Herpetology Notes 19: 513–515, published on 12 July 2026

Predation on a Clown Rasbora, *Rasbora kalochroma*, by a Painted Mock Viper, *Psammodynastes pictus* Günther, 1858

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Psammodynastes pictus Günther, 1858, commonly known as the Painted Mock Viper, is widely distributed throughout Southeast Asia (Das, 2010). This species, along with *Psammodynastes pulverulentus* (Boie, 1827), has recently been placed in the distinct family Psammodynastidae (Das et al., 2024). *Psammodynastes pictus* is typically associated with swamp and riparian habitats and is frequently observed perched motionless on vegetation at the edges of water bodies (Tapley and Muurmans, 2011; Tan and Yi, 2024). Asad et al. (2020) recorded a sit-and-wait ambush feeding strategy in *P. pictus* on fish from an arboreal position. This behaviour relies on the visual detection of prey above the water surface, followed by a direct strike into the water column. However, current knowledge of this species' feeding ecology, particularly its diet composition, remains limited. Previous detailed observations of prey consumed by *P. pictus* include freshwater shrimp, *Rasbora* sp. (identified only to genus), *Trichopodus trichopterus*, and *Zenarchopterus buffonis* (Durso et al., 2025). Here, we report on an observation of *P. pictus* feeding on the Clown Rasbora (*Rasbora kalochroma*) in the Katingan–Mentaya peat swamp, Central Kalimantan, Indonesia.

On 24 May 2023 at 19:00 h, we observed an adult *P. pictus* (approx. 40 cm total length) perched on the fronds of emergent pandanus-like sedges, *Mapania bancana*, along the bank of a blackwater stream within the peat swamp forest of Hanaut River Drainages, part of Katingan-Mentaya Landscape in Central Kalimantan, Indonesia (2.7077°S, 113.0857°E, elevation 20 m). The snake adopted an "S"-shaped ambush posture above the water surface and struck an adult *R. kalochroma* (approx. 5 cm total length) swimming near the surface of the water column (Fig. 1). This fish was identified following a description by Kottelat (1993), based on body shape, colouration and presence of notable dark dots on the posterior part of the body. The fish was subdued by the snake's jaws without any observed constriction. The snake then proceeded to swallow the prey head-first. Throughout prey handling and ingestion, the snake relied solely on jaw movements, without the use of constriction. During this period, the snake remained suspended above the water, anchoring its posterior body and tail around the sedge leaves. After completing ingestion for approx. 4 minutes, the snake climbed higher onto the leaves and rested on the upper surface with continuing peristaltic movements to move the prey into the stomach.

During this observation, no lingual luring behaviour was observed. This finding is consistent with previous accounts by Asad et al. (2020), which suggest that *P. pictus* primarily relies on visual cues, employing an arboreal ambush position followed by direct strikes into the water. Similar arboreal piscivorous ambush behaviours have been reported in *Mesotes strigatus* (Günther, 1858) from South America and *Ahaetulla fronticincta* (Günther, 1858) from the Indochinese region (Maria-da-Rosa et al., 2020; Wogan and Vogel, 2020). In *M. strigatus*, individuals rest their mouths at the water surface and attract fish by vibrating the tongue above the water (Maria-da-Rosa et al., 2020), whereas no lingual luring behaviour has been reported in *A. fronticincta*. The evolution of fishing behaviour in these three mostly arboreal snake species may also be influenced by their optical anatomy. Although *M. strigatus* is considered a nocturnal species, it possesses an optical anatomy similar to those of diurnal snakes (Maria-da-Rosa et al., 2020). Meanwhile, both *Ahaetulla* and *Psammodynastes* exhibit a typical diurnal snake retina, and the presence of a temporal fovea

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Figure 1. (A) *Psammodynastes pictus* grasped *Rasbora kalochroma* by its head. (B and C) the process of ingestion, mainly relying on jaw movement to consume the fish. (D) Following ingestion, the snake rested on the upper surface of the leaves with the fish being moved in the digestive tract via peristaltic motions. Photos by Alfonsus T. E. Saputro.

which may enhance forward visual acuity (Rasmussen, 1990). These visual adaptations may enable *P. pictus* to utilise active visual targeting and forward striking when capturing fish. However, research on fishing behaviour in these species remains limited, and further studies examining the relationship between optical anatomy, prey detection, and capture efficiency are needed to better elucidate this behaviour.

The fishing behaviour documented herein demonstrates the ability of *P. pictus* to exploit aquatic resources and highlights the importance of riparian microhabitats and the existence of peat swamp for the survival of this species. As suggested by Asad et al. (2020), *P. pictus* tends to occur closer to larger bodies of water compared to its congener *P. pulverulentus*. This pattern may reflect differences in dietary composition or feeding ecology with *P. pictus* possibly consuming more fish prey than its congener. Moreover, given the observed arboreal ambush position above the water surface, it is plausible that *P. pictus* prefers to prey upon fish species that occupy the surface or upper water column. Nevertheless, additional studies are needed to better understand the dietary composition of this species, especially in comparison with its closest relative *P. pulverulentus* or with other arboreal piscivorous snakes exhibiting similar feeding strategies, such as *A. fronticincta*.

Acknowledgments. This observation was made as part of routine biodiversity monitoring by PT Rimba Makmur Utama within their concession in the Katingan-Mentaya Peat Landscape PT. Rimba Makmur Utama is operating in Kotawaringin Timur Kalimantan under permit by Ministry of Forestry, Indonesia Decree No. 23/1/IUPHHK-RE/PMDN/2016 concerning the issuance of an IUPHHK-RE dated 15 November 2016, which is deemed equivalent with Decree of the Head of the Investment Coordinating Board (SK PBP) No.SK.1099/MENLHK/SETJEN

/PHL.0/11/2021, dated 17 November 2021. We thank all staff involved in the survey, particularly Mr. Julkipli and Mr. Shahrizal Pratama, for their assistance and field support. We also thank Neil Balchan and Przemysław Zdunek for reviewing the draft of this article.

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Accepted by Russell J. Gray