REPTILIA: SQUAMATA: GEKKONIDAE

Catalogue of American Amphibians and Reptiles.

Nava, S.S., C.R. Lindsay, R. Powell, and R.W. Henderson. 2002. *Sphaerodactylus parvus*.

Sphaerodactylus parvus King

Anguilla Bank Dwarf Gecko

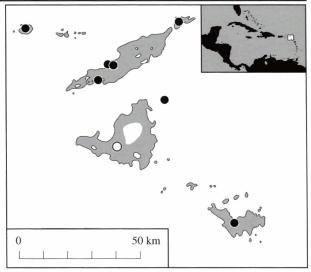
Sphaerodactylus macrolepis parvus King 1962:16. Type locality, "island of St. Martin, 2-1/2 miles west, 1/4 mile north of Philipsburg." Holotype, Flordia State Museum, University of Florida (UF) 10034.1, adult male, collected by W. King, 16 July 1958 (not examined by authors).

Sphaerodactylus parvus: Powell and Henderson 2001:288. See Remarks.

- · CONTENT. No subspecies are recognized.
- **DEFINITION.** Sphaerodactylus parvus is a small dwarf gecko with SVL ranging from 18–24 mm (King 1962). Dorsal body scales are large, strongly keeled, acute, imbricate, and number 23–29 from axilla to groin. Dorsal scales of the tail are similar, and lie flat on the tail. All dorsal scales have single hair-bearing scale organs along the dorsodistal edge. No granules are present in the middorsal area. Ventrals are round but not imbricate, smooth or sometimes keeled on the sides of the abdomen, and number 26–29 from axilla to groin. Scale rows at midbody number 44–54, whereas the escutcheon measures 12–25 scales wide and 4–7 scales long. The snout is acute and typically not curved; scales are small, elongate, and strongly keeled. Zero to 3 (usually 1) internasals and 3 upper labials are present. Gular scales usually are keeled.

The dorsal ground color ranges from a light or medium brown to pale pink. A number of scattered dark brown scales on this lighter ground color form a salt and pepper effect (Thomas and Schwartz 1966). A darker brown stripe extends from the nostril to the eye, and diminishes across the side of the neck. A pair of dark stripes run from the tip of the snout to between the eyes. These fork, combine again to form a suprapostorbital stripe, and revolve around a dark occipital spot, where they almost meet. Most often, these stripes are separated caudally by three scale rows, but they occasionally unite (King 1962). Two scapular ocelli usually are distinct; modifications include a merging of the two spots to form a semblance of spectacles, complete absence, poor definition, or the presence of a single occellus.

- **DIAGNOSIS.** Sphaerodactylus parvus can be distinguished from the nine subspecies of *S. macrolepis*, with which it was subspecifically allied until recently (Powell and Henderson 2001, also see **Remarks**), by the following combination of characters: smaller size, less bulky habitus, hair-bearing organs only on dorsal scales (except *S. m. macrolepis*), keeled ventrals (smooth, in *S. macrolepis* except on gulars), less densely pigmented throat, less conspicuous head patterns, smaller scapular patch in females, lack of sexual dichromatism, more midbody scale rows (31–50 in subspecies of *S. macrolepis*), and 10 versus 9 modal number of fourth toe lamellae (Thomas and Schwartz 1966).
- **DESCRIPTIONS.** Descriptions of *Sphaerodactylus parvus* are in King (1962) and Thomas and Schwartz (1966). Other published descriptions include *S. macrolepis* (see **Remarks**).
- ILLUSTRATIONS. Line drawings of the head, fourth toe subdigital lamellae, and variations in dorsal pattern are in King (1962).



MAP. Distribution of *Sphaerodactylus parvus*, the circle represents the type locality, other localities are marked with dots (modified from Schwartz and Henderson 1991).



FIGURE 1. Adult *Sphaerodactylus parvus* from below Cavanah Cave, Anguilla (photograph by RP).

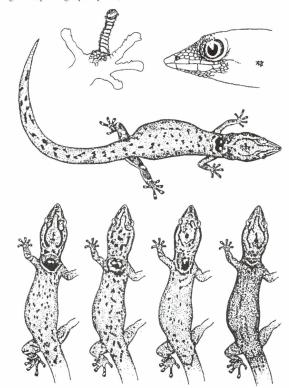


FIGURE 2. Holotype (top) and pattern variation in *Sphaerodactylus parvus* (from King 1962).

- **DISTRIBUTION.** Sphaerodactylus parvus is widely distributed in various habitats across the Anguilla Bank, with populations known to occur on Anguilla, Dog Island, Scrub Island, St.-Martin/Sint Maarten, Tintamere, and St.-Barthélémy. The range was previously illustrated in King (1962), Thomas and Schwartz (1966), and Schwartz and Henderson (1991) (all as *S. macrolepis parvus*).
- FOSSIL RECORD. None.
- **PERTINENT LITERATURE.** King (1962) provided the original description and line drawings. Thomas and Schwartz (1966) contributed a detailed description. Snyder (1979) briefly mentioned the occurrence of *S. macrolepis* on the Anguilla Bank. Powell and Henderson (2001) elevated this taxon to full-species status. Nava et. al. (2001a) noted the presence of this species on Scrub Island and described it as "common" on Anguilla. Nava et. al. (2001b) discussed microhabitat, activity, and population densities on Anguilla.

This species, as *Sphaerodactylus macrolepis* or *S. m. parvus*, is included in checklists, guides, and general works by Schwartz and Thomas (1975), MacLean et. al. (1977), Currat (1980), Schwartz and Henderson (1985, 1988, 1991), Kluge (1991), Welch (1994), Powell et al. (1996), Censky and Kaiser (1999), and Thomas (1999).

- **REMARKS.** Sphaerodactylus parvus appears to be most closely related to S. macrolepis from the Puerto Rico Bank, with which it was subspecifically allied until Powell and Henderson (2001) elevated the Anguilla Bank populations to full species. Additional references to this species may be included in accounts of S. macrolepis. For example, Noble (1921) did not indicate the origin of specimens used in his study, and Hass (1996) did not distinguish between S. macrolepis ssp. from greater Puerto Rico and S. macrolepis parvus in her phylogenetic study of the genus.
- ETYMOLOGY. The specific name, *parvus*, is Latin for "little," an obvious reference to the small size of these lizards.

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