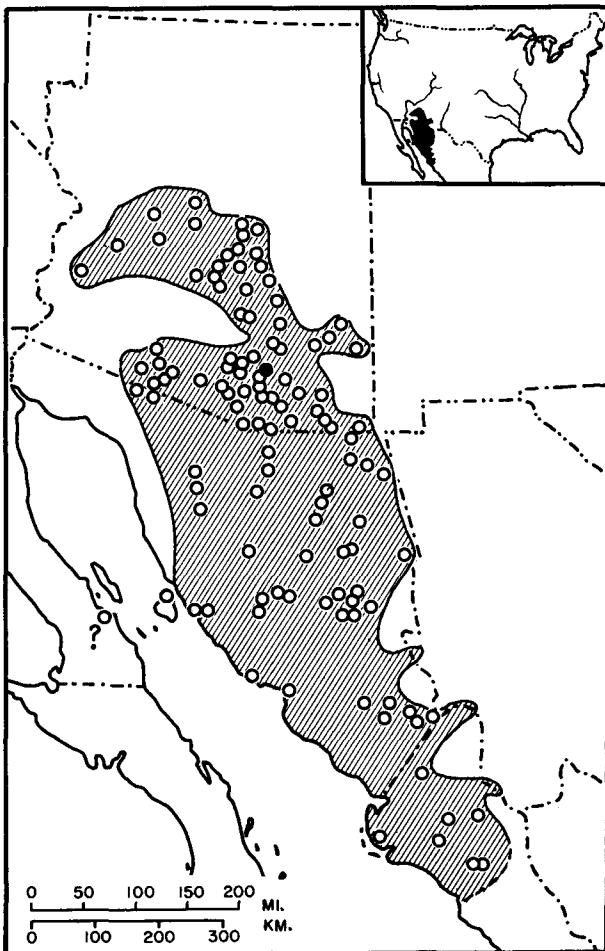
Phrynosoma solari Gray, 1845:229. Type-locality, "California"; restricted to Tucson [Pima County], Arizona (Schmidt, 1953:136). Holotype, British Mus. Nat. Hist. XXIII.125.d, collector and date unknown (not examined by author).

Phrynosoma regale Girard, 1858:406. Type-locality "Valleys of the Zuni and Colorado Rivers"; actually Sierra de la Nariz, near Zuni, Sonora, Mexico (Cochran, 1961:130). Syntypes, U. S. Natl. Mus. 161 (2 specimens), collected by Arthur Schott, date not recorded (syntypes not examined by author).

Phrynosoma solare: Van Denburgh, 1895:115. Emendation of name.

• CONTENT. The species is monotypic.

• DEFINITION AND DIAGNOSIS. *Phrynosoma solare* is one of the larger members of the genus (maximum snout-vent length 117 mm in females; 95 mm in males), with four (rarely only two) equal sized occipital spines, which form a continuous series with the large temporal spines on the posterior edge of the head. The nostrils lie within the canthal ridge. There are two scale rows in the lateral abdominal fringe, and the ventral scales are keeled.



MAP. Solid symbol marks the restricted type-locality; hollow symbols indicate other localities; shading indicates estimated total range. Presence in Baja California is doubtful (see text).

• DESCRIPTIONS. The original description (Gray, 1845) was brief, and barely sufficient to characterize the species. The species was described by Girard (1858), Gentry (1885), Cope (1900), Van Denburgh (1922), Smith (1946), and Reeve (1952). Etheridge (1964) and Presch (1969, 1970) described its osteology and scleral ossicles.

• ILLUSTRATIONS. For photographs of *P. solare* see Ruthven (1907), Van Denburgh (1922) and Smith (1946). Reeve (1952) and Presch (1969) illustrated the skull. For line drawings, see Baird (1859), Bocourt (1870), Cope (1900), and Stebbins (1954, 1966).

• DISTRIBUTION. *Phrynosoma solare* occurs in the Sonoran Desert in south-central and southeastern Arizona, through most of Sonora (including Isla Tiburón) into northern Sinaloa, Mexico. Lockington (1880), Van Denburgh (1895), and Van Denburgh and Slevin (1921) recorded one specimen from Baja California, but the species' presence there is doubtful (Savage, 1954). Photographs of typical habitat are in Gloyd (1937:89, Fig. 6), and Lowe (1964a:25, Fig. 6). New locality records since Reeve (1952) were reported by Langebartel and Smith (1954) and Zweifel and Norris (1955) for Sonora and by Hardy and McDiarmid (1969) for Sinaloa.

• FOSSIL RECORD. None, although *Phrynosoma josecensis* from Pleistocene deposits of San Josecito Cave, Nuevo Leon, Mexico "appears to be closely related" (Brattstrom, 1955).

• PERTINENT LITERATURE. Reeve's (1952) revision of the genus is the best source of information on *P. solare*. General ecological and distributional notes on the species were included by Baird (1859), Cooper (1870), Bocourt (1874), Boulenger (1885), Van Denburgh (1894, 1896), Ruthven (1907), Stone (1911), Van Denburgh and Slevin (1913), Stejneger and Barbour (1917), Ortenburger and Ortenburger (1926), Burt (1933), Taylor (1936), Gloyd (1937), Huey (1942), Smith and Laufe (1945), Smith (1946), Edgren (1948), Smith and Taylor (1950a), Gates (1957), Lowe (1964b), and Nickerson and Mays (1970).

Aspects of the natural history of *P. solare* were described by Blount (1929; reproduction), Schonberger (1945; oviposition), Bogert and Oliver (1945; sexual dimorphism, reproduction), Vorhies (1948; predation), Lowe (1954; growth, movements), Stebbins (1954; reproduction), Cutter (1959; blood squirting), Heath (1965; temperature regulation), Lynn (1965; display behavior), Parker (1971; growth, movements, reproduction), Baharav (1971; body temperatures, movements), Medica, Turner, and Smith (1973; reproduction), Van Devender and Howard (1973; reproduction), and Pianka and Parker (ms.; food habits, reproduction). Ryerson (1949) reported on blood chemistry, and Smith and Taylor (1950b) gave an incorrect type-locality restriction.

• ETYMOLOGY. The Latin word *solaris* means "of the sun."

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