

Reinstating Palaeotropical genera of Convolvulaceae: *Argyrea*, *Stictocardia*, *Turbina* and *Astripomoea* (tribe Ipomoeae, subtribe Argyreinae)

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Abstract: Ipomoeae, the most diverse tribe in Convolvulaceae, contains 815 species, nearly half of the species diversity of the family. Its largest genus, *Ipomoea*, is morphologically highly variable and has repeatedly been demonstrated to be polyphyletic, with several Palaeotropical genera nested within it. A generic reclassification of the tribe is, however, still lagging due to the sizeable task of sequencing and morphologically characterising the 815 species, and an intricacy related to the type species of *Ipomoea*, which could lead to a major nomenclatural destabilisation - especially in the Neotropical region, where the greatest diversity of *Ipomoea* is concentrated. Previous researchers, while making good progress in molecular studies of Ipomoeae, have opted to consolidate all the previously recognised genera of Ipomoeae into an even broader, morphologically ambiguous, *Ipomoea*. This resulted in 206 nomenclatural changes, of which only 5 Neotropical taxa, and the

remaining 201 African, Asian, Australian, or Malagasy taxa; therefore, with the greatest impact on species and genera from the Eastern Hemisphere. We suggest that tribe Ipomoeae is better understood as a collection of smaller, morphologically distinguishable clades rather than a single expanded genus, morphologically more challenging to circumscribe, with greater benefits also for species conservation, as species of genus *Ipomoea* tend to be negatively perceived as weeds in the Eastern Hemisphere. As the nomenclatural blockage to reclassifying this complex group has now been resolved, with the proposal of a new type species, we propose the reinstatement of the most clearly delimited and phylogenetically distinct, Palaeotropical genera of the tribe - *Argyrea*, *Astripomoea*, *Turbina* and *Stictocardia*. As these genera are widely recognised (e.g. in herbarium collections, local Floras, and databases), this will allow to minimise nomenclatural disruption caused by the proposed transfer into *Ipomoea*, before it becomes more widely implemented, and thus mitigating the impact of these name changes on biodiversity monitoring,

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conservation, horticulture, or citizen science. This will also be a contribution for an improved classification of tribe Ipomoeae, for which an integrative and more equitable approach, with the contribution of taxonomists from the Eastern Hemisphere, and further sampling in this region, will be pillar.

Keywords; Convolvulaceae, *Ipomoea*, Palaeotropics, Taxonomy

Introduction

Convolvulaceae, a family of economically important species such as sweet potato, morning glories and bindweeds, comprises 1,955 species, classified into 6 subfamilies, 12 tribes and 60 genera (POWO, 2024; Simões *et al.*, in prep.). Its largest tribe, Ipomoeae, currently contains 815 species, nearly half of the species diversity of the family. It is characterised by single styles, bi-globose stigmas and echinate pantoporate pollen grains, a combination of characters which do not occur in any other species or genera of the family. The unique echinate pollen type has led to earlier classifications of Convolvulaceae relying primarily on this character, as Hallier (1893), who created two major subdivisions in Convolvulaceae: Echinoconieae (spiny pollen, corresponding to tribe Ipomoeae) vs Psiloconieae (smooth pollen, corresponding to the remaining 11 tribes of the family). Molecular phylogenetic studies have demonstrated that tribe Ipomoeae is monophyletic, with the spiny pollen being an autapomorphy for the tribe in relation to the rest of the family; phylogenetic analyses have also revealed the subdivision of this tribe into two major clades - Astripomoeinae and Argyreiinae (Stefanović *et al.*, 2002, 2003) - with Astripomoeinae consisting mostly of Neotropical (Western Hemisphere) species and Argyreiinae of mostly Palaeotropical (Eastern Hemisphere) species.

Ipomoea, its largest genus, contains 635 accepted species alone, with high levels of morphological variation in characters that are otherwise distinctive at generic and tribal levels in Convolvulaceae (for example, fruit type) and a worldwide tropical and sub-tropical distribution. It was one of the

first genera of Convolvulaceae to be described (Linnaeus, 1737), followed by *Convolvulus* (Linnaeus, 1753) and *Evolvulus* (1762), and has since had a complicated taxonomic and nomenclatural history (see Eserman *et al.*, 2020, 2024 for more details). Consequently, *Ipomoea* has been poorly defined morphologically, leaving its boundaries open to varied interpretations regarding its “true” genus identity. Unsurprisingly, it has frequently been shown to be polyphyletic, with several other genera—such as *Argyreia*, *Astripomoea*, *Rivea*, *Stictocardia*, *Turbina*, *Lepistemon*, *Lepistemonopsis*, and *Blinkworthia*—nested within it. (Wilkin, 1999; Miller *et al.*, 2002; Stefanović *et al.*, 2002; Eserman *et al.*, 2014; Muñoz-Rodríguez *et al.*, 2019) As a result, the prevailing generic classification within the tribe Ipomoeae has been called into question (Wilkin, 1999; Muñoz-Rodríguez *et al.*, 2019; Muñoz-Rodríguez *et al.*, 2023). Muñoz-Rodríguez *et al.* (2019), while focusing their observations and molecular sampling primarily on Neotropical species of *Ipomoea*, for which a regional monograph was later published (Wood *et al.*, 2020), then proposed to subsume all the smaller genera with spiny pollen nested in the tribe Ipomoeae under a much-expanded genus *Ipomoea* (also discussed in Staples *et al.*, 2021). This proposal resulted in a total of 206 name transfers, of which 113 were new combinations (names that had never been combined in *Ipomoea*), 39 reinstatements (species or subspecies which had once been described in *Ipomoea* and which epithet could be recovered from synonymy), and 52 new names (species which had to be given a new epithet, because the one they carried was already occupied in genus *Ipomoea*). This had the greatest impact on species and genera from the Eastern Hemisphere, exclude for example: of the 206 nomenclatural novelties, only five were Neotropical taxa, the remaining 201 being African, Asian, Australian or Malagasy (Appendix I). To substantiate their own concept of the expanded genus *Ipomoea*, another new species from India, published after this taxonomic study, *Argyreia sharadchandrajii* Lawand & Shimpale, was

also later combined in *Ipomoea* (Wood *et al.*, 2022). In addition, some names were notably omitted from the monographic study of Muñoz-Rodríguez *et al.* (2019) (e.g. *Argyreia bracteosa* (C.B. Clarke) Raizada, *A. gyrobracteata* Traiperm & Chitchak, and *A. lakshminarasimhanii* S.Shalini, Sujana, Arisdason & D.Maity), demonstrating the incomplete study of the Palaeotropical species of Ipomoeae by the authors of this study, and certain synonyms were included without a sense of reinstatement (e.g. *Blinkworthia discostigma*, synonymised under *B. convolvuloides* since 1995).

The disproportionate geographic impact of the nomenclatural changes, and the omission of published names or reinstatements, highlights a gap in regional expertise and reflects the lack of inclusion and collaboration with taxonomists from the Eastern Hemisphere, namely the Indian subcontinent, an important centre of diversity for Ipomoeae - but also Tropical Africa, SE Asia, Madagascar and Australia. These are also the regions where the consequences of these taxonomic changes were most felt, with cascading effects on ecological studies, biodiversity inventories, and conservation assessments – and which were broadly overlooked by the authors proposing these changes. Dismissing the contribution of local taxonomists when making impactful nomenclatural and taxonomic changes that affect a given region is a legacy of historical colonialist practices, and accentuates current geographic and economic imbalances (Jiménez-Mejías *et al.*, 2024). In addition to compromising equity and inclusion in science, it generates negative consequences for the effectiveness of biodiversity assessments and regional conservation planning strategies, for which the input of local taxonomists is essential.

