**Amphibia: Caudata**

*Aquiloeyrea cephalica* (Cope, 1865). Size and natural history. *Aquiloeyrea cephalica* is a plethodontid salamander found in the Transmexican Volcanic Belt and the Sierra Madre Oriental in Mexico (Parra-Olea et al., 2005). Its distribution includes the states of Hidalgo, Mexico, Morelos, Puebla, Querétaro, San Luis Potosí, Tamaulipas, Tlaxcala, and Veracruz, as well as the Distrito Federal (Smith and Smith, 1976; Parra-Olea et al., 2005; Fernández et al., 2006; Farr et al., 2009). *Aquiloeyrea cephalica* is polytypic, and according to Parra-Olea et al. (2010) it likely represents a species complex.

On 8 August 2015 at 15:39 h, we collected an adult female *A. cephalica* (Fig. 1) in a trail within Parque Ejidal San Nicolás Totolapan, Magdalena Contreras, Distrito Federal, Mexico (19.25175N, 99.248528W; WGS 84; elev. 2,966 m). The salamander was perched on a tussock of dry grass at approximately 15 cm above the ground. The vegetation along the trail was pine-juniper forest. The specimen (MZFC 29986) was deposited in the herpetological collection of the Museo de Zoología “Alfonso L. Herrera,” Facultad de Ciencias, Universidad Nacional Autónoma de México, and represents the second largest and most fecund known female of this species (see below).

![Specimen of *Aquiloeyrea cephalica* (MZFC 29986) in life.](image)

We examined MZFC 29986 morphologically with the aid of a dissecting microscope, and recorded measurements either with a digital caliper or a ruler adapted to the ocular of a dissecting microscope (to the nearest 0.1 mm). We sexed the specimen by dissection. The limb interval equals the number of costal interspaces separating the forelimb and hind limb when adpressed against the body. The snout–vent length (SVL) equals the distance between the tip of the snout and the anterior edge of the vent, and the standard length (SL) equals the distance between the tip of the snout and the posterior edge of the vent. Measurements (in mm, except for the limb interval) and tooth counts of the specimen are as follows: SVL = 57.4; SL = 60.7; tail length = 50.7; axilla–groin distance = 32.6; limb
interval = 2; snout–gular fold distance = 14.8; head width = 8.5; head depth = 4.6; internarial width = 2.5; nostril
diameter = 0.2; shoulder width = 6.9; forelimb length = 14.1; hind limb length = 16.7; foot width = 5.3, premaxill-
ary plus maxillary teeth = 80; and vomerine teeth = 27. Upon dissection, we found that the specimen contained 53
vitellogenic follicles (27 in the left ovary and 26 in the right), ranging in diameter from 1 to 2.5 mm.

Several publications state that males of *A. cephalica* are larger than females (e.g., Uribe-Peña et al., 1999; Ramírez Bautista and Arizmendi, 2004). In contrast, Parra-Olea et al. (2010) reported larger sizes for females than males. Ramírez-Bautista et al. (2009) reported the largest specimen of the species, a female collected in 1977 and measuring 62.7 SVL, but we are not aware if the authors measured the SVL or the SL, as these measurements are
used here. Either way, the specimen herein described represents the second largest known female of the species. It
surpasses the SL of the third largest reported female by 2.9 mm (Parra-Olea et al., 2010), and has an unusually high
number of premaxillary plus maxillary teeth (80 vs. 2–11 and 43–70 premaxillary and maxillary teeth, respectively,
in previously reported specimens; Ramírez Bautista and Arizmendi, 2004; Parra-Olea et al., 2010), which probably
is related to the large size of the specimen. Based on his own observations of *A. cephalica* and reported accounts
of other plethodontid species, Bille (1998: 450) stated that, “It seems . . . that teeth are added continuously during
ontogeny.”

Clutch sizes of 22 to 28 eggs have been reported for *A. cephalica* (Bille, 1998; Ramírez Bautista and Arizmendi, 2004). In contrast, MZFC 29986 contained about twice that number of vitellogenic follicles. The spec-
imen with a clutch size of 22 came from Parque Nacional Lagunas de Zempoala, Morelos, Mexico, at an elevation
of 2,850 m, ca. 23 km (straight line) from the collection locality of MZFC 29986. Even though we are not certain if
all of the follicles present in MZFC 29986 would have been ovoposited, the number is considerably larger than the
27 vitellogenic follicles present in the largest known specimen of the species (see above; Ramírez-Bautista et al.,
2009). More data are needed to assess whether this difference is explainable by intrapopulational variation, local
adaptation, body size dependence of the clutch size, or specific level divergence.

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material into the MZFC collection.

**Literature Cited**


**Reptilia: Squamata (lizards)**

**Callisaurus draconoides. Reproduction.** *Callisaurus draconoides* ranges from northwestern Nevada and southeastern California eastward to southwestern New Mexico, in the United States, and in Mexico southward to the tip of Baja California and southern Sinaloa (Stebbins, 2003). Although the reproduction of *C. draconoides* has been well studied in North America (Pianka and Parker, 1972; Tanner and Krogh, 1975; Vitt and Ohmart, 1977; Goldberg, 2013), reproductive information on *C. draconoides* in Mexico consists of reports from Baja California (Asplund, 1967; Fitch, 1970; Grismer, 2002). In this note I report five clutch sizes for *C. draconoides* from Sinaloa, Mexico.

I examined five females of *C. draconoides* collected 20 July 1960 at Mazatlán (23.2200°N, 106.4200°W; WGS 84), Sinaloa, Mexico. The specimens were deposited in the herpetology collection of the Natural History Museum of Los Angeles County (LACM), Los Angeles, California, United States as LACM 94447–94451. Four of the five contained oviductal eggs, and the remaining female (LACM 94447) had five enlarged pre-ovulatory follicles (> 6 mm). The mean clutch size of the five specimens was 3.0 ± 1.2 SD, range = 2–5, which is within the range (2–15 eggs) and time for oviposition (June to August) reported for *C. draconoides* in the United States by Stebbins (2003). Additional monthly samples of *C. draconoides* need to be examined before the reproductive cycle of this species in Sinaloa can be ascertained, and comparisons made with North American populations.

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**Literature Cited**


