

## An unusual sleep posture for the oriental garden lizard *Calotes versicolor*

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The oriental garden lizard *Calotes versicolor* (Daudin, 1802) is a wide spread agamid species, ranging from Oman across southern and south-eastern Asia to Indochina, the Maldives, Reunion, Mauritius and Seychelles (Wei et al., 2018; Deb & Sengupta, 2020). On April 4, 2020 at 23:14 h, at the college campus of A.V.C. College (Autonomous), Mannampandal (11.1036° N, 79.6934° E; WGS 84; 39 m a.s.l.), Cauvery Delta region, Tamil Nadu, India, we were studying the perch selection of two sympatric agamid species, when we recorded the peculiar sleep posture of a sub-adult *C. versicolor*. The lizard was observed hanging from a grass twig by its jaws while its limbs provided no support and simply hung from the body (Fig. 1). Lizards typically choose narrow, unstable perch plants to sleep; this allows for the early detection of an approaching predator (Bors et al., 2020). We searched for predators nearby in case the lizard was feigning death as an anti-predator response (Sengupta et al., 2020) but none could be found. Upon closer observation, it could be seen that both eyelids of the lizard were closed and that it appeared to be asleep.



Figure 1. Peculiar sleep posture of a sub-adult *Calotes versicolor*

After completion of the survey at 23:55 h, we returned to the same location and found the individual in the same posture. When photographing this behaviour (due to the flash of the camera), the individual became alert and dropped down the ground and escaped. This peculiar sleep posture seems not to have been reported previously in *C. versicolor* or other lizard species and gives some insights into both the physical and behavioural capabilities of this species. Why this posture is adopted remains unknown but we suggest that it could be a defence against snakes as they typically swallow their prey head first and this posture would obstruct them. Alternatively, if such a posture actually made predation more likely for some types of predator then it might be induced by a parasite that is using the lizard as an intermediate host; such host manipulation by parasites is well known in other taxa (Heil, 2016).

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