Thus, while this work seemingly generated a controversial debate on the delimitation of *Ipomoea*, the reality is that it is not so contentious. A large part of the taxonomists working in Convolvulaceae—particularly those studying species from the Eastern Hemisphere, and supported by specialists

working in the Americas—have consensually rejected the proposal to merge all genera within the tribe Ipomoeae into a single genus (Eserman *et al.*, 2020, 2023) and have favoured retaining the previous classification system, which recognises at least some of the Palaeotropical genera, though not without acknowledging that more work is necessary to fully reclassify the tribe and resolve the standing generic circumscription issues (Shalini *et al.*, 2020; Traiperm & Suddee, 2020; Tran *et al.*, 2020; Lawand & Shimpale, 2021; Staples *et al.*, 2021; Rattanakrajang *et al.*, 2022; Simões *et al.*, 2022; Lawand *et al.*, 2023; Zhang *et al.*, 2023; Chitchak *et al.*, 2024; Gunadasa *et al.*, 2024; Srisombat *et al.*, 2024). Thus, to be able to maintain the segregate genera in tribe Ipomoeae and reduce the nomenclatural impact of future name changes, a nomenclatural proposal was submitted to change the type species of *Ipomoea* from *I. pes-tigridis* L. (native to the Eastern Hemisphere) to *I. triloba* L. (native to the American continent, introduced elsewhere) (Eserman *et al.*, 2020; Fig. 1). This proposal was recommended by the IAPT's Nomenclature Committee for Vascular Plants (Applequist, 2023) and approved at the Nomenclature session of the latest IBC Congress (Gostel *et al.*, 2024). This progress has gathered support from a majority of taxonomists with family-level expertise in Convolvulaceae, both from the Western and Eastern Hemisphere, who see this as an opportunity to continue working on improving the generic classification of tribe Ipomoeae, through a collaborative effort and integrated methodologies, that will efficiently reconcile different sources of evidence, i.e., phylogenetics, morphometrics, micromorphology, anatomy, ecology, etc., with expanded and more representative sampling across the Eastern Hemisphere. Clear generic and species boundaries, supported by monophyly but also diagnosable by morphology, geography, ecology and other characters, are very important for regional taxonomies, facilitating specimen identification, inventorying biodiversity

and assessing conservation risks. Smaller, morphologically distinct, genera, are also more manageable to study at a local scale which creates more opportunities for new species descriptions, increased sampling, and collection of more detailed data (geographic, ecological, conservation threats...). Hence, striving to recognise more clearly circumscribed genera - also more manageable to study and easier to visually recognise - could be of greater benefit for conservation initiatives than much expanded, geographically more widespread, and less clearly characterised, genera.

Following the recent approval of the proposal to re-assign the type of *Ipomoea* for a species in the Astripomoeineae clade (Eserman *et al.*, 2020, 2023), we here propose the re-assessment of the taxonomic status of *Argyreia*, *Stictocardia*, *Turbina* and *Astripomoea* - Palaeotropical genera of Ipomoeae - in the light of molecular phylogenetic analyses, and demonstrate that they are monophyletic and morphologically well-circumscribed, for which we defend that their previous synonymisation with a broader, more ill-defined, geographically widespread genus

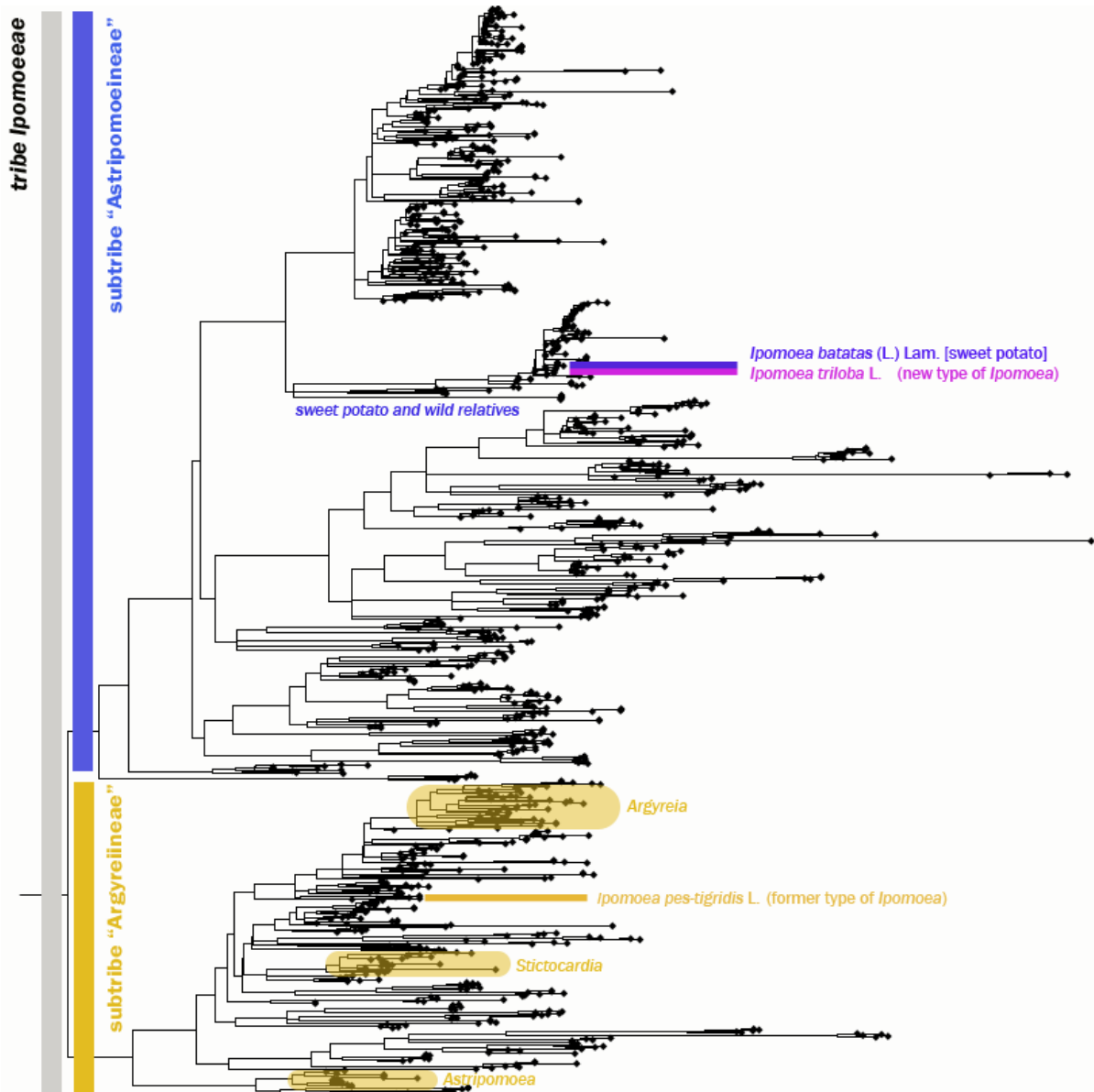


Fig. 1. Molecular phylogenetic tree of tribe *Ipomoeae*, illustrated and adapted from the *ITS* tree in Muñoz-Rodríguez *et al.* (2019).

(*Ipomoea*), was a taxonomic drawback. Here, we make the necessary synonymisations of previously published names in *Ipomoea* into the traditionally recognised genera, with an identification key based on the most clearly distinguishable morphological characters that separate them. As such, we here present an up-to-date species list, for which 191 names, out of the previous 206 species transfers, are retrieved from *Ipomoea* and re-assigned to the genera where they were earlier classified, including 42 of the 52 new names and 98 of the 113 new combinations published in Muñoz-Rodríguez *et al.* (2019)

Material and Methods

An up-to-date list of currently accepted species names contained in tribe Ipomoeae and their distribution range was compiled based on a collaborative expert taxonomic database that includes specialised literature in Convolvulaceae, especially for Palaeotropical species (Shalini *et al.*, 2020; Traiperm & Suddee, 2020; Tran *et al.*, 2020; Lawand & Shimpale, 2021; Staples *et al.*, 2021; Mwanga-Mwanga *et al.*, 2022; Rattanakrajang *et al.*, 2022; Simões *et al.*, 2022; Lawand *et al.*, 2023; Zhang *et al.*, 2023; Chitchak *et al.*, 2024; Gunadasa *et al.*, 2024; Srisombat *et al.*, 2024; Davis *et al.*, 2024; Williams *et al.*, 2024) taxonomic reference database POWO [Plants of the World Online] (<https://powo.science.kew.org/>), cross-checked against proposed name changes in Muñoz-Rodríguez *et al.* (2019), Wood *et al.* (2020) and Wood *et al.* (2022) (Appendix I). A dataset of Internal Transcribed Spacer (*ITS*) sequences was compiled for the species of Ipomoeae, based on publicly available sequences in online repositories including data from Muñoz-Rodríguez *et al.* (2019) and Simões *et al.* (2015), and newly generated sequences for 25 samples from East Africa (Table 1). A first analysis was run to determine an overall topology for the tribe Ipomoeae. On the second step, taxa resolved in the “Argyreinae” clade were selected from the alignment and analysed separately, with taxa from the “Astripomeiinae” clade

removed to reduce the computation workload on the analysis. The final dataset comprised 300 taxa, including species from *Ipomoea*, *Argyreia*, *Astripomoea*, *Stictocardia*, *Turbina*, *Rivea*, *Lepistemon* and *Lepistemonopsis* as ingroup, and species of *Astripomoea*, and *Ipomoea vagans* Baker, defined as outgroup. The dataset was aligned using MAFFT v.7 (Kato *et al.*, 2002, 2013) with 1,000 maximum iterations and an auto-adjustment parameter. The alignment was subsequently refined manually using AliView v.1.27 (Larsson, 2014) to identify and correct misalignments. The final alignment dataset consisted of 300 sequences with 886 positions and 246 parsimony informative sites. The alignment was then subjected to ModelFinder (Kalyaanamoorthy, 2017) embedded within IQTree multicore version v.1.6.12 (Minh *et al.*, 2020) to search for the best model for maximum likelihood analysis based on the least Akaike Information Criterion (AIC) values. ML analysis was conducted in IQTree multicore v.1.6.12 (Minh *et al.*, 2020) using UltraFast bootstrapping (Hoang *et al.*, 2018) option with SYM+R3 as the best likelihood model. Figure 2 shows the output tree.

