

Washington, DC, USA. <sup>2</sup>ViaFAUNA Estudos Ambientais, São Paulo, Brazil. <sup>3</sup>Programa de Pós-graduação stricto sensu em Ciências Ambientais, Universidade do Estado de Mato Grosso, Cáceres, Brazil. <sup>4</sup>World Wildlife Fund, Washington, DC, USA. <sup>5</sup>Instituto de Ciências Naturais, Humanas e Sociais, Universidade Federal de Mato Grosso, Sinop, Brazil. <sup>6</sup>Centre for Environmental Policy, Imperial College London, London, UK

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## Rediscovery after 100 years: first confirmed sighting of the Gombak bent-winged firefly in Kuala Lumpur

The genus *Pteroptyx* is notable among firefly genera because of extensive research on its species. Certain species within the genus gather on mangrove trees, creating a bioluminescent display along intertidal rivers, making them iconic ecotourism spots. Ongoing research on firefly taxonomy has led to the division of *Pteroptyx* into three groups, with one group exclusively comprising species characterized by deflexed elytra, commonly referred to as bent-winged fireflies (Jusoh et al., 2018, *Zootaxa*, 4456, 1–71). Of the 14 bent-winged firefly species, nine inhabit mangrove ecosystems, but the habitats of the remaining five (*Pteroptyx decolor*, *Pteroptyx gombakia*, *Pteroptyx masatakai*, *Pteroptyx sulawesensis* and *Pteroptyx truncata*) are unclear, as these species were described solely based on museum specimens, with insufficient ecological data.

On 9 January 2025, when examining *Colophotia* firefly specimens collected during experiential learning events at Bukit Kiara, Kuala Lumpur (Muharraran et al., 2024, *Oryx*, 58, 9), author WJT observed a male specimen that did not fit within the *Colophotia* genus, specifically lacking a median carina on ventrite 7. This specimen had short, flat, hairless incurving lobes along the posterior margin of the ventrite. Further examination revealed a metafemoral comb on the third leg, deflexed elytra, and a short, narrow postero-lateral projection, shorter than the emarginated median posterior projection. These morphological characteristics confirmed the specimen as *P. gombakia*, the Gombak bent-winged firefly, originally described by Ballantyne in 2015 based on a single specimen collected in the Gombak Valley, Kuala Lumpur, in 1921.

This is the first confirmed sighting of a live Gombak bent-winged firefly in a century. It is also the first record of the species in Bukit Kiara and the first known occurrence outside mangrove habitats. Currently, it remains uncertain whether this species exhibits congregating behaviour, and the limited number of collections implies it may be solitary.

This finding underscores the need for regular species monitoring, particularly given the threatened status of the Bukit Kiara habitat amid urban development. The discovery increases the known firefly species count in Bukit Kiara from eight to nine, emphasizing the critical role insect collections play in documenting species distributions and supporting conservation. We recommend further field studies to support a national Red List assessment for fireflies in Malaysia.

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WEI JACK TAN<sup>1</sup>  and WAN FARIDAH AKMAL JUSOH<sup>1,2</sup>  ([wanf.ajusoh@monash.edu](mailto:ajusoh@monash.edu))

<sup>1</sup>School of Science, Monash University Malaysia, Selangor, Malaysia. <sup>2</sup>IUCN Species Survival Commission Firefly Specialist Group

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## New threat to the Critically Endangered white-bellied heron in Namdapha Tiger Reserve, India

Namdapha Tiger Reserve in the north-east Indian state of Arunachal Pradesh is the only stronghold of the Critically Endangered white-bellied heron *Ardea insignis*, of which 8–10 individuals remain in India. The Reserve is the heron's only known breeding location in the country (Mondal & Maheswaran, 2014, *BirdingASIA*, 21, 13–17) and may be a place from where the birds disperse to nearby localities in search of new territories (Reddy et al., 2021, *Indian Birds* 17, 115–118).

From late 2024 onwards, there has been an increase in the number of local villagers collecting stink bugs *Coridius nepalensis* and *Coridius singhalanus* (Hemiptera: Dinidoridae), known locally as *Gandhi puk*, for consumption and sale. Local people have indicated they can sell the insects for USD 35–125 per kg, depending upon the variety. This potential income has motivated more people to collect the bugs, and this increased anthropogenic disturbance is causing white-bellied herons to desert their foraging grounds.

On a visit to Namdapha during 4–16 January 2025, as part of our research project on the white-bellied heron, supported by the Department of Science & Technology, Government of India, we traversed the majority of the Noa-Dihing and Namdapha Rivers within the Reserve, but saw no white-bellied herons. We have sighted herons along these river stretches on all previous trips in the last 20 years. We were surprised to find instead groups of 3–4 people per km turning boulders in search of stink bugs.

