## Catalogue of American Amphibians and Reptiles.

Townsend, J.H. 2006. Celestus montanus.

## Celestus montanus Schmidt

Celestus montanus Schmidt 1933:21. Type-locality, 
"...the mountains west of San Pedro, Honduras 
(the Sierra de Merendon). Altitude 4500 feet." See 
Remarks. Holotype, Field Museum of Natural 
History (FMNH) 5066, an adult female, collected 
by Karl P. Schmidt and Leon L. Walters on 1 April 
1923 (not examined by author).

Diploglossus montanus: Wermuth 1969:10. See Remarks.

- · CONTENT. No subspecies are recognized.
- DEFINITION. Celestus montanus is a moderately sized anguimorph lizard in the subfamily Diploglossinae with a maximum reported SVL of 93 mm, 66-72 scales along the dorsal midline, 33-34 scales around the body, and 23-25 subdigital lamellae on the fourth toe. There are two pairs of internasals. One median and two lateral prefrontals contact the large frontal; median prefrontal not contacting the supraoculars. Three loreals are present with the middle the largest and neither the middle nor posterior loreal is divided. The interparietal is equal to or smaller than the size of the parietals, and there are 4-5 supraoculars with the 2nd and 3rd supraocular contacting the frontal; 4 postoculars arranged in a distinct series juxtaposed to the suboculars. Townsend et al. (2005) provided the following description of a juvenile (Florida Museum of Natural History [UF] 142324; Fig. 1) from a locality in Parque Nacional El Cusuco fewer than 20 km west of the type-locality: SVL 34.2 mm; length of incomplete tail 36 mm; 3 prefrontals (1 median and 2 lateral); 2 rows of internasals with 2 small scales irregularly positioned between anterior internasals and rostral; nasal in contact with rostral; frontal more than 2 times as long as wide; interparietal equal to or slightly smaller than size of parietals; 3 loreals; 5 supraoculars, with supraocular 2 and 3 contacting frontal; 4 postoculars; 10 (left) and 11 (right) supralabials, with supralabials 7 and 8 directly below orbit on both sides; 8 infralabials; lower postnasal contacts 3rd supralabial; 34 scales around body; 71 scales along dorsal midline; fourth toe with 24 subdigital lamellae.

Wilson et al. (1986) described the color in life of an adult female (University of Texas at Arlington [UTA] R-9443) from southeastern Depto. Cortés near Lago de Yojoa as follows: dorsal surface of body uniform brownish olive; lateral surfaces brownish olive with numerous black-outlined pale lime green ocelli; venter pale yellowish green; head grayish blue. Townsend et al. (2005) described the color in preservation of UF 142324 (Fig. 1) as follows: dorsal surface of body and limbs olive green; dorsal surface of head somewhat darker; supralabials dark gray-brown towards upper edges, pale cream towards lower edges, with a black line along posterior edges; dark gray mottling on lateral surfaces between head and fore-



Figure 1. Juvenile *Celestus montanus* (UF 142324) from Guanales, 1220 m elevation, Parque Nacional El Cusuco, Sierra De Omoa, Depto. Cortés, Honduras (photograph by Daniel Pupius).

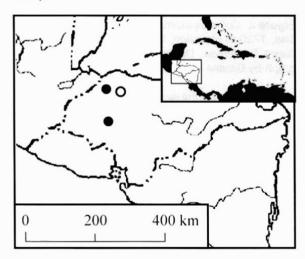


**Figure 2**. Celestus montanus (UF 144903) from Cantiles, 1780 m elevation, Parque Nacional El Cusuco, Sierra De Omoa, Depto. Cortés, Honduras (photograph by Brooke L. Talley).

limbs, with some infusion of pale blue from ventral surface in lateral gular region; lateral surfaces of body with some well defined and some poorly defined ocelli, increasing in number anteriorly; dorsal surface of limbs mottled brown and black; ventral surface of body pale blue; dorsal surface of tail copper-infused green with some black flecks; subcaudal surface orange-tinted towards distal portion.