Results and Discussion

The genera *Argyreia*, *Astripomoea*, *Turbina* and *Stictocardia* – all mostly Palaeotropical genera of tribe Ipomoeae, previously traditionally recognised in the classification of the tribe, were resolved as monophyletic in a topologically unconstrained ML analysis, most with high level of statistical support - *Argyreia* (84/100 BS), *Astripomoea* (100/100 BS), *Stictocardia* (87/100 BS), except for *Turbina* which, although resolved as monophyletic, was not highly supported (36/100). All genera are morphologically well-circumscribed by exclusive morphological characters or a unique combination. *Turbina*, while not as significantly supported as the other genera, is morphologically cohesive with a good synapomorphic trait – a pyramidal chartaceous fruit, indehiscent or faintly 4-valved, with a long persisting style –

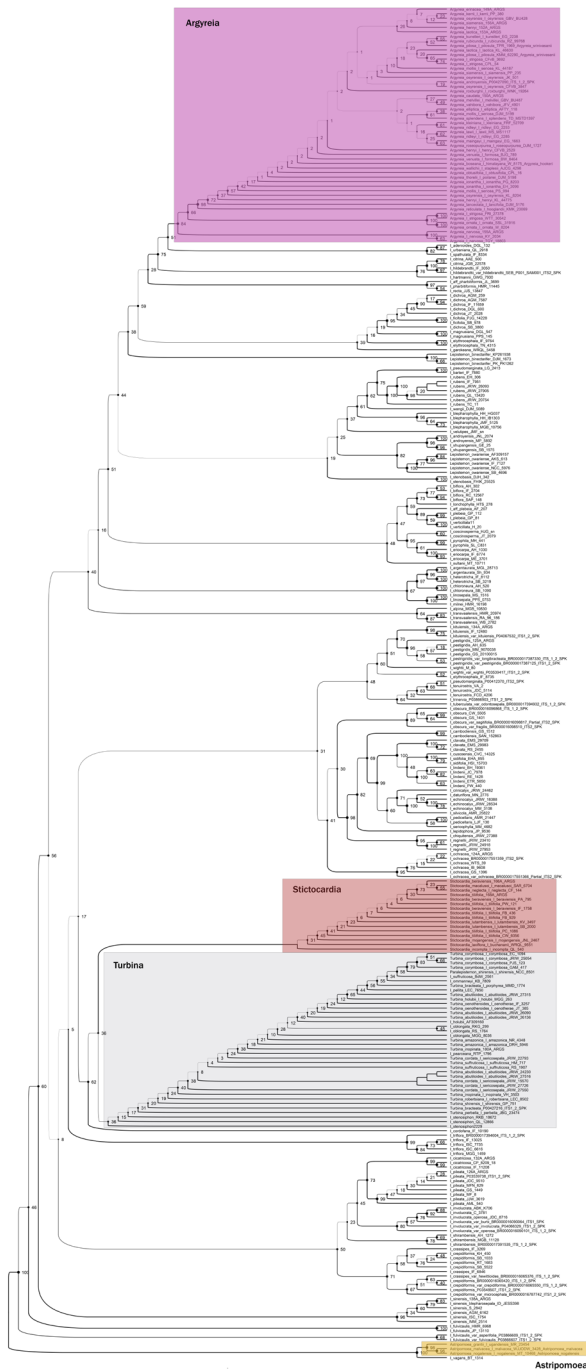


Fig. 2. Molecular phylogenetic analysis of subtribe Argyreiinae, based on ML analyses of ITS sequences; the genera reinstated (*Argyreia*, *Astripomoea*, *Turbina* and *Stictocardia*) are highlighted.

and is, therefore, here reinstated, for the benefit of maintaining nomenclatural stability in the regions where this genus is recognised, and as a stepping stone for future studies. It is possible that this genus will be segregated into further smaller, more narrowly circumscribed, genera, with the help of improved phylogenetic analyses that will

provide greater clarity on the relationships among the deeper nodes of this group. This could be achieved with the addition of more genetic data into phylogenomic analyses, for example with Angiosperms353, as previously applied with success in resolving higher level relationships in Convolvulaceae (Simões *et al.* 2022, Zuntini *et al.* 2024). The addition of chloroplast data could also help to improve the support of deeper nodes within tribe Ipomoeae, but, for this purpose, increased sampling, especially for species from the Eastern Hemisphere, is still much needed, "as the currently available data still does not completely represent the phylogenetic diversity of the tribe".

The reinstated genera are being monographed, and more in-depth morphological and phylogenetic studies may soon be presented. In the scope of this study, an identification key to the recognised genera is provided, and easily distinguishable morphological characters are illustrated (Fig. 4) to help visually identify the genera. As demonstrated by the geographic distribution information collected for all the taxa in Ipomoeae (Appendix I), the reinstatement of *Argyreia*, *Astripomoea*, *Stictocardia* and *Turbina* affects mostly Palaeotropical species and has minimal impact in Neotropical taxa (Fig. 3).

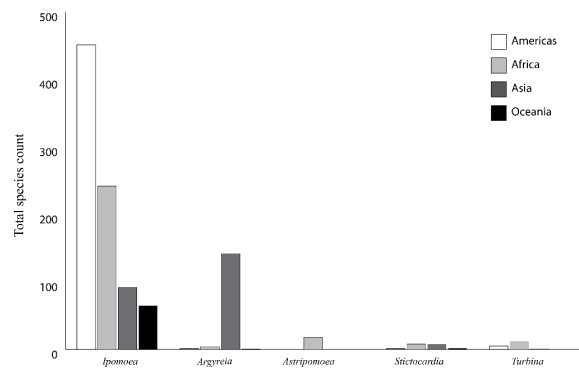


Fig. 3. Geographic distribution of currently accepted species of tribe Ipomoeae by region, in view of the currently proposed genera; for widely distributed species, their assumed native distribution was considered.

Of the traditionally recognised genera in Ipomoeae, not all were reinstated due to

remaining uncertainties, i.e. where there was little confidence that they are monophyletic, and their morphological diagnosability would be ambiguous, they were not proposed for reinstatement. This is the case of *Lepistemon*, which was resolved in two distinct clades, both strongly supported in the ML analysis: (100/100 bootstrap support) and (100/100 bootstrap support). However, the deeper nodes connecting these two clades are weakly supported, leaving the monophyly of *Lepistemon* inconclusive and not yet entirely ruled out. Morphologically, the genus is characterised by the presence of scales at the base of the filaments, which has proved difficult to be used and not exclusive to this group of species; it is present, for example, also in the Thai endemic genus *Remirema* (Simões & Staples, 2017). As the morphological circumscription of *Lepistemon* is yet doubtful, and the genus not confirmed to be monophyletic, this genus is not reinstated here until further studies are conducted, the same applying to other, smaller, synonymised genera, such as *Rivea* and *Lepistemonopsis*, which recognition is still doubtful.

Admittedly, reinstating these four large genera prior to a comprehensive re-classification of tribe Ipomoeae, will create temporary uncertainty, with the genus *Ipomoea* remaining polyphyletic until a more effective classification system for the tribe can be delivered, and all species in *Ipomoea* can be correctly assigned. While it would have been ideal to wait for a full reclassification of tribe Ipomoeae to reinstate any of the previously synonymised genera, to avoid this classification uncertainty, we believe there are great risks of nomenclatural disruption, and negative impact on species conservation, which need to be urgently addressed (Jiménez-Mejías, et al., 2024). The genera *Argyreia*, *Astripomoea*, *Turbina* and *Stictocardia* are still widely recognised across the Eastern Hemisphere, and significantly represented in herbarium collections, regional Floras and taxonomic databases. A simple search in GBIF results in 6,305 preserved specimens

of *Argyreia*, 1,297 of *Astripomoea* and 1,958 of *Stictocardia* worldwide, amounting to nearly 10,000 specimens to be renamed, in these three genera alone – including economically important species such as *Argyreia nervosa* (Burm.f.) Bojer (“hawaiian woodrose”, “elephant creeper”). As the recent proposal of taxonomic transfer into *Ipomoea* has not yet been fully consolidated, i.e. many herbaria have not yet re-curated their collections, and most regional Floras and global reference taxonomic databases (e.g. POWO) still recognise the species names under these genera, it is timely to reinstate these genera now, to prevent a wider nomenclatural disruption in the future.

