

A NEW SUBSPECIES OF **ANOLIS SAGREI** FROM  
THE ATLANTIC COAST OF TROPICAL AMERICA

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Examination of a series of **Anolis sagrei** from the Mexican states of Yucatán, Campeche, and Tabasco has revealed a number of differences from the described races of this species. The three subspecies known at present are distributed as follows: **A. s. sagrei** (Duméril and Bibron), Cuba, Isle of Pines, and Jamaica<sup>1</sup> (type locality, Cuba); **A. s. ordinatus** (Cope), Bahamas (type locality "W. Indies", hereby restricted to Bimini Island); **A. s. stejnegeri** Barbour, Key West, Florida (type locality, the same). We propose that the form occurring in the eastern coastal areas of southern Mexico and central America be known as

**Anolis sagrei mayensis**<sup>1</sup> subsp. nov.

**Holotype.** Univ. Ill. Mus. Nat. Hist. N° 4170 from Panlao (a small island at the mouth of the Río Mamantel, Laguna de Términos), state of Campeche, Mexico, collected by H. M. Smith, October 17, 1936.

**Paratypes.** Univ. Ill. Mus. Nat. Hist. N° 4179 from Mérida, Yucatán; Nos. 4171-3 from Ciudad del Carmen, Campeche; Nos. 4174-5, Tres Brazos, Campeche; Nos. 4176-7, Encarnación, Campeche; No. 4178, Chichén Itzá, Yucatán.

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<sup>1</sup> Probably introduced into Jamaica.

**Diagnosis.** This subspecies differs from *A. s. sagrei* morphologically in having: 1) 23-30 loreals on each side; 2) 124-135<sup>2</sup> mid-dorsal scales, and 3) a snout-vent length of 53-67 mm. in adults. In all of these respects *mayensis* exceeds the other subspecies of *sagrei*. A fourth distinctive feature of *mayensis* is the peculiarity that the median line of the dewlap of males is broken by grey mottling; in other subspecies of *sagrei* it is usually a distinct and immaculate white.

**Description of holotype.** Head and body moderately elongate; body laterally compressed, approximately 9/10 as wide as the head; head twice as long as high and 1-2/3 times as long as wide; head length included 3-1/2 times in the snout-vent length; orbit moderate sized, its diameter approximately equaling 1/6 the length of the head; nares prominent, opening laterally just above the anterior origin of the canthal ridge; fourth toe of adpressed hind limb reaching slightly beyond the corner of the mouth; tail laterally compressed, with a well developed caudal crest; tail length 1-4/5 times snout-vent length.

Frontal, canthal, and supraorbital ridges well developed; frontal ridges involving four pairs of scales; supraorbitals 5 on left, 4 on right, separated anteriorly by one scale and posteriorly by two scales; canthals five on each side; supraoculars separated from the supra-orbitals by a single row of small scales.

Dorsum covered with small, weakly keeled, subcircular scales, smallest on the neck and lower sides; mid-dorsal scales 124; ventral scales larger, keeled, and imbricate; scales of tail imbricate, becoming larger and more sharply keeled posteriorly; dorsal and ventral tail scales larger than those of the lateral surface; posterior tail scales arranged in indistinct verticils, 3 or 4 scales wide.

Dorsal surface of body, tail, and limbs dark grayish brown (in preserved condition), that of head slightly lighter; ventral surface of body, limbs, and proximal portion of tail light brown, that of limbs somewhat mottled; labials yellowish, mottled with brown; chin brown, faintly mottled with yellow; neck dark gray — brown on sides; dewlap somewhat lighter brown with an indistinct median line of dingy white; ventrum of body brownish white, darker on the sides, that of the limbs slightly lighter and flecked with dark brown; ventrum of tail brown, light at the base but turning progressively darker posteriorly until at the tip there is little difference between the dorsal and ventral color.

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<sup>2</sup> The median dorsal scales counted along the dorsal line, between a thread tied around the head at the posterior border of the tympanic openings and another thread tied around the base of the tail at the posterior border of the femur on each side.

Measurements, in millimeters, are as follows: snout-vent length, 64; tail length 116; head length 18.1; maximum head width 11.2; maximum head height 9.1; diameter of eye 4.1; snout length (from anterior edge of orbit to most anterior point of head 8.7; snout width (at level of nares) 4.0; length of fore limb 27.0; length of hind limb 51.0; length of fourth toe 18.0; maximum width of adhesive pad on fourth toe 4.2.

**Distribution.** Atlantic coast from central Mexico to northern South America.

TABLE 1

MEAN AND RANGES OF THREE DIAGNOSTIC CHARACTERS OF **ANOLIS SAGREI MAYENSIS**

	loricals	dorsal scales	adult snout-vent length
<b>sagrei</b>			
mean	20.9	119.7	49.7
range	14 - 25	104 - 132	43 - 63
<b>mayensis</b>			
mean	23.6	128.7	59.4
range	18 - 30	123 - 140	53 - 67

TABLE 2

VARIATION OF SOME NON-DIAGNOSTIC CHARACTERS IN **ANOLIS SAGREI SAGREI** AND **A. S. MAYENSIS**

	Lamellae on Fourth Toe	Ratio of tail to Snout- Vent Length	Ratio of Hind Leg to Snout- Vent Length	Ratio of Head Length to Snout- Vent Length
<b>sagrei</b>				
mean	37.3	1.83	.73	.29
range	35 - 39	1.67 - 2.04	.69 - .76	.28 - .30
<b>mayensis</b>				
mean	38.5	1.84	.75	.30
range	36 - 41	1.76 - 1.89	.69 - .80	.27 - .33

**Variation.** Since only ten specimens of **mayensis** (the holotype and nine paratypes) and 29 specimens of **sagrei** were available for study, we do not attempt detailed analysis of our data. The mean and range of variation of each of the three diagnostic characters is given in Table 1. In addition counts and measurements were made of a number of other features, examples of which are given in Table 2. It is evident that **mayensis** and **sagrei** are indistinguishable in these latter respects.

### Key to the subspecies of **Anolis sagrei**

1. Supraorbitals in contact medially.....**ordinatus**  
Supraorbitals separated medially by one or more scutes..... 2
2. Dewlap burnt orange in color.....**stejnegeri**  
Dewlap light brown to light grey in color..... 3
3. Loreals 22 or less, dorsal scales 123 or less, snout-vent length less than 53 mm. in adults.....**sagrei**  
Loreals more than 22, dorsal scales more than 123, snout-vent length 53 mm. or more in adults.....**mayensis**

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