

***ARISAEMA LIDAENSE* J.Murata & S.K. Wu (Araceae): A New Record For The Flora Of Vietnam**

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ABSTRACT

Arisaema lidaense J.Murata & S.K. Wu, a species previously known from Yunnan (China), is recorded for the first time from Vietnam. This is the first time any species of *Arisaema* section *Attenuata* has been recorded from Vietnam. The species was found in Quan Ba district, Ha Giang province of Northern Vietnam. Vouchers are deposited in the Herbarium of the Institute of Ecology and Biological Resources (HN) Hanoi, Vietnam. In this paper, *A. lidaense* is described from the specimens collected from Vietnam.

KEY WORDS

Araceae, *Arisaema*, *Arisaema lidaense*,
New record Vietnam.

INTRODUCTION

The genus *Arisaema* (Araceae) includes 209 species (Kew World Checklist on line, 2016), distributed in Northern America and from NE Asia (N Japan) to China, SE Asia, to East Africa. (Gusman & Gusman, 2006). The genus is classified into 15 sections (Gusman & Gusman, 2006): *Anomala*, *Decipienta*, *Sinarisaema*, *Lobata*, *Pistillata*, *Nependoidea*, *Tenusipistillata*, *Dochafa*, *Clavata*, *Franchetiana*, *Arisaema*, *Fimbriata*, *Attenuata*, *Tortuosa* and *Flagenllarisema*. In Vietnam, this genus includes about 24 species (counted by the first author) and is distributed in mountainous provinces (see additional literature suggestions below for details of Vietnamese species).

During fieldwork in Son Phu village, Quan Ba district of Ha Giang province in Northern Vietnam, the second author collected some interesting specimens