Another of the greatest concerns is the impact on species conservation. Since *Ipomoea* species are generally perceived as invasive weeds, non-invasive taxa from these genera are challenging to prioritise for conservation efforts. In contrast, endemic or geographically restricted genera are easier to advocate for, particularly to non-scientific audiences, as demonstrated by the local reverence for *Argyreia* species in regions like India and Thailand. For instance, studies by Srisombat et al. (2024) highlight the newly described and geographically restricted species within the *Argyreia collinsiae* complex, which require precise taxonomic recognition to facilitate their conservation. Similarly, research by Jirabanjongjit et al. (2024) illustrates the critical dependence of rare species, such as *Argyreia mekongensis* and the near-extinct *Argyreia versicolor*, on specific pollinators like carpenter bees for their reproductive success. These findings underscore the value of maintaining genus-level distinctions, which guide targeted conservation actions and prevent species with limited distributions from being conflated with widespread *Ipomoea* weeds. On the other hand, the renaming of economically important species, such as *Turbina corymbosa*, and *Argyreia nervosa*, both with ornamental, cultural and medicinal applications, is also disruptive for the horticultural trade or applied medical research, risking to cause confusion.

While achieving monophyletic, strongly supported, and morphologically diagnosable genera is of the utmost importance, we advocate that this should not come at the expense of nomenclatural stability, especially when it affects economically important species, as well as generates a potential negative impact on species conservation. Moving on from the present reinstatement of *Argyreia*, *Astripomoea*, *Turbina* and *Stictocardia*, as four important Convolvulaceae genera for the Eastern Hemisphere, and as a step forward to advancing the systematics of tribe Ipomoeae, we will strive to continue working at a fast pace to resolve the classification uncertainties of this complex group, in an integrative approach. This approach will include reconciling molecular phylogenomic techniques, morphology, micromorphology, anatomy, and other sources of evidence, to fully classify all species of *Ipomoea*, and Ipomoeae,

into monophyletic and diagnosable genera, and readjusting the circumscription of the currently accepted genera as seen appropriate in the light of new evidence. Looking ahead, part of the upcoming challenges that need to be overcome towards a new classification for Ipomoeae are: reassessing the historical influence of regional taxonomic studies in the standing classification system while striving to overcome the geographic imbalances in the sampling and specialists' participation; improving molecular sampling and analytical methods for better resolved and supported topologies in which to frame future taxonomic and evolutionary studies; and promoting equitable collaboration and funding opportunities between taxonomic centres with greater access to resources, and regional experts. A challenging task such as the global revision of a diverse group, within an economically important family, can only be achieved through more

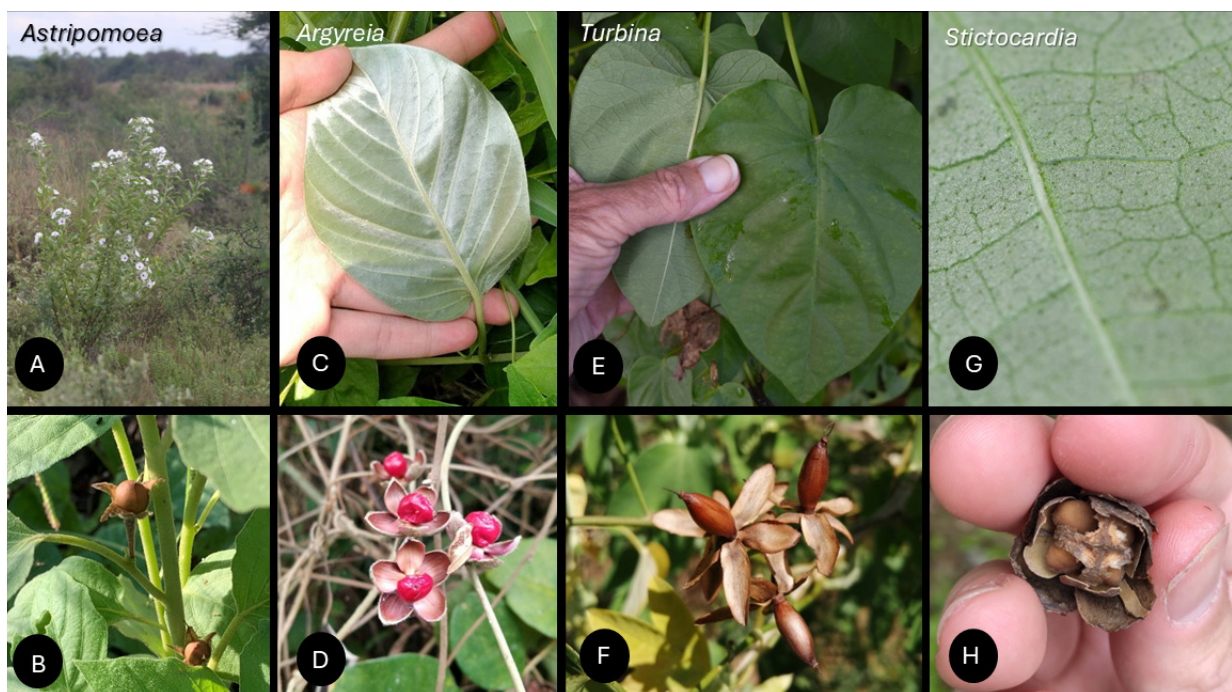


Fig. 4. Diagnostic characters of the reinstated genera of Argyreiinae. **A, B.** *Astripomoea*. **A.** Shrub, *Astripomoea hyoscyamoides* (source: <https://www.inaturalist.org/observations/45090205>). **B.** Fruit a 4-valved capsule, sepals reflexing from the fruit, *Astripomoea lachnosperma* (source: <https://www.inaturalist.org/observations/69762210>). **C, D.** *Argyreia*. **C.** Abaxial surface of the leaf covered in silvery indumentum, *Argyreia mollis* (source: <https://www.inaturalist.org/observations/132134088>). **D.** Fruit a fleshy berry, sepals accrescent and involving the fruit, *Argyreia mollis* (source: <https://www.inaturalist.org/observations/127516067>). **E, F.** *Turbina*. **E.** Abaxial surface of the leaf (left), showing glabrous leaf, without black gland dots, *Turbina corymbosa* (source: <https://www.inaturalist.org/observations/100184533>). **F.** Fruit a tardily dehiscent dry capsule, with persistent style, sepals reflexing from the fruit *Turbina corymbosa* (source: <https://www.inaturalist.org/observations/111164832>). **G, H.** *Stictocardia*. **G.** Abaxial surface of the leaf, showing glabrous leaf, with black gland dots, *Stictocardia beraviensis* (source: <https://www.inaturalist.org/observations/138348573>). **H.** Fruit heart-shaped, tardily dehiscent along septa walls, *Stictocardia beraviensis* (source: <https://www.inaturalist.org/observations/69606384>).

participatory and equitable collaboration between researchers across geographic boundaries, with the impact of taxonomic changes, especially those with potential consequences for conservation, discussed with regional specialists prior to any decisions being made.

Taxonomic treatment

Key to the genera of subtribe Argyreineae (tribe Ipomoeae)

- 1a. Shrubs or sub-shrubs, never climbing; indumentum stellate on all parts.....*Astripomoea*
- 1b. Lianas; indumentum simple on all parts 2
- 2a. Fruits indehiscent, either dry or fleshy..... 3
- 2b. Fruits dehiscent or tardily dehiscent..... 4
- 3a. Fruit a berry, with or without a persisting style; abaxial surface of the leaf with dense silvery indumentum; accrescent sepals enclosing the fruit*Argyreia*
- 3b. Fruit dry nutlets or capsules, with a persisting style; abaxial surface of the leaf mostly glabrous, without dense silvery indumentum; papery sepals reflexing from the fruit.....*Turbina*
- 4a. Calyx greatly enlarged, completely enclosing

fruit; leaves (and often sepals and corolla lobes) with minute blackish glandular dots abaxially; fruit wall eroding at length between septa, lantern-shaped*Stictocardia*

4b. Calyx not enlarged, either reflexed from fruit or not fully enclosing it; leaves (and sepals and corolla lobes) without blackish dots; fruit wall dehiscent along 4 valves.....*Ipomoea* s.l.

Argyreia Lour., Fl. Cochinch. 1: 95, 134. 1790; Staples & Traiperm, Taxon: 66(2): 445. 2017. Type: *Argyreia obtusifolia* Lour.

Distribution: 145 (150 taxa) distributed in Madagascar, Tropical & Subtropical Asia to N. Queensland (Fig. 5).

