# A new combination and lectotypification in *Argyreia* (Convolvulaceae)

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ISSN (Print): 0976-5069

ISSN (Online): 2455-376X

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# अरजेरिया (कॉनवॉलवुलेसी) में एक नया संयोजन एवं लेक्टोटाइपीफिकेशन

एस. शालिनी, पी. लक्ष्मीनरासिम्हन एवं डी. मैती

# सारांश

आइपोमिया नाना कॉलेट एवं हेमसल के लिए एक नया संयोजन *अरजेरिया नाना* (कॉलेट *एवं* हेमसेल) शालिनी, लक्ष्मीन. एवं डी. मैती को प्रस्तावित किया गया है। *अरजेरिया नाना (आइपोमिया नाना* कॉलेट एवं हेमसेल) को मेलबोर्न संहिता के अनुच्छेद 9.2 के अनुसार लेक्टोटाइपीफाइड किया गया है।

#### **ABSTRACT**

A new combination, *Argyreia nana* (Collett & Hemsl.) Shalini, Lakshmin. & D. Maity is proposed for *Ipomoea nana* Collett & Hemsl. Additionally, the name *Argyreia nana* (≡ *Ipomoea nana* Collett & Hemsl.) is lectotypified here in accordance with article 9.2 of the Melbourne Code.

Keywords: Argyreia nana, Ipomoea, Myanmar, Shan hills

# INTRODUCTION

Argyreia Lour. is a diverse and complex genus with most of its members being distributed throughout tropical Asia. It is one of the most species-rich genera in the family Convolvulaceae with high concentration in India (44 species and 3 varieties), Thailand, Myanmar and a considerable number of species occurring in peninsular

Malaysia, Philippines, China and other parts of Asia (Staples & Traiperm, 2017). In Myanmar, the genus is majorly concentrated in Shan hills, which is evident from the reports of occurrence of many species of *Argyreia* in the hills during the past (Collett & Hemsley, 1890). Kress & al. (2003) enumerated 27 species of *Argyreia* in the checklist of trees, shrubs, herbs, and climbers of Myanmar.

Received: 19.11.2017 Accepted: 06.12.2017 Date of Publication: 30.12.2017

Argyreia encompasses considerable morphological diversity paralleling *Ipomoea* in floral morphology and corolla pigment diversity but can easily be distinguished from the latter on the basis of pigmented indehiscent fruit with fleshy or leathery pericarp (Ooststroom, 1943, 1953; Meeuse, 1957) and also based on its leaf indumentum and inflorescence architecture. While studying the type specimens of Argyreia housed at CAL as part of the on-going taxonomic revision of the genus Argyreia in India, the syntypes of *Ipomoea nana* were found. On careful observation it was found that this Ipomoea species share characters (erect habit, presence of hairy leaves, persistent bracts, and reflexed sepals in fruit) more similar to Argyreia than Ipomoea, making it evident to be treated under Argyreia rather Ipomoea. Unlike the other Argyreia it shows its uniqueness in being erect (same as the Indian species, A. cuneata Ker Gawl., an exceptional erect shrubby Argyreia) with purple corolla and thick woody root. In addition, there is some handwritten annotation by C.B. Clarke "Argyreia probably near A. cuneata" on both of the type specimens deposited at CAL, which further increases the evidence of its identity to be placed in Argyreia. Hence taking into account on all these, the following new combination is proposed here. The name is also lectotypified in accordance with the Art. 9.2 of the Melbourne Code (McNeill & al., 2012)

### **TAXONOMY**

**Argyreia nana** (Collett & Hemsl.) Shalini, Lakshmin. & D. Maity, *comb. nov.* 

*Ipomoea nana* Collett & Hemsl. in J. Linn. Soc., Bot. 28: 97. 1890.

**Lectotype** (designated here): Myanmar, Upper Burma, Shan Hills, Pwehla, 4000 ft, June 1888, *H. Collett* 821 (K000097485 image! **Fig. 1**; isolectotypes K000097486 image!, CAL0000018598!, CAL0000018599!).

Collett & Hemsley (1890) based on collections from Upper Burma and Shan States described two new species of *Ipomoea*, *I. nana* and *I. popahensis*. The two originally recognized species of *Ipomoea* exhibit certain diagnostic morphological characters such as the shape and indumentum of leaves, size of the flowers, especially the pubescent outer surface of the corolla and the sepal morphology that fall within the circumscription of the genus *Argyreia*. Of the two names, Staples (in Staples & Traiperm, 2008) has already transferred *I. popahensis* to *Argyreia* (*A. popahensis*). However, the name *I. nana* 

has not yet been transferred to *Argyreia*. On the basis of morphological evidences presented in the protologue and after the careful observation of the type specimens of *I. nana* housed at CAL with leathery enlarged fruiting calyx and fallen fruits and images of specimens at K, we here propose a new combination, *Argyeria nana* for *Ipomoea nana*.

#### **LECTOTYPIFICATION**

Four specimens of *Ipomoea nana* were located, two each at CAL (CAL0000018598, CAL0000018599) and K (K000097485, K000097486 on a single sheet). Of the four specimens, the one traced at K (K000097485, the middle specimen on the sheet) matches well with the protologue in having the original field ticket with exact place of collection "Shan hills, General Collett, 4000 ft" and few annotations on the diagnostic characters: "ovary 2-celled, 4-ovuled, stigma biglobose" of the species at the top of the field ticket, making it more evident to be considered as the original material. Hence, the middle specimen bearing the barcode K000097485 has been designated as the lectotype, while the other specimens may be considered isolectotypes.

Note: At Kew Herbarium Catalogue (http://apps.kew. org/herbcat/details), the image of *Ipomoea nana* is stored under the name *I. barlerioides* (Choisy) Benth. ex C.B. Clarke. Furthermore, in the specimen details, the location (place of collection) is given as 'Ruchla'. But, the correct spelling of the locality is 'Pwehla', which is given here based on the map provided in the publication of the name *Ipomoea nana* (Collett & Hemsley, 1890).

#### **ACKNOWLEDGEMENTS**

The authors are grateful to Dr. Paramjit Singh, Director, Botanical Survey of India, and Dr. P.V. Prasanna, Head, Central National Herbarium, BSI, Howrah, for facilities and encouragement. They are also thankful to the Board of Trustees of Royal Botanic Gardens, Kew, for permission to publish the image of the selected lectotype specimen.

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**Fig. 1.** Lectotype of *Argyreia nana* (*H. Collett* 821, K000097485). Reproduced with permission from the Board of Trustees, Royal Botanic Gardens, Kew.

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