



# Death-feigning Behavior by a Banded Racer, *Platyiceps plinii* (Merrem 1820) (Squamata: Colubridae)

Diptesh Ramani<sup>1</sup> and Krunal Trivedi<sup>2</sup>

<sup>1</sup>223, Laxman Nagar, Punagam, Surat, Gujarat-395010, India (dipteshramani017@gmail.com)

<sup>2</sup>81, Sarjan Society, Parle Point, Surat, Gujarat-395007, India (krunal.trivedi.7567@gmail.com [corresponding author])

Death feigning (also known as thanatosis, catalepsy, or tonic immobility) is a form of defensive behavior in which an animal pretends to be dead when threatened or attacked by a predator (Greene 1988; Vogel and Han-Yuen 2010). This behavior has rarely been recorded in Asian snakes (Mirza et al. 2011) but a few reports document thanatosis in Indian snakes: Checkered Keelback, *Fowlea piscator* (Vogel and Han-Yuen 2010), Copper-headed Trinket Snake, *Coelognathus radiatus* (Vogel and Han-Yuen 2010; Giri et al. 2020; Nadolski et al. 2020), Common Wolfsnake, *Lycodon aulicus* (Vogel and Han-Yuen 2010; Mirza et al. 2011), Large-eyed False Cobra, *Pseudoxenodon macrops* (Bhosale and Thite 2013), Burmese Python, *Python bivittatus* (Bhattarai et al. 2017), Yellow-collared Wolfsnake, *Lycodon flavicollis* (Muliya et al. 2018), and Common Sand Boa *Eryx conicus* (Deshmukh et al. 2020). Herein we report the first record of thanatosis in the Banded Racer, *Platyiceps plinii* (Merrem 1820).

The Banded Racer is a non-venomous colubrid (Fig. 1) that inhabits plains, plateaus, mid-elevation hills covered with mixed and dry deciduous and scrub forests, semi-arid and rocky areas, and also has been recorded in urban and cultivated areas where it has been found in houses, village environs, open agricultural fields, gardens, parks, and farms

(Whitaker and Captain 2004; Deepak et al. 2021). It is an active hunter that feeds on small mammals, lizards, frogs, and birds and usually kills its prey by constriction (Whitaker and Captain 2004).

On 11 July 2021, a Nature Club Surat team member rescued a subadult *Platyiceps plinii* from Althan, Surat, Gujarat, India (21°07' 45.31 N, 72°46' 23.96 E). During the rescue operation, the snake first attempted to flee but, when handled, began striking at the rescuer. When fleeing and striking failed, the snake feigned death (Fig. 2). Released onto the ground, it stopped moving, inverted its body and exposed its venter, and gaped. The snake appeared to be fully relaxed except in the nuchal region. It remained in this position for 4–6 min. After being left undisturbed, it slowly turned its body upright and again attempted to flee. The snake again exhibited death-feigning behavior when it was released into nearby natural habitat.

### Acknowledgements

We thank Shri Snehal Patel, Shri Ashish Vakil, and the Nature Club Surat for constant support and motivation; Rakesh Patel for assisting in the rescue operation; and Harshil Patel for nomenclatural advice and discussion.



**Fig. 1.** A Banded Racer (*Platyiceps plinii*) from Surat, Gujarat, India. Photograph by Krunal Trivedi.



**Fig. 2.** Death-feigning by a Banded Racer (*Platyiceps plinii*) from Surat, Gujarat, India. Photograph by Krunal Trivedi.

## Literature Cited

- Bhattarai, S., C.P. Pokheral, and B.R. Lamichhane. 2017. Death feigning behavior in the Burmese Python *Python bivittatus* Kuhl, 1820 in Chitwan National Park, Nepal. *Russian Journal of Herpetology* 24: 323–326. <https://doi.org/10.29252/JAD.2021.3.1.2>.
- Bhosale, H.S. and V. Thite. 2013. Death feigning behavior in Large-eyed False Cobra *Pseudoxenodon macrops* (Blyth 1854) (Squamata: Colubridae). *Russian Journal of Herpetology* 20: 190–192. <https://doi.org/10.30906/1026-2296-2013-20-3-190-192>.
- Deepak, V., S. Narayanan, P.P. Mohapatra, S.K. Dutta, G. Melvinselvan, A. Khan, K. Mahlow, and F. Tillack. 2021. Revealing two centuries of confusion: new insights on nomenclature and systematic position of *Argyrogena fasciolata* (Shaw 1802) (auctt.), with description of a new species from India (Reptilia: Squamata: Colubridae). *Vertebrate Zoology* 71: 253–316. <https://doi.org/10.389/vz.71e64345>.
- Deshmukh, R.V., S.A. Deshmukh, S.A. Badhekar, U.M. Udupure, and S.K. Hattimare. 2020. Death-feigning behavior in the Common Sand Boa, *Eryx conicus* (Schneider 1801) (Erycidae), and the Common Wolfsnake, *Lycodon aulicus* (Linnaeus 1758) (Colubridae). *Reptiles & Amphibians* 27: 65–67. <https://doi.org/10.17161/randa.v27i1.14457>.
- Giri, R., R. Giri, and K. Devkota. 2020. Death-feigning behavior by Copper-headed Trinket Snakes, *Coelognathus radiatus* (Boie 1827) (Squamata: Colubridae), in Nepal. *Reptiles & Amphibians* 27: 249–250. <https://doi.org/10.17161/randa.v27i2.14196>.
- Greene, H.W. 1988. Antipredator mechanisms in reptiles, pp. 1–152. In: C. Gans and R.B. Huey (eds.), *Biology of the Reptilia. Volume 16, Ecology B. Defense and Life History*. Alan R. Liss, New York, New York, USA.
- Mirza, Z.A., V.V. Vaze, and R.V. Sanap. 2011. Death feigning behaviour in two species of the genus *Lycodon* of Asia (Squamata: Colubridae). *Herpetology Notes* 4: 295–297.
- Muliya, S.K., A. Nath, and A. Das. 2018. First report of death feigning behaviour in the yellow collared wolf snake (*Lycodon flavicollis*). *The Herpetological Bulletin* 143: 41–42.
- Nadolski, B., K. Trivedi, K. Ashaharaza, and P. Suwanwaree. 2020. Defensive behaviors of Copper-headed Trinket Snakes, *Coelognathus radiatus* (Boie 1827) (Squamata: Colubridae), from the Sakaerat Biosphere Reserve, Thailand. *Reptiles & Amphibians* 26: 243–244. <https://doi.org/10.17161/randa.v26i3.14424>.
- Vogel, G. and K. Han-Yuen. 2010. Death feigning behavior in three colubrid species of tropical Asia. *Russian Journal of Herpetology* 17: 15–21. <https://doi.org/10.30906/1026-2296-2010-17-1-15-21>.
- Whitaker, R. and A. Captain. 2004. *Snakes of India. The Field Guide*. Draco Books, Chennai, India.