Names recognised under genus *Argyreia* and their new synonyms

Argyreia adpressa (Choisy) Boerl. = *Ipomoea adpressa* (Choisy) J.R.I.Wood & Scotland

Argyreia akoensis S.Z.Yang, P.H.Chen & Staples = *Ipomoea akoensis* (S.Z.Yang, P.H.Chen & Staples) J.R.I.Wood & Scotland

Argyreia albiflora Staples & Traiperm = *Ipomoea candida* J.R.I.Wood & Scotland

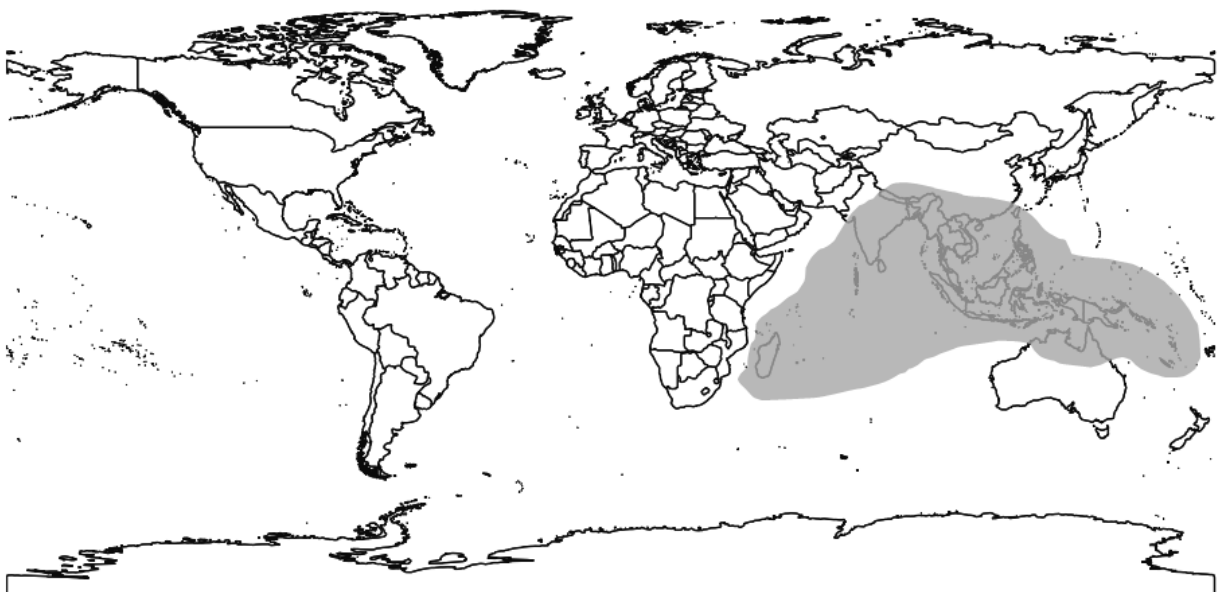


Fig. 5. Broad geographic distribution of *Argyreia*, based on GBIF (<https://gbif.org>) records; only native distribution considered, potentially cultivated/introduced records for ornamental species excluded.

- Argyreia androyensis* Deroin = *Ipomoea deroinii* J.R.I. Wood & Scotland
- Argyreia ankylophlebia* Traiperm & Staples = *Ipomoea ankylophlebia* (Traiperm & Staples) J.R.I. Wood & Scotland
- Argyreia apoensis* (Elmer) Ooststr. = *Ipomoea apoensis* (Elmer) J.R.I. Wood & Scotland
- Argyreia arakuensis* N.P. Balakr. = *Ipomoea concanica* J.R.I. Wood & Scotland
- Argyreia argentea* (Roxb.) Sweet = *Ipomoea argenteosericea* J.R.I. Wood & Scotland
- Argyreia atropurpurea* (Wall.) Raizada = *Ipomoea atropurpurea* (Wall.) Sweet
- Argyreia baoshanensis* S.H. Huang = *Ipomoea barlerioides* (Choisy) Benth. ex C.B. Clarke
- Argyreia barbata* (Wall.) Raizada = *Ipomoea barbata* (Wall.) Choisy
- Argyreia barbiger* Choisy = *Ipomoea prainii* J.R.I. Wood & Scotland
- Argyreia barnesii* (Merr.) Ooststr. = *Ipomoea barnesii* (Merr.) J.R.I. Wood & Scotland
- Argyreia barnesii* var. *urdanetensis* (Elmer) Ooststr. = *Ipomoea barnesii* var. *urdanetensis* (Elmer) J.R.I. Wood & Scotland
- Argyreia baronii* Deroin = *Ipomoea baronii* (Deroin) J.R.I. Wood & Scotland
- Argyreia bella* (C.B. Clarke) Raizada = *Ipomoea euantha* J.R.I. Wood & Scotland
- Argyreia bifrons* Ooststr. = *Ipomoea bifrons* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia boholensis* (Merr.) Ooststr. = *Ipomoea boholensis* (Merr.) J.R.I. Wood & Scotland
- Argyreia boseana* Santapau & Patel = *Ipomoea himalayana* J.R.I. Wood & Scotland
- Argyreia bracteata* Choisy = *Ipomoea austroindica* J.R.I. Wood & Scotland
- Argyreia breviscapa* (Kerr) Ooststr. = *Ipomoea breviscapa* (Kerr) J.R.I. Wood & Scotland
- Argyreia capitiformis* (Poir.) Ooststr. = *Ipomoea capitiformis* (Poir.) J.R.I. Wood & Scotland
- Argyreia caudata* Ooststr. = *Ipomoea borneoensis* J.R.I. Wood & Scotland
- Argyreia celebica* Ooststr. = *Ipomoea celebica* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia cheliensis* C.Y. Wu = *Ipomoea cheliensis* (C.Y. Wu) J.R.I. Wood & Scotland
- Argyreia cinerea* Ooststr. = *Ipomoea cinerea* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia coacta* (C.B. Clarke) Alston = *Ipomoea coacta* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia collinsiae* (Craib) Na Songkhla & Traiperm = *Ipomoea collinsae* (Craib) J.R.I. Wood & Scotland
- Argyreia confusa* (Prain) Thoth. = *Ipomoea confusa* (Prain) J.R.I. Wood & Scotland
- Argyreia congesta* Ooststr. = *Ipomoea congestiflora* J.R.I. Wood & Scotland
- Argyreia convolvuloides* (Prain) Rattanagr. & Traiperm = *Blinkworthia convolvuloides* Prain = *Ipomoea blinkworthii* J.R.I. Wood & Scotland = *Blinkworthia discostigma* Hand.-Mazz. = *Ipomoea discostigma* (Hand.-Mazz.) J.R.I. Wood & Scotland
- Argyreia coonoorensis* W.W. Sm. & Ramaswami = *Ipomoea coonoorensis* (W.W. Sm. & Ramaswami) J.R.I. Wood & Scotland
- Argyreia corneri* Hoogland = *Ipomoea corneri* (Hoogland) J.R.I. Wood & Scotland
- Argyreia crispa* Ooststr. = *Ipomoea acehensis* J.R.I. Wood & Scotland
- Argyreia cucullata* Ooststr. = *Ipomoea cucullata* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia cuneata* (Willd.) Ker Gawl. = *Ipomoea cuneata* (Willd.) J.R.I. Wood & Scotland
- Argyreia cymosa* (Roxb.) Sweet = *Ipomoea cymulosa* J.R.I. Wood & Scotland
- Argyreia daltonii* C.B. Clarke = *Ipomoea daltonii*

