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NOTE

Neotypification of *Arisaema murrayi* (J.Graham) Hook. (Araceae)

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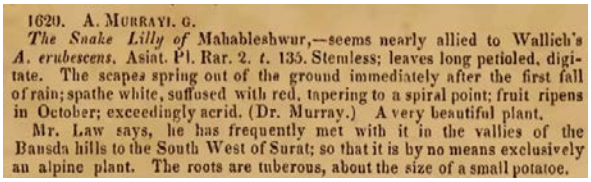
ABSTRACT: Typification of *Arisaema murrayi* (J. Graham) Hook. (=*Arum murrayi* J. Graham) is discussed and a neotype selected.

KEY WORDS: *Arum murrayi*, India, neotype, Stocks

INTRODUCTION

Arisaema murrayi (J.Graham) Hook. was originally described as *Arum murrayi* by John Graham (1839) with the additional vernacular name 'The snake lilly of Mahableshwur' (Mahabaleshwar in Maharashtra). Graham provided a brief description, at least part of which was attributed to 'Dr. Murray' (James Murray, 1802–1855), an Edinburgh medical graduate, who was medical superintendent at Mahabaleshwar. In the following paragraph Graham cited the observations of 'Mr. Law' regarding the occurrence of this plant in the Banda Hills, Surat (now in Gujarat) (Fig.1). This refers to the Bombay civil servant John Sutherland Law (1810–85), who was based at Tanna (Thane, near Bombay) and who later sent corms of the species to William Hooker at Kew. Hooker (1848, *Curtis's Bot. Mag*. 74: t. 4388) provided a detailed description and a beautiful drawing (Fig.2) based on the resulting plants cultivated at Kew, and transferred the species to the genus *Arisaema*. Graham (*l.c*.), when describing *Arum murrayi*, did not refer to any specimens, but in the common name implied that the original locality was Mahabaleshwar. There is no evidence that Graham maintained a herbarium at the time of his work on the plants of Bombay and vicinity, which was interrupted by his death and completed by Joseph Nimmo. Subsequently, Schott (1860) when treating this species in his *Prodromus Systematis Aroidearum*, cited wild-collected specimens seen in Hooker's herbarium as: "*Bombay Hooker v.s. specim. spont. in Herb. Hook*.", which has no implication for typification. Later workers (Engler, 1879, 1920; Dalzell and Gibson, 1861; Hooker, 1893; Woodrow, 1901; Cooke, 1903) also failed to designate a type for this name.

Chatterjee (1955) in his treatment of Indian and Burmese species of *Arisaema* examined the specimens of *A. murrayi* at Kew and wrote 'Concon, Stocks (3 sheets in Herb. Kew, Type!)'. There are three sheets at Kew and



1620. A. MURRAYI. G.
The Snake Lilly of Mahableshwur,—seems nearly allied to Wallich's *A. erubescens*. Asiat. Pl. Rar. 2. *t*. 135. Stemless; leaves long petioled, digitate. The scapes spring out of the ground immediately after the first fall of rain; spathe white, suffused with red, tapering to a spiral point; fruit ripens in October; exceedingly acrid. (Dr. Murray.) A very beautiful plant.
Mr. Law says, he has frequently met with it in the vallies of the Bansda hills to the South West of Surat; so that it is by no means exclusively an alpine plant. The roots are tuberous, about the size of a small potatoe.

Fig. 1. Protologue of ***Arum murrayi*** **J.Graham**

one of the sheets (K000499460) bears both a wild-collected Stocks specimen, and the cultivated specimen from which Hooker's drawing was made, and N.E. Brown annotated the latter specimen '*Arisaema murrayi* Hooker Bot. Mag. 4388 Type specimen!' meaning that it was the 'type' (*i.e.* voucher) of the drawing, not necessarily of the name and certainly not to be taken as such according to modern methods of typification. Gusman and Gusman (2006) cited 'Type: *Stocks s.n.* (lectotype K!), W. India, Maharashtra, Concan', could not be accepted as a lectotypification as it did not include the phrase 'designated here' (Art. 7.10), even if it had specified a single sheet or been based on original material (see below).