• DIAGNOSIS. Celestus montanus is most easily distinguished from all other members of the genus Celestus by having three prefrontals (the medial prefrontal was referred to as the frontonasal by Savage and Lips 1993), a characteristic that distinguishes it from its most geographically proximate congeners: C. bivittatus of eastern Guatemala, southwestern Honduras, and northeastern Nicaragua; C. rozellae from the Isthmus of Tehuantepec across northern Guatemala to Belize; and C. scansorius, a species known only from the Cordillera Nombre de Dios in north-central Honduras. Celestus montanus may be further distinguished by having a median supraocular in contact with the prefrontal (not in contact in C. bivittatus, C. rozellae, and C. scansorius); 33-34 scales around the body (29-33 in C. bivittatus, 31-33 in C. rozellae, 29-31 in C. scansorius); 71-72 scales along the dorsal midline (72-77 in C. bivittatus, 74 in C. scansorius); 23-25 subdigital lamellae on the fourth toe (14-17 in C. bivittatus, 21-22 in C. scansorius); dorsolateral stripes absent in adults (present in C. bivittatus and C. scansorius), and flanks marked with well-defined pale spots (no spots present in C. bivittatus, C. rozellae, or C. scansorius; C. bivittatus with dark flanks with pale flecks, C. rozellae with dark bars on flanks, and C. scansorius with pale scales arranged in vertical bars).

- DESCRIPTIONS. Descriptions other than the original appear in Campbell and Camarillo (1994) and Townsend et al. (2005). Wilson et al. (1986) described the color in life of an adult female.
- ILLUSTRATIONS. A black-and-white photograph appears in Wilson et al. (1986) and a color photograph in Townsend et al. (2006). Black-and-white illustrations appear in Strahm and Schwartz (1977: middorsal osteoderm), Savage and Lips (1993: dorsal color pattern), and Campbell and Camarillo (1994: lateral and dorsal aspects of the head).
- **DISTRIBUTION**. Celestus montanus is found in the premontane and lower montane wet forests of northwestern Honduras in Depto. Cortés between 915–1780 m elevation (see **Comment**). This species also reportedly occurs in the Merendón region of eastern Guatemala (Campbell 2005, Townsend et al. 2005).



**Map**. Known distribution of *Celestus montanus*. The open circle denotes the type-locality. Closed circles indicate other reported localities.

- FOSSIL RECORD, None.
- PERTINENT LITERATURE. Strahm and Schwartz (1977) and Savage and Lips (1993) included this species in their discussions of the validity of the genus Celestus; Savage and Lips (1993) also illustrated the distribution. Savage (2002) mentioned the species when introducing the genus Celestus in his book. Wilson and McCranie (2004a) and Townsend (2006) analyzed conservation status. Townsend et al. (2005) provided morphological data for a juvenile specimen. Ecological distribution was discussed by Wilson et al. (2001), Wilson and McCranie (2003, 2004b), and Wilson and Townsend (2006). Several papers describing other Diploglossine lizards included Celestus montanus for comparative purposes: Savage and Lips (1993), Campbell and Camarillo (1994; as Diploglossus), McCranie and Wilson (1996), and Werler and Campbell (2004; as Diploglossus).

The species appears in the following keys, faunal

- lists, and biogeographical works: Marx (1958), Savage (1966), Wermuth (1969), Peters and Donoso-Barros (1970), Meyer and Wilson (1973), Villa et al. (1988), Wilson (1983), Wilson and McCranie (1994, 2002), Köhler (2000, 2003), Townsend (2006), and Townsend et al. (2006).
- REMARKS. The type-locality is probably in the vicinity of Quebrada del Infierno on the eastern slope of Cerro de La Virtúd, Depto. Cortés, Honduras (Schmidt 1942; McCranie and Wilson 2002). The validity of the genus *Celestus* is a matter of some controversy, with some authors (Stejneger 1904; Taylor 1956; Peters and Donoso-Barros 1970; Strahm and Schwartz 1977; Wilson et al. 1986; Savage and Lips 1993; McCranie and Wilson 1996, Köhler 2000, 2003; Savage 2002) choosing to recognize the genus as distinct, while others (Boulenger 1885, Dunn 1939, Wermuth 1969, Campbell and Camarillo 1994, Werler and Campbell 2004) consider *Celestus* a junior synonym of *Diploglossus*.
- ETYMOLOGY. The specific epithet apparently refers to the mountainous habitat where the holotype was collected.
- **COMMENT**. A recently collected specimen (UF 144903; Fig. 2) was found at the highest elevation (1780 m) known for this species.
- ACKNOWLEDGMENTS. Daniel Pupius and Brooke Talley kindly allowed use of their photographs. Museum acronyms follow Leviton et al. (1985).

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Josiah H. Townsend, Tropical Conservation and Development Program, Center for Latin American Studies, University of Florida, and Division of Herpetology, Florida Museum of Natural History, Gainesville, Florida 32611-7800 (jtownsend@flmnh.ufl.edu).

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