- (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia discolor* Ooststr. = *Ipomoea carrii* J.R.I. Wood & Scotland
- Argyreia dokmaihom* Traiperm & Staples = *Ipomoea dokmaihom* (Traiperm & Staples) J.R.I. Wood & Scotland
- Argyreia elliptica* (Roth) Choisy = *Ipomoea elliptica* Roth ex Roem. & Schult.
- Argyreia elongata* Forman = *Ipomoea dransfieldii* J.R.I. Wood & Scotland
- Argyreia erinacea* Ooststr. = *Ipomoea erinacea* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia eriocephala* C.Y. Wu = *Ipomoea chengyiwuensis* J.R.I. Wood & Scotland
- Argyreia formosana* Ishig. ex T. Yamaz. = *Ipomoea formosana* (Ishigami ex T. Yamaz.) J.R.I. Wood & Scotland
- Argyreia fulgens* Choisy = *Ipomoea fulgens* (Choisy) J.R.I. Wood & Scotland
- Argyreia fulvocymosa* C.Y. Wu = *Ipomoea fulvocymosa* (C.Y. Wu) J.R.I. Wood & Scotland
- Argyreia fulvovillosa* C.Y. Wu & S.H. Huang = *Ipomoea fulvovillosa* (C.Y. Wu & S.H. Huang) J.R.I. Wood & Scotland
- Argyreia glabra* Choisy = *Ipomoea zollingeri* J.R.I. Wood & Scotland
- Argyreia hancorniifolia* Gardner ex Thwaites = *Ipomoea hancorniifolia* (Gardner ex Thwaites) J.R.I. Wood & Scotland
- Argyreia henryi* (Craib) Craib = *Ipomoea henryi* Craib
- Argyreia hirsuta* Wight & Arn. = *Ipomoea villifolia* J.R.I. Wood & Scotland
- Argyreia hirsutissima* (C.B. Clarke) Thoth. = *Ipomoea oreogena* J.R.I. Wood & Scotland
- Argyreia hookeri* C.B. Clarke = *Ipomoea himalayana* J.R.I. Wood & Scotland
- Argyreia hylophila* (Kerr) Staples & Traiperm = *Ipomoea hylophila* Kerr
- Argyreia inaequisepala* Traiperm & Staples = *Ipomoea inaequisepala* (Traiperm & Staples) J.R.I. Wood & Scotland
- Argyreia involucrata* C.B. Clarke = *Ipomoea dalzellii* J.R.I. Wood & Scotland
- Argyreia involucrata* var. *inaequalis* C.B. Clarke = *Ipomoea dalzellii* var. *inaequalis* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia ionantha* (Kerr) Khunwasi & Traiperm = *Ipomoea ionantha* (Kerr) J.R.I. Wood & Scotland
- Argyreia kerrii* Craib = *Ipomoea kerrii* (Craib) J.R.I. Wood & Scotland
- Argyreia kleiniana* (Schult.) Raizada = *Ipomoea kleiniana* Roem. & Schult.
- Argyreia kondaparthiensis* P. Daniel & Vajr. = *Ipomoea kondaparthiensis* (P. Daniel & Vajr.) J.R.I. Wood & Scotland
- Argyreia kunstleri* (Prain) Ooststr. = *Ipomoea kunstleri* (Prain) J.R.I. Wood & Scotland
- Argyreia kurzii* (C.B. Clarke) Boerl. = *Ipomoea kurzii* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia lamii* Ooststr. = *Ipomoea lamii* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia lanceolata* Choisy = *Ipomoea lancifolia* J.R.I. Wood & Scotland
- Argyreia laotica* Gagnep. = *Ipomoea laotica* (Gagnep.) J.R.I. Wood & Scotland
- Argyreia lawii* C.B. Clarke = *Ipomoea lawii* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia leschenaultii* Choisy = *Ipomoea leschenaultii* (Choisy) J.R.I. Wood & Scotland
- Argyreia leucantha* Traiperm & Staples = *Ipomoea thailandica* J.R.I. Wood & Scotland
- Argyreia linggaensis* Ooststr. = *Ipomoea linggaensis* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia longifolia* (Collett & Hemsl.) Raizada =

- Ipomoea shanensis* J.R.I. Wood & Scotland
- Argyreia longipes** (Gagnep.) Traiperm & Staples
= *Ipomoea gagnepainii* J.R.I. Wood & Scotland
- Argyreia luzonensis** (Hallier f.) Ooststr. = *Ipomoea luzonensis* (Hallier f.) J.R.I. Wood & Scotland
- Argyreia lycioides** (Choisy) Traiperm & Rattanakr. = *Blinkworthia lycioides* Choisy = *Ipomoea lycioides* (Choisy) J.R.I. Wood & Scotland
- Argyreia maingayi** (C.B. Clarke) Hoogland = *Ipomoea maingayi* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia marlipoensis** C.Y. Wu & S.H. Huang = *Ipomoea marlipoensis* (C.Y. Wu & S.H. Huang) J.R.I. Wood & Scotland
- Argyreia mastersii** (Prain) Raizada = *Ipomoea mastersii* (Prain) J.R.I. Wood & Scotland
- Argyreia maymyensis** (Lace) Raizada = *Ipomoea maymyensis* Lace
- Argyreia mekongensis** Gagnep. & Courchet = *Ipomoea mekongensis* (Gagnep. & Courchet) J.R.I. Wood & Scotland
- Argyreia melvillei** (S. Moore) Staples = *Ipomoea melvillei* (S. Moore) J.R.I. Wood & Scotland
- Argyreia micrantha** Ooststr. = *Ipomoea kinabaluensis* J.R.I. Wood & Scotland
- Argyreia mollis** (Burm. f.) Choisy = *Ipomoea sericea* (L.) Blume
- Argyreia monglaensis** C.Y. Wu & S.H. Huang = *Ipomoea monglaensis* (C.Y. Wu & S.H. Huang) J.R.I. Wood & Scotland
- Argyreia monosperma** C.Y. Wu = *Ipomoea uniseminalis* J.R.I. Wood & Scotland
- Argyreia nana** (Collett & Hemsl.) S. Shalini, Lakshmin. & D. Maity = *Ipomoea nana* Collett & Hemsl.
- Argyreia nellygherya** Choisy = *Ipomoea nellygherya* (Choisy) J.R.I. Wood & Scotland
- Argyreia nervosa** (Burm. f.) Bojer = *Ipomoea nervosa* (Burm. f.) J.R.I. Wood & Scotland
- Argyreia nitida** (Desr.) Choisy = *Ipomoea purpuricarpa* (Elmer) J.R.I. Wood & Scotland
- Argyreia nuda** Ooststr. = *Ipomoea bunnemeyeri* J.R.I. Wood & Scotland
- Argyreia oblongifolia** Ooststr. = *Ipomoea kalimantanensis* J.R.I. Wood & Scotland
- Argyreia obtusifolia** Lour. = *Ipomoea obtusifolia* (Lour.) J.R.I. Wood & Scotland
- Argyreia onilahiensis** Deroin = *Ipomoea onilahiensis* (Deroin) J.R.I. Wood & Scotland
- Argyreia ooststroomii** Hoogland = *Ipomoea ooststroomii* (Hoogland) J.R.I. Wood & Scotland
- Argyreia osyrensis** (Roth) Choisy = *Ipomoea osyrensis* Roth ex Roem. & Schult.
- Argyreia paivae** A.R. Simões & P. Silveira = *Ipomoea paivae* (A.R. Simões & P. Silveira) J.R.I. Wood & Scotland
- Argyreia pallida** Choisy = *Ipomoea burmannica* J.R.I. Wood & Scotland
- Argyreia parviflora** (Ridl.) Ooststr. = *Ipomoea subpeltata* J.R.I. Wood & Scotland
- Argyreia paucinervia** Ooststr. = *Ipomoea paucinervia* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia pedicellata** Ooststr. = *Ipomoea pedicellata* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia penangiana** (Choisy) Boerl. = *Ipomoea penangiana* (Choisy) J.R.I. Wood & Scotland
- Argyreia philippinensis** (Merr.) Ooststr. = *Ipomoea philippinensis* (Merr.) J.R.I. Wood & Scotland
- Argyreia pierreana** Bois = *Ipomoea pierreana* (Bois) J.R.I. Wood & Scotland
- Argyreia pilosa** Wight & Arn. = *Ipomoea pilosula* J.R.I. Wood & Scotland
- Argyreia popahensis** (Collett & Hemsl.) Staples = *Ipomoea popahensis* Collett & Hemsl.

