

Anoop Puthuparampil BALAN*, Karadiparambathu ANOOP, Vendakkulathil RAJILESH and Nediyparambu Sukumaran PRADEEP: *Hanguanaceae*, a New Family Record for the Flora of India

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Summary: *Hanguana anthelminthica* (Blume ex Schult. & Schult. f.) Masam. (*Hanguanaceae*), a species that was collected from the Vembanad-Kol Wetland, one of the 27 Ramsar sites in India, constitutes the first distributional record of the monotypic genus *Hanguana* and the monogeneric family *Hanguanaceae* in India. The plant may have reached India from neighbouring countries and naturalized here during the last few decades. Detailed description, illustrations and photographs are provided here to facilitate identification.

Hanguanaceae is a small monogeneric monocot family distributed in South and SE Asia, with the highest diversity in the Sunda region. The family was established by Airy Shaw (1965) by separating the genus *Hanguana* Blume with a single species *H. malayanum* (Jack) Merr. from *Flagellariaceae* based on palynological and anatomical characters. The genus was thought to be monotypic until recently and the name *H. malayana* has almost universally been applied to any *Hanguana* species regardless of ecology or morphology. In the latest revision, Backer (1951) also treated *Hanguana* as a monotypic genus. The diversity in this genus was overlooked until 15 new species were described in recent years from Thailand, Peninsular Malaysia, Singapore and Borneo (Airy Shaw 1981, Tillich and Sill 1999, Siti Nurfaizilah et al. 2010, 2011, Mohd Fahmi et al. 2012, Niissalo et al. 2014, Leong-Škorničková and Boyce 2015, Leong-Škorničková and Kiew 2016, Wijedasa et al. 2016). The specific status of *H. anthelminthica*

(Blume ex Schult. & Schult. f.) Masam. and *H. kassintu* Blume wrongly synonymized under *H. malayana* was reinstated and *Susum minus* Miq. was transferred to *Hanguana* by Leong-Škorničková and Niissalo (2017). They recircumscribed *H. malayana* and confirmed that the taxon is a critically endangered solitary forest species confined to Penang Island of Peninsular Malaysia. Thus, the total number of recognised species under *Hanguana* has increased to 19 and the number is likely to exceed 50 in the near future as suggested by Leong-Škorničková and Boyce (2015). *Hanguana* species are most often described from fruiting material, since flowers are rather uniform across the entire genus and seem to offer few characters helpful in species delimitation. The affinities of *Hanguanaceae* were a matter of dispute over a period of time even though Airy Shaw placed it near *Xanthorrhoeaceae*. As per APG IV (2016), it belongs to the order *Commelinales* along with *Commelinaceae*, *Philydraceae*, *Pontederiaceae* and *Haemodoraceae*.

While exploring the flora of the Vembanad-Kol wetland area in Alappuzha District of Kerala State in India in 2015, the authors located a few large colonies of a robust helophytic herb quite strange in the native flora. The plants were in vegetative stage and a few of them were taken to the aquatic plant conservatory of KSCSTE-Malabar Botanical Garden and Institute for Plant Sciences, Kozhikode, Kerala (MBGIPS), where they flowered in November 2018. Critical studies of the fertile specimens revealed the distinctness

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A. P. Balan, K. Anoop, V. Rajilesh, N. S. Pradeep: インド新産のハングアナ科

ツククサ目ハングアナ科 *Hanguanaceae* をインドから初めて記録した。この科は単型科で、*Hanguana* 属の19種よりなり、これまでスリランカ、マレーシア、ニューギニア、ミクロネシア、オーストラリア北部の熱帯に分布することが知られていた。著者らはケララ州の Vembanad-Kol Wetland (ラムサール条約に登録された保護地域) のフロラを調査中、2015年に *Hanguana*

属植物を発見し、2018年にその花と果実を得ることができた。これらにもとづき、この植物は *Hanguana anthelminthica* (Blume ex Schult. & Schult. f.) Masam. と同定できた。

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