The genus *Thamnodynastes* is comprised of 19 valid species distributed throughout South America from Northern Colombia to Southern Argentina (Cei et al., 1992; Franco and Ferreira, 2002; Bailey et al., 2005; Bailey and Thomas, 2007). It consists of small snakes, viviparous and opistoglyphas, with an elliptical vertical pupil that can live in a wide variety of habitats and environments (Bailey, 1967; Hamdan and Lira-Da-Silva, 2012). *Thamnodynastes pallidus* is recorded for localities in the Guianas, Suriname, Bolivia, Venezuela, Colombia, Ecuador, Peru, and Brazil (Franco and Ferreira, 2002; Nóbrega et al., 2016).

In Brazil *T. pallidus* is found in Pará (Franco and Ferreira, 2002), Rondônia (Bernarde et al., 2012), Acre (Silva et al., 2010), Mato Grosso do Sul (Silva Jr et al., 2009), Paraíba (Santana et al., 2008), Pernambuco (Franco and Ferreira 2002), Alagoas (Guedes et al., 2014), Bahia (Marques et al., 2013; Marques et al., 2017) and Sergipe (Carvalho et al., 2005) states. Previously, affirmed that *T. pallidus* exhibiting a disjunct distribution in northeastern Brazil. Further, Franco and Ferreira (2002) corroborate and confirm the occurrence of *T. pallidus* in this region (Hamdan and Lira-Da-Silva, 2012). According to Nóbrega et al. (2016), in a recent study the definition of this species and its geographic limits was still unresolved. These authors also performed a distribution modelling analysis to identify potential suitable areas for *T. pallidus*, in order to understand definition and geographical limits of this species and was verified the regions with particularly high suitability are seen on the northeast coast of Brazil, the central Brazilian Amazon, the coast of the Guianas, northern Bolivia, eastern Peru and Colombia.

*Thamnodynastes pallidus* is observed in ombrophilous forest remnants, this snake is nocturnal and found foraging on the ground (Cunha and Nascimento, 1981; Marques et al., 2016; Marques et al., 2017). Cunha and Nascimento (1978) report *T. pallidus* inhabiting the humid ground on forests and feeding on frogs and insect larvae. About reproduction, previously, the reports to this species have been only information about ovarian

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**Morphometry of hatchlings of *Thamnodynastes pallidus* (Linnaeus, 1758) (Serpentes: Dipsadidae: Xenodontinae: Tachymenini)**

Daniel O. Santana1*, Francis L. S. Caldas1,4, Débora S. Matos2, Charlles M. S. Machado2, José L. Vilanova-Júnior2 and Renato G. Faria3

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**Figure 1.** Hatchlings of *Thamnodynastes pallidus* (C4509 to C4512) from rural area of Carlos Torres in Salgado municipality, state of Sergipe, northeastern Brazil. Photo by Daniel Oliveira Santana.
Table 1. Morphometry (in mm) and mass (in g) of the hatchlings and female of *Thamnodynastes pallidus* in rural area of Carlos Torres in Salgado municipality, state of Sergipe, northeastern Brazil. The Mean and Standard Deviation refer only to the hatchlings. Snout-vent length = SVL, Tail length = TL, Tail width = TW, Head width = HW, Ocular width = OW, Nasal width = NW, Ocular-nasal distance = OND, Head length = HL, Snout-labial distance = SLD and V entral-sinfsal distance = VSD; *Stillborn; **Female.