Our team members, who have been stationed inside the Reserve since September 2024, noticed intensive stink bug collection begin in the second week of November 2024 and continue to early February 2025. White-bellied herons tend to forage in open river stretches, and this increase in anthropogenic pressure will make it increasingly difficult for the species to find suitable sites within the Reserve. Furthermore, the heron's nesting season starts in June following courtship beginning during January–February in Namdapha. Absence of the heron in its known localities during this period therefore highlights concern for its reproduction in 2025. A pause in breeding may lead to a further decrease in the already limited population in India. If not addressed quickly, this emerging threat will lead to declines in the heron population in Namdapha Tiger Reserve, where the population is already decreasing (Menzies et al., 2025, *Oryx*, 58, 730–734). Stricter reserve management and provision of alternative incomes for inhabitants of the Reserve are required to mitigate the issue.

GOPINATHAN MAHESWARAN<sup>✉</sup> ([gmaheswaran@yahoo.com](mailto:gmaheswaran@yahoo.com))  
and SRINJOY DAS  
Zoological Survey of India, Kolkata, India

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## Rediscovery of the Critically Endangered *Sinocrassula techinensis* in Sichuan, China

Dry-hot valleys of the tropical regions are considered special ecosystems in which woody and herbaceous plants coexist, strongly influenced by seasonal drought, climate and ecological characteristics. The ancient, primary vegetation of the dry-hot valleys of the Jinsha River basin in south-west China is predominantly herbaceous, with scattered shrubs and trees, resembling a sparse tree savannah. Plants of the genus *Sinocrassula* (family Crassulaceae) are representative of the region's unique vegetation.

With support from the Sichuan Province Batang County Wild Plant Resources Comprehensive Scientific Investigation Project, we surveyed the valleys of the Jinsha River basin in August 2024. During our surveys we incidentally discovered a brightly coloured *Sinocrassula* plant, which we later confirmed to be the rare *Sinocrassula techinensis*.

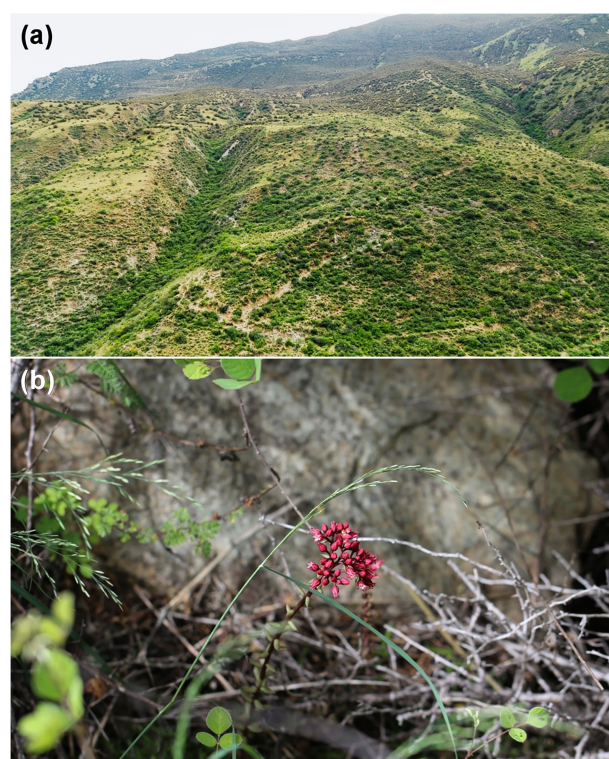
*Sinocrassula techinensis* is a perennial herbaceous plant. The whole plant is glabrous, the flowering stem is solitary and erect, the stem leaves are alternate and the inflorescences are corymbiform with red petals. It often grows alone amongst grass on rocky hillsides. It is categorized as Critically Endangered on the China Biodiversity Red List—Higher Plants and the Red List of China Higher Plants. We discovered a single population of c. 15

individuals at 3,229 m altitude, within shrubland composed of *Sinocrassula davidii* var. *chuansiensis*.

Historically, *S. techinensis* has only been recorded in Yunnan and Tibet, with the previous specimens collected by Fang Zhendong and stored at the Missouri Botanical Garden in 2003. Our discovery is the first record of this species in Sichuan and is of importance for studying the flora, biogeography and phylogenetic relationships of the genus *Sinocrassula*.

Our finding not only enriches knowledge of the biodiversity of Batang County but also demonstrates the suitability of the dry-hot valley environment in the upper reaches of the Jinsha River for the growth and reproduction of *S. techinensis*. To protect this Critically Endangered plant, the local government plans to expand the survey area and continue long-term monitoring, taking effective measures to ensure the survival and reproduction of the species.

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The rediscovery of *Sinocrassula techinensis* in Batang County, Sichuan Province: (a) its habitat in the dry-hot valleys of the Jinsha River basin, and (b) a flowering individual observed during our surveys in August 2024. Photos: Gang Gao.

GANG GAO<sup>✉</sup>, XUYAN CHEN<sup>✉</sup>, ZHIMIN JIANG and YANG YANG  
Faculty of Agriculture, Forestry and Food Engineering, Yibin University, Yibin, Sichuan, China

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