- Argyreia pseudorubicunda* Ooststr. = *Ipomoea pseudorubicunda* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia reinwardtiana* (Blume) Miq. = *Ipomoea reinwardtiana* Blume
- Argyreia reticulata* (Prain) Hoogland = *Ipomoea hooglandii* J.R.I. Wood & Scotland
- Argyreia reticulata* var. *microcalyx* Hoogland = *Ipomoea hooglandii* J.R.I. Wood & Scotland var. *microcalyx* (Hoogland) J.R.I. Wood & Scotland
- Argyreia ridleyi* (Prain) Ooststr. = *Ipomoea ridleyi* (Prain) J.R.I. Wood & Scotland
- Argyreia robinsonii* (Ridl.) Ooststr. = *Ipomoea kerinciensis* J.R.I. Wood & Scotland
- Argyreia roseopurpurea* (Kerr) Ooststr. = *Ipomoea roseopurpurea* (Kerr) J.R.I. Wood & Scotland
- Argyreia roxburghii* (Sweet) Choisy = *Ipomoea roxburghii* Sweet
- Argyreia rubicunda* Choisy = *Ipomoea rubicunda* (Choisy) J.R.I. Wood & Scotland
- Argyreia samarensis* Ooststr. = *Ipomoea samarensis* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia scortechinii* (Prain) Prain ex Hoogl. = *Ipomoea scortechinii* (Prain) J.R.I. Wood & Scotland
- Argyreia sericea* Dalzell & A. Gibson = *Ipomoea concanica* J.R.I. Wood & Scotland
- Argyreia setosa* (Roxb.) Sweet = *Ipomoea baccata* J.R.I. Wood & Scotland
- Argyreia setosa* var. *minor* (C.B. Clarke) Staples & Traiperm = *Ipomoea baccata* J.R.I. Wood & Scotland var. *minor* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia sharadchandrajii* Lawand & Shimpale = *Ipomoea sharadchandrajii* (Lawand & Shimpale) J.R.I. Wood & P. Muñoz
- Argyreia siamensis* (Craib) Staples = *Ipomoea siamensis* Craib
- Argyreia sikkimensis* (C.B. Clarke) Ooststr. = *Ipomoea sikkimensis* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia sorsogonensis* Ooststr. ex Staples & Traiperm = *Ipomoea sorsogonensis* (Ooststr. ex Staples & Traiperm) J.R.I. Wood & Scotland
- Argyreia sphaerocephala* (Prain) Prain ex Hoogl. = *Ipomoea erythrocephala* J.R.I. Wood & Scotland
- Argyreia splendens* (Hornem.) Sweet = *Ipomoea splendens* (Roxb.) Sims
- Argyreia srinivasanii* Subba Rao & Kumari = *Ipomoea pilosula* J.R.I. Wood & Scotland
- Argyreia stenophylla* (Kerr) Staples & Traiperm = *Ipomoea chiangmaiensis* J.R.I. Wood & Scotland
- Argyreia strigillosa* C.Y. Wu = *Ipomoea strigillosa* (C.Y. Wu) J.R.I. Wood & Scotland
- Argyreia suddeana* Traiperm & Staples = *Ipomoea suddeana* (Traiperm & Staples) J.R.I. Wood & Scotland
- Argyreia sumbawana* Ooststr. = *Ipomoea sumbawana* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia thomsonii* (C.B. Clarke) Babu = *Ipomoea thomsonii* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia thorelii* Gagnep. = *Ipomoea poilanei* (Ooststr.) J.R.I. Wood & Scotland
- Argyreia thwaitesii* (C.B. Clarke) D.F. Austin = *Ipomoea thwaitesii* (C.B. Clarke) J.R.I. Wood & Scotland
- Argyreia tomentosa* Choisy = *Ipomoea myanmarensis* J.R.I. Wood & Scotland
- Argyreia vahibora* Deroin = *Ipomoea vahibora* (Deroin) J.R.I. Wood & Scotland
- Argyreia variabilis* Traiperm & Staples = *Ipomoea traipermae* J.R.I. Wood & Scotland
- Argyreia velutina* C.Y. Wu = *Ipomoea fulvocymosa* J.R.I. Wood & Scotland
- Argyreia venusta* Choisy = *Ipomoea formosa* J.R.I. Wood & Scotland

Argyreia versicolor (Kerr) Staples & Traiperm =
Ipomoea enigmatica J.R.I. Wood & Scotland

Argyreia wallichii Choisy = *Ipomoea staplesii*
J.R.I. Wood & Scotland

Argyreia walshiae Ooststr. = *Ipomoea walshiae*
(Ooststr.) J.R.I. Wood & Scotland

Argyreia zeylanica (Gaertn.) Voigt = *Ipomoea*
zeylanica Gaertn.

Additional species of *Argyreia*: Omitted in Muñoz-
Rodríguez *et al.* (2019) and Wood *et al.* (2022):

Argyreia bracteosa (C.B. Clarke) Raizada

Argyreia decemloba Traiperm, Fujikawa &
Staples (published also in 2019)

Argyreia lakshminarasimhanii S. Shalini,
Sujana, Arisdason & D. Maity (published in
2020)

Not listed before, nor enumerated in the global
synopsis of *Argyreia* (Staples & Traiperm,
2017):

Argyreia campanuliflora (Gage) Thoth.
(resurrected from synonym of *A. convolvuloides*)

Argyreia collinsiae subsp. *megabracteata*

Traiperm & Srisombat (published in 2024)

Argyreia gyrobracteata Traiperm & Chitchak
(published in 2018)

Argyreia pseudosolanum Traiperm & Suddee
(published in 2020)

Argyreia subrotunda Q.R. Liu & Mao Lin Zhang
(published in 2023)

Astripomoea A. Meeuse, *Bothalia* 6: 709 1958;
Verdcourt, *Kirkia* 1: 26–31. 1960; Wilkin, *Kew*
Bulletin 54(4): 853. 1999. *Type: Astripomoea*
lachnosperma (Choisy) A. Meeuse.

Distribution: 12 (18 taxa) distributed in Tropical &
S. Africa, Arabian Peninsula (Fig. 6).

**Names recognised under genus *Astripomoea*
and their synonyms**

Astripomoea cephalantha (Hallier f.) Verdc. =
Ipomoea mwanzae J.R.I. Wood & Scotland

Astripomoea delamereana (Rendle) Verdc. =
Ipomoea delamereana (Rendle) J.R.I. Wood &
Scotland

Astripomoea grantii (Rendle) Verdc. = *Ipomoea*
ugandensis (Rendle) J.R.I. Wood & Scotland

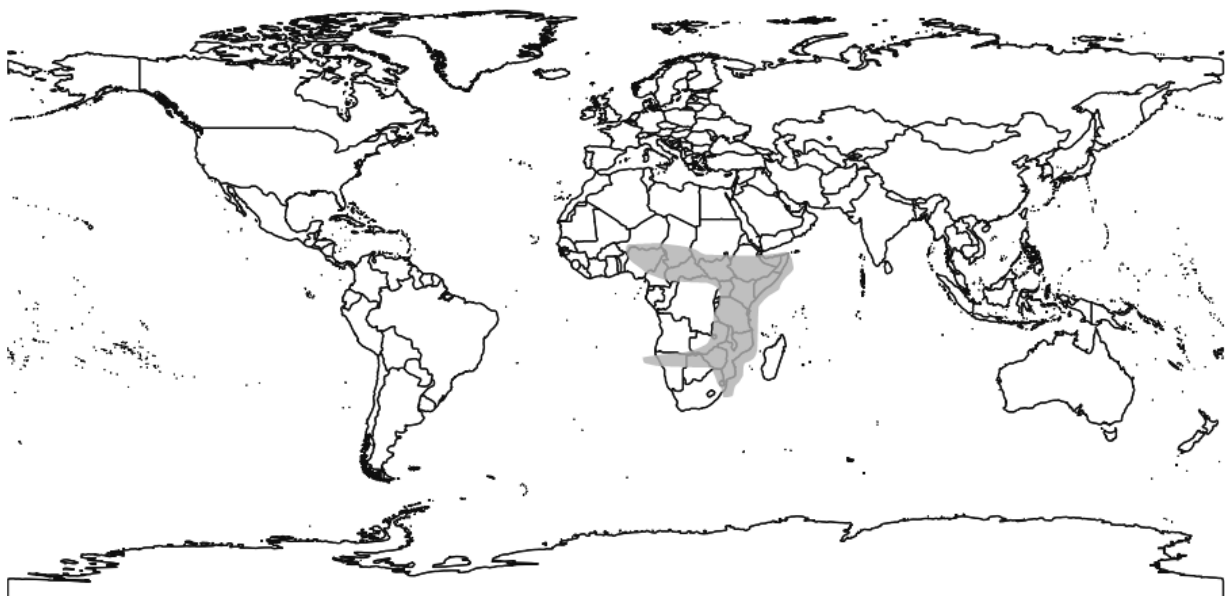


Fig. 6. Broad geographic distribution of *Astripomoea*, based on GBIF (<https://gbif.org>) records; only native distribution considered, potentially cultivated/introduced records for ornamental species excluded.