<table>
<thead>
<tr>
<th>Voucher</th>
<th>SVL</th>
<th>HL</th>
<th>HW</th>
<th>OW</th>
<th>NW</th>
<th>OND</th>
<th>VSD</th>
<th>SLD</th>
<th>TL</th>
<th>TW</th>
<th>mass (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4509</td>
<td>158.41</td>
<td>9.2</td>
<td>4.84</td>
<td>5.16</td>
<td>1.77</td>
<td>1.54</td>
<td>8.2</td>
<td>5.3</td>
<td>61.37</td>
<td>2.48</td>
<td>1.75</td>
</tr>
<tr>
<td>C4510</td>
<td>162.91</td>
<td>9.11</td>
<td>4.73</td>
<td>5.27</td>
<td>1.86</td>
<td>1.47</td>
<td>7.53</td>
<td>5.26</td>
<td>63.57</td>
<td>2.3</td>
<td>1.75</td>
</tr>
<tr>
<td>C4511</td>
<td>149.74</td>
<td>8.85</td>
<td>4.76</td>
<td>5.01</td>
<td>1.69</td>
<td>1.69</td>
<td>7.49</td>
<td>5.27</td>
<td>58</td>
<td>2.11</td>
<td>1.4</td>
</tr>
<tr>
<td>C4512</td>
<td>164.16</td>
<td>9.08</td>
<td>5.2</td>
<td>5.53</td>
<td>1.93</td>
<td>1.41</td>
<td>7.56</td>
<td>5.51</td>
<td>63.99</td>
<td>2.45</td>
<td>1.6</td>
</tr>
<tr>
<td>C4514*</td>
<td>150.36</td>
<td>9.03</td>
<td>5.25</td>
<td>5.29</td>
<td>1.91</td>
<td>1.5</td>
<td>7.03</td>
<td>5.43</td>
<td>60.72</td>
<td>2.34</td>
<td>1.5</td>
</tr>
<tr>
<td>C4513**</td>
<td>412</td>
<td>11.7</td>
<td>8.11</td>
<td>7.73</td>
<td>2.75</td>
<td>2.66</td>
<td>11.1</td>
<td>9.25</td>
<td>167</td>
<td>5.05</td>
<td>14</td>
</tr>
<tr>
<td>Mean</td>
<td>157.12</td>
<td>9.05</td>
<td>4.96</td>
<td>5.25</td>
<td>1.83</td>
<td>1.52</td>
<td>7.56</td>
<td>5.35</td>
<td>61.49</td>
<td>2.34</td>
<td>1.6</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>6.80</td>
<td>0.13</td>
<td>0.25</td>
<td>0.19</td>
<td>0.10</td>
<td>0.11</td>
<td>0.42</td>
<td>0.11</td>
<td>2.38</td>
<td>0.15</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Follicles, eggs and embryos in development. Cunha and Nascimento (1981) verified in an analysis of collected specimens, four females observed with eggs (3, 4, 5 and 6 eggs respectively), and also found a gravid female with seven well-developed neonates close to being expelled. In another study Marques et al. (2014) examined two gravid females, where they observed the presence of two eggs in one female and ten ovarian follicles in the other female. However, the morphometric information of neonates have not been known until now.

On 17 February 2015, we collected a female *T. pallidus* at the rural area of Carlos Torres in Salgado municipality, state of Sergipe, northeastern Brazil (-11.0269°S, -37.4189°W; DATUM SAD-69; 55 m above sea level). The animal was gravid and had a ventral expansion. On 24 February 2015, while in captivity, it gave birth to four alive offspring (Figure 1) and on 25 February 2015 to one stillborn offspring. The hatchlings showed the same coloration as the mother and were immediately measured and weighed. For each snake, we registered the snout-vent length (SVL), the tail length (TL), the tail width (TW), the head width (HW), the ocular width (OW), the nasal width (NW), the ocular-nasal distance (OND), the head length (HL), the snout-labial distance (SLD) and the ventral-sinfsal distance (VSD) with a digital calliper (precision of 0.1 mm). The body mass was registered using an electronic balance (precision of 0.1 g).

The mean snout-vent length (SVL) of *T. pallidus* hatchlings was 157.10 ± 6.8 mm and the mean body mass was 1.60 ± 0.15 g (Table 1). Voucher specimens were deposited in the Collection of the Herpetological Collection of the Universidade Federal de Sergipe (CHUFS - C4509 to C4514) and were collected under the collecting permit #10504-1; Granted by the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis – IBAMA.

Body size is a basic characteristic of organisms, which has direct implications on physiology, ecology, and social interactions (Schäuble, 2004). In studies with snakes, for example, morphological data are frequently used to describe and compare biological assemblages (Martins and Oliveira, 1998; França et al., 2008) or even to investigate variations within the same species subject to differences in the supply of certain resources (Shine 1987; Boback, 2006). However, there is a notable deficiency of juvenile data especially newborn. This is the first description of morphometry and mass of hatchlings of *Thamnodynastes pallidus* and this information adds to the limited data currently available on wild reproduction in this species. We hope that this data can be used in a comparative way for juveniles of other congeners and even of other species of snakes helping to clarify systematic aspects, morphological variations in geographic scale and phenotypic plasticity.

**Acknowledgements.** We thank Msc. Rafaela Cândido de França for critically reviewing the manuscript and confirmation of the observed species. The Federal University of Sergipe for logistic. The CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) and the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the fellowships granted to authors.

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