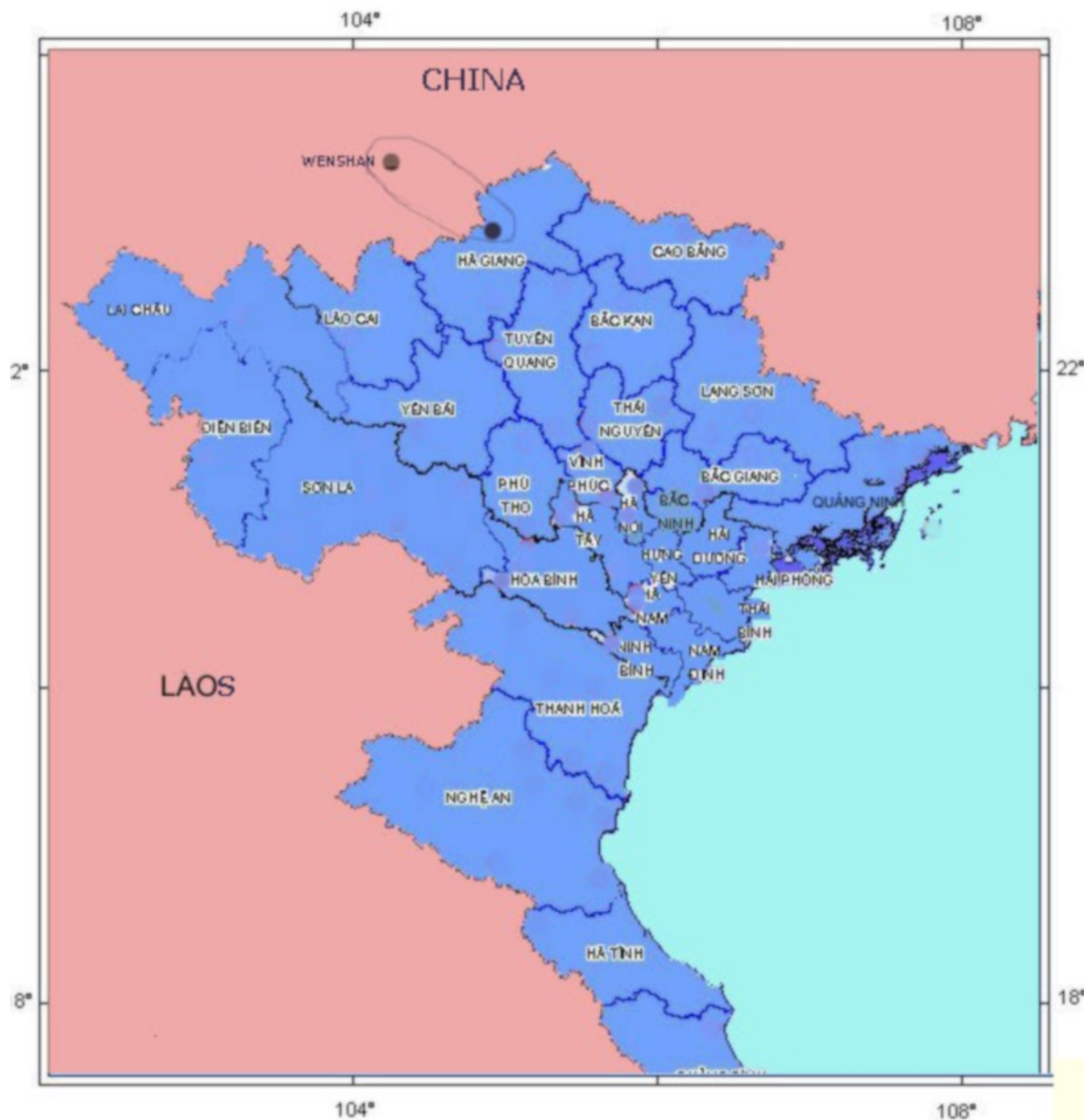


Figure 1. Distribution map of *Arisaema lidaense* J. Murata & S.K. Wu.

belonging to the genus *Arisaema* (**Figure 1, Figure 2**). Comparing to all known species in the genus, the material matched to *A. lidaense* J. Murata & S. G. Wu, a Chinese species described from Yunnan. The present record is the first report of *A. lidaense* from Vietnam.

Cytogenetically, *A. lidaense* belongs to section *Attenuata* (Gusman & Gusman, 2006) and is similar to *A. yunnanensis* by having chromosome number $2n = 24$ (Gusman & Gusman, 2006). On a morphological basis it is most similar to *A. praegeri* by having the middle leaflet ovate