John Ellerton Stocks, a member of the East India Company medical staff in Bombay, did not arrive in India until 1847; almost a decade after Graham described his species (Jackson, 1901). Since no specimen was cited by Graham in his original publication, the subsequent citation of a 'type' by Chatterjee (1955) and Gusman and Gusman (2006) from non-original materials, does not constitute a valid lectotypification (McNeill *et al.*, 2012).

We could find no specimens collected by Law or Graham in any of the herbaria in India or abroad but duplicates of various Stocks specimens from the Concan including the ones cited by Chatterjee (1955). According to Art. 9.9 of Melbourne code, the typification of Chatterjee could be considered as a 'first step'of neotypification, because more than one sheet is cited.

There are three sheets of Stocks' specimens at K (K000499460, K000499461 and K000499462), three sheets

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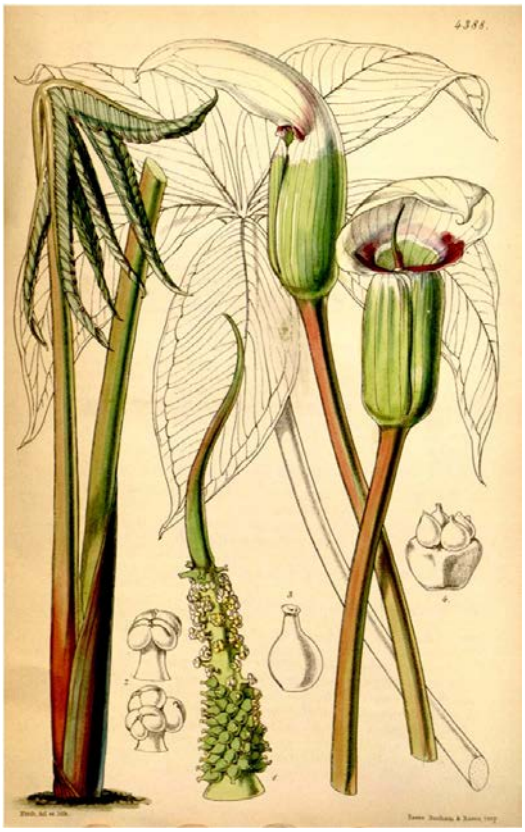


Fig. 2. Icon of ***Arisaema murrayi*** published by W.J. Hooker in Curtis' Botanical Magazine (74: t.4388. 1848)



Fig. 3. Neotype of ***Arisaema murrayi*** (J.Graham) Hook. (K000499462, designated here) © The Board of Trustees of the Royal Botanic Gardens, Kew.

at P (P02128240, P02128241 and P02128242) and one each at BM (BM000958542) and CAL (CAL0000001309). As already noted K000499460 has both wild collected and cultivated material. K000499461 and P02128241 both bear a mixture of two taxa (right hand specimen of P021282401 and left and right hand specimens of K000499461 seems to be *Arisaema neglectum* Schott). While the cultivated specimen annotated 'Type' by Brown would be a possible choice, it seems preferable to designate a wild collected specimen as type, so the sheet K000499462 (on which all specimens belong to *A. murrayi*) is selected here as neotype (Fig. 3) and the other wild collected material as isoneotypes (Article 9.17, 9.11 & Recommendation 9C.1, McNeill *et al*., 2012).

Arisaema murrayi (J.Graham) Hook., Bot. Mag. 74: t.4388.1848.

Arum murrayi J. Graham, Cat. Pl. Bombay 229. 1839.

Neotype (first-step designated by Chatterjee, 1955): **INDIA**. Concan, *s.die.*, *Stocks s.n.* (K [K000499460, K000499461 & K000499462], photo!).

Neotype (second-step designated here): **INDIA**. Concan, *s.die.*, *Stocks s.n.* (K [K000499462!], (Fig.3.); isoneotypes CAL excluding right hand specimens, K000499461! excluding left and right hand specimens], P [P02128240!, P02128241! excluding the right hand specimen, P02128242!]).

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