# *Philodryas olfersii* (Squamata, Serpentes, Dipsadidae): Nocturnal mating behavior

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The green snake, *Philodryas olfersii,* is a semi-arboreal, dietary generalist and is considered to be exclusively diurnal (Marques *et al.,* 2001). It is widely distributed in South America, occurring in Brazil, Peru, Bolivia, Paraguay, Uruguay and Argentina (Peters and Orejas-Miranda, 1970). It is probably one of the most studied species of dipsadids due to its high abundance in many snake assemblages (Vitt and Vangilder, 1983; Bernarde and Abe, 2006; França and Araújo, 2007; Pontes *et al.,* 2008).

There is a considerable amount of information available on diet, reproductive cycle, activity patterns, and frequency of snake bites caused by *Philodryas olfersii* (Vitt, 1980; Vitt and Vangilder, 1983; Fowler and Salomão, 1994; Hartmann and Marques, 2005; Leite *et al.,* 2009). However, as is the case for most Neotropical snake species, information on mating behavior in nature is scarce (Zacariotti and Valle, 2010). Herein, we present the first record of the mating behavior of *P. olfersii* in nature.

On 19 June 2009, at 20:15 h, in a Caatinga habitat in Pentecoste municipality, State of Ceará, Brazil (03°44'25.4"S, 39°18'26.0"W; GPS Datum: WGS84), we observed a pair of *Philodryas olfersii* (male: snout vent length, SVL = 561 mm, tail length, TL = 242 mm; mass = 47.9 g; female: SVL = 645 mm, TL = 259 mm, mass = 66 g) mating on the top of a spiny tree (Fabaceae, Mimosoideae) at approximately 7 m above the ground. The male was on a lower branch than the female; their tails were entwined, and this was the only body part in contact (Figures 1 and 2). Cloacal juxtaposition and hemipenial insertion were evident. Both snakes remained copulating on the top of the tree for 15 minutes, performing only slow tail movements. At the end of the process the snakes were captured, measured and released at the capture site.

Observations of mating behavior in nature are rarely reported, even for a common and widely distributed species, such as *Philodryas olfersii*. But perhaps the most remarkable information of this record is that the mating process occurred at night, approximately two hours after sunset and beyond the expected diel activity of this species. However, we cannot disregard the possibility that the process of courtship and mating had initiated during the day because when we began our observations intercourse was already ongoing.

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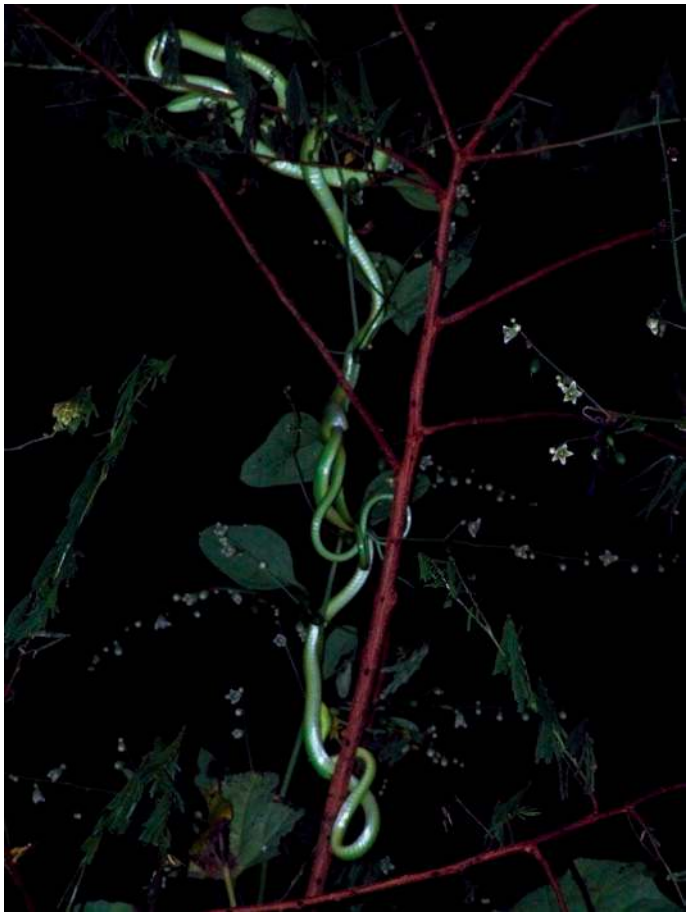


**Figure 1:** Mating behavior of *Philodryas olfersii* at night (20:15) in Pentecoste municipality, State of Ceará, Brazil.

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Macho adulto de *Ischnocnema henselii,* Pró-Mata, São Francisco de Paula, RS. (Foto: T. Grant).