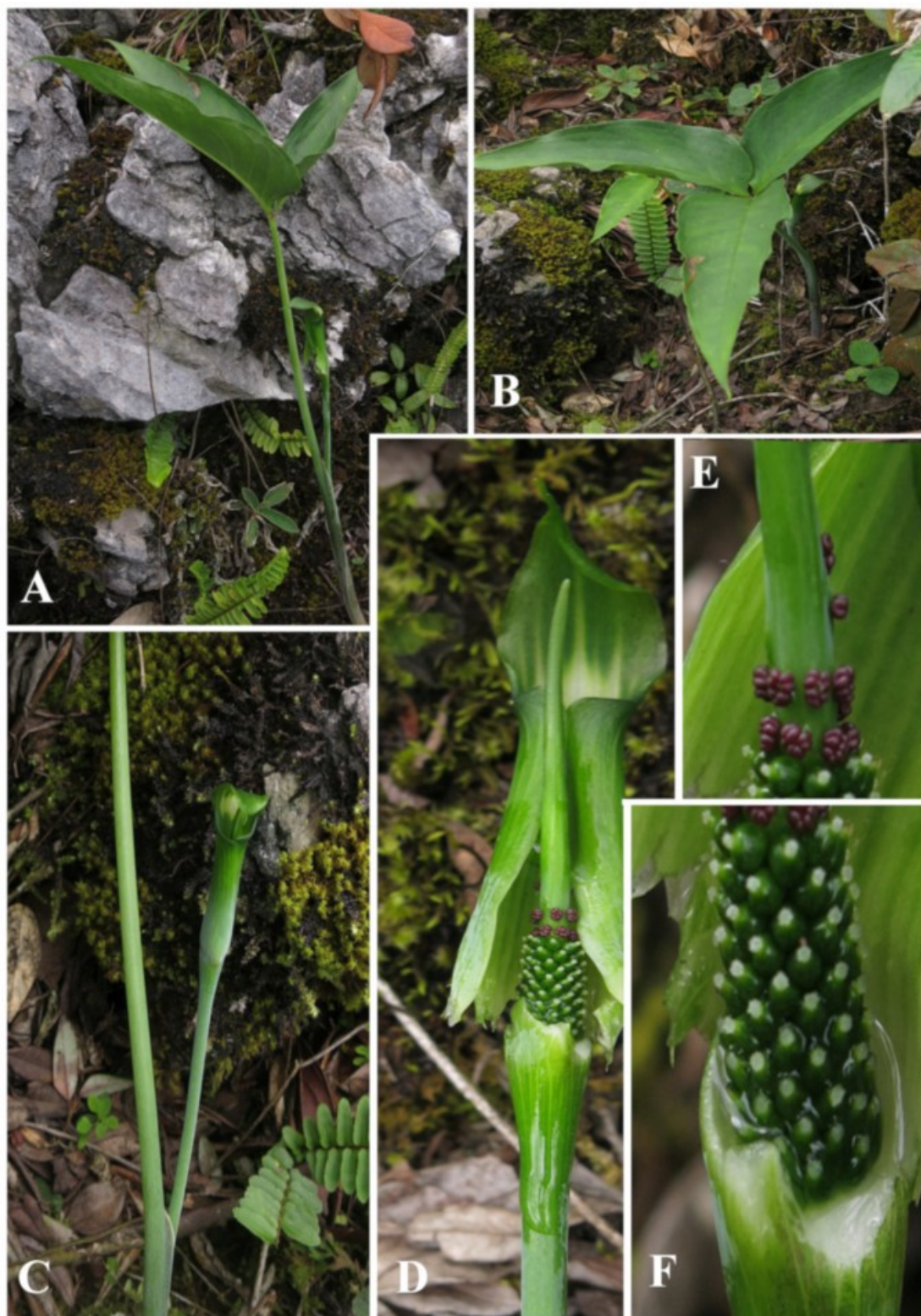


Figure 2. *Arisaema lidaense* J.Murata & S.K. Wu. **A.** habit; **B.** leaf blade; **C.** inflorescence; **D.** spadix and spathe opened; **E.** male flower, **F.** female flower portion. (Photographs by Vu Tien Chinh)

and spathe with white patch at dorsal side between limb and spathe tube.

Arisaema lidaense J. Murata & S. G. Wu, J. Jap. Bot. 78: 81 (2003); H. Li, Fl. China, 23: 123 (2010); G. & L. Gusman, Arisaema. Mon. Bot. Nat. Lov. 155 (2006).

Type: China, Yunnan, Wenshan, Funing, Lidazhen, J. Murata & H. Murata s.n. (holo. KUN). **Figure 2.**

Tuberous plants 30–40 cm tall. *Tuber* depressed globose, 1–2 cm diam., with distinct axillary buds. *Cataphylls* 2 or 3, surrounding pseudostem, purplish green, without distinct markings. *Leaf* usually solitary; petiole 20–40 cm, proximal (3)5–12(15) cm sheathing into pseudostem, green to grey-green, pruinose; leaf blade 3-foliolate; lobes subsessile, subequal in size; central one narrowly ovate, 7–14(–16) × 2–4.5(–5.5) cm, base truncate, apex long acuminate; lateral lobes, ovate, oblique at base, 6–13 × 4 cm; medium green; lateral vein 7–8 pairs, prominent beneath, collective vein 3–5 mm from margin, prominent. *Inflorescence* bisexual; *peduncle* usually shorter than petioles, 8–15 cm long, peduncle down-curved when fruiting. *Spathe* green with white patch at dorsal side between limb and spathe tube, extends upward along the main veins of spathe limb, 4–9 cm long; tube narrowly cylindric, 4–6 cm long, 2.5–5 cm diam., not expanded at throat; spathe limb ovate to broadly ovate, 1.5–4 cm wide, apex acuminate. *Spadix* ca. 7 cm long; female zone cylindric, to 1.4 cm

long, ca. 1 cm diam.; ovaries congested, green, ellipsoid, 1.5–2 × 1.2 mm; male zone c. 10 mm long; male flowers few, scattered arranged in groups of 2–3, 1.5–2 × 2.5 mm, thecae dark purple, dehiscent by an apical pore; appendix subulate, upright or weakly curving back into the spathe, green, usually without sterile flowers, gradually narrowed to apex, not exerted from spathe, 3–4.5 cm. Infructescence pendulous. $2n = 24^*$.

Distribution. – Northern Vietnam (Ha Giang prov.; Quan Ba distr.). China (– Yunnan, Wenshan).

Ecology. – The plant grows on limestone mountains, under shade of small trees or shrubs, over 1,000 m alt.

Conservation. – The species is known from only 2 locations. Wenshan (Yunnan, China) and Quan Ba (Vietnam) at each site represented by a small population. However the plant occurs at high altitude in remote areas, at present there is no information its possible threats. Following the IUCN criteria (2014), the species is recommended to be treated under Data Deficient category.

Studied materials: Vietnam: Ha Giang prov., Quan Ba distr., Phu Ho village, *Vu Tien Chinh* 106 (HN).

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