- Astripomoea hyoscyamoides** (Vatke) Verdc. = *Ipomoea hyoscyamoides* (Vatke) J.R.I.Wood & Scotland
- Astripomoea hyoscyamoides var. melandrioides** (Hallier f.) Verdc. = *Ipomoea hyoscyamoides* (Vatke) Verdc. var. *melandrioides* (Haller f.) J.R.I.Wood & Scotland
- Astripomoea lachnosperma** (Choisy) A.Meeuse = *Ipomoea lachnosperma* Choisy, Prodr., 9: 356 (1845)
- Astripomoea longituba** Verdc. = *Ipomoea kenyensis* J.R.I.Wood & Scotland
- Astripomoea malvacea** (Klotzsch) A.Meeuse = *Ipomoea malvacea* (Klotzsch) J.R.I.Wood & Scotland
- Astripomoea malvacea var. epedunculata** (Rendle) Verdc. = *Ipomoea malvacea* var. *ependunculata* (Rendle) J.R.I.Wood & Scotland
- Astripomoea malvacea var. floccosa** (Vatke) Verdc. = *Ipomoea malvacea* var. *floccosa* (Vatke) J.R.I.Wood & Scotland
- Astripomoea malvacea var. involuta** (Rendle) Verdc. = *Ipomoea malvacea* var. *involuta* (Rendle) J.R.I.Wood & Scotland
- Astripomoea malvacea var. parviflora** (Rendle) Staples = *Ipomoea malvacea* var. *parviflora* (Rendle) J.R.I.Wood & Scotland
- Astripomoea malvacea var. volkensii** (Dammer) Verdc. = *Ipomoea malvacea* var. *volkensii* (Dammer) J.R.I.Wood & Scotland
- Astripomoea nogalensis** (Chiov.) Verdc. = *Ipomoea nogalensis* (Chiov.) J.R.I.Wood & Scotland
- Astripomoea polycephala** (Hallier f.) Verdc. = *Ipomoea polycephala* (Hallier f.) J.R.I.Wood & Scotland
- Astripomoea procera** Thulin = *Ipomoea procera* (Thulin) J.R.I.Wood & Scotland
- Astripomoea rotundata** (Pilg.) A.Meeuse = *Ipomoea meeusei* J.R.I.Wood & Scotland
- Astripomoea tubiflora** (Hallier f.) Verdc. = *Ipomoea rivae* J.R.I.Wood & Scotland
- Stictocardia** Hallier f., Bot. Jahrb. Syst. 18(Heft 1-2): 159. 1893; Austin & Demissew, Kew Bull. 52(1): 161–169. 1997; Austin & Eich, Willdenowia 31(1): 79–85. 2001; Johnson, Austrobaileya 6(4): 631–637. 2004. Type: *Stictocardia tiliifolia* (Desr.) Hall. f.



Fig. 7. Broad geographic distribution of *Stictocardia*, based on GBIF (<https://gbif.org>) records; only native distribution considered, potentially cultivated/introduced records for ornamental species excluded.

Distribution: 13 (15) taxa distributed in Tropical & Subtropical Africa and Asia, to Australia and the Pacific (Fig. 7).

Names recognised under *Stictocardia* and their new synonyms:

Stictocardia beraviensis (Vatke) Hallier f. = *Ipomoea beraviensis* Vatke

Stictocardia cordatosepala Ooststr. = *Ipomoea lombokii* J.R.I.Wood & Scotland

Stictocardia discolor Ooststr. = *Ipomoea orientalis* J.R.I.Wood & Scotland

Stictocardia incompta (Hallier f.) Hallier f. = *Ipomoea incompta* Hallier f.

Stictocardia jucunda (Thwaites) C.R.Gunn = *Ipomoea jucunda* Thwaites

Stictocardia laxiflora (Baker) Hallier f. = *Ipomoea buchananii* Baker

Stictocardia laxiflora (Vatke) Hallier f. var. *woodii* (N.E.Br.) Verdc. = *Ipomoea buchananii* var. *woodii* (N.E.Br.) J.R.I.Wood & Scotland

Stictocardia lutambensis (Schulze-Menz) Verdc. = *Ipomoea lutambensis* Schulze-Menz

Stictocardia macalusoi (Mattei) Verdc. = *Ipomoea*

macalusoi Mattei

Stictocardia mojangensis (Vatke) D.F.Austin & Eich = *Ipomoea mojangensis* Vatke

Stictocardia neglecta Ooststr. = *Ipomoea neglecta* (Ooststr.) J.R.I.Wood & Scotland

Stictocardia queenslandica (Domin) R.W.Johnson = *Ipomoea queenslandica* (Domin) J.R.I.Wood & Scotland

Stictocardia sivarajanii Biju, Pushp. & P.Mathew = *Ipomoea sivarajanii* (Biju, Pushp. & P.Mathew) J.R.I.Wood & Scotland

Stictocardia tiliifolia (Desr.) Hall. f. = *Ipomoea tiliifolia* (Desr.) Roem. & Schult.

Stictocardia tiliifolia subsp. *marquesensis* Staples & Butaud = *Ipomoea tiliifolia* subsp. *marquesensis* (Staples & Butaud) J.R.I.Wood & Scotland

TURBINA Raf., Fl. Tellur. 4: 81. 1838 ; Austin & Staples, Bull. Torrey Bot. Club 118(3): 265–280. 1991; Meeuse, Bothalia 6: 641–792; 1957. *Type:* *Turbina corymbosa* (L.) Raf.

Distribution: 16 (17) taxa, distributed from Central and South America to South Africa (Fig. 8).

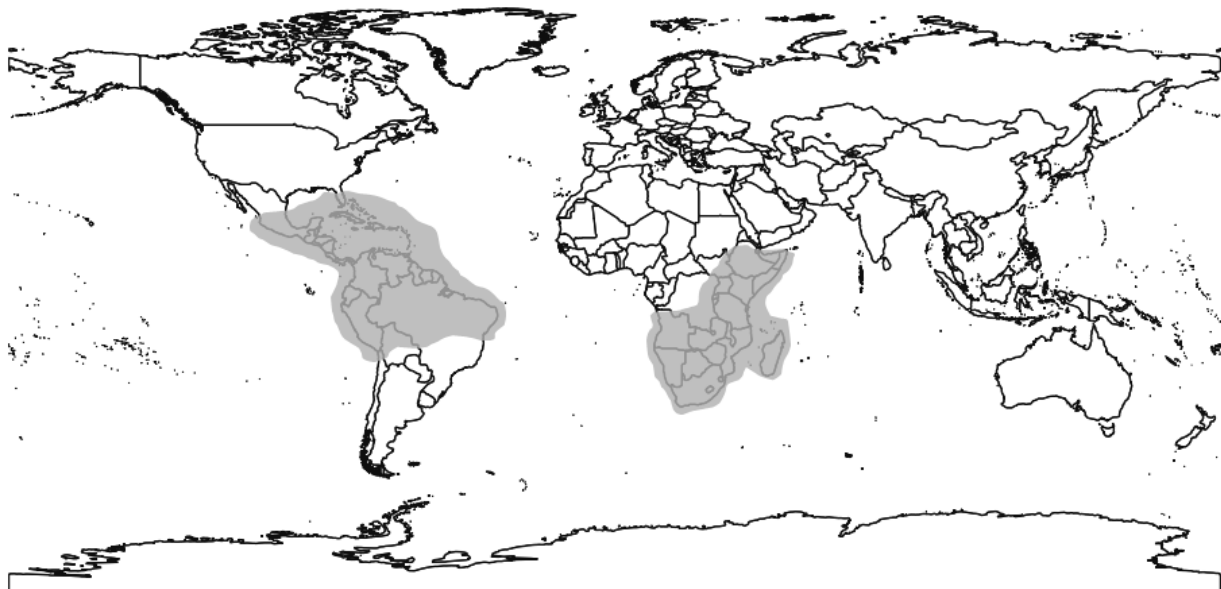


Fig. 8. Broad geographic distribution of *Turbina*, based on GBIF (<https://gbif.org>) records; only native distribution considered, potentially cultivated/introduced records for ornamental species excluded.

Names recognised under *Turbina* and their new synonyms

Turbina abutiloides (Kunth) O'Donnell = *Ipomoea abutiloides* (Kunth) G.Don

Turbina amazonica D.F.Austin & Staples = *Ipomoea amazonica* (D.F.Austin & Staples) J.R.I.Wood & Scotland

Turbina bracteata (Choisy) D.F.Austin & Staples = *Ipomoea porphyrea* J.R.I.Wood & Scotland

Turbina cordata (Choisy) D.F.Austin & Staples = *Ipomoea sericosepala* J.R.I.Wood & Scotland

Turbina corymbosa (L.) Raf. = *Ipomoea corymbosa* (L.) Roth

Turbina holubii (Baker) A. Meeuse = *Ipomoea holubii* Baker

Turbina longiflora Verdc. = *Ipomoea mozambicensis* J.R.I.Wood & Scotland

Turbina oblongata (E.Mey. ex Choisy) A.Meeuse = *Ipomoea oblongata* E.Mey. ex Choisy

Turbina ommanneyi (Rendle) A.R.Simões = *Ipomoea ommanneyi* Rendle

Turbina oenotheroides (L.f.) A.Meeuse = *Ipomoea oenotheroides* (L.f.) A.Meeuse & Welman

Turbina pearceana (Kuntze) A.R. Simões = *Ipomoea pearceana* Kuntze

Turbina pellita (Hallier f.) A.R.Simões = *Ipomoea pellita* Hallier f.

Turbina perbella Verdc. = *Ipomoea perbella* (Verdc.) J.R.I.Wood & Scotland

Turbina pyramidalis (Hallier f.) A.Meeuse = *Ipomoea pyramidalis* Hallier f.

Turbina racemosa (Poir.) D.F.Austin = *Ipomoea racemosa* Poir.

Turbina robertsiana (Rendle) A.Meeuse = *Ipomoea robertsiana* Rendle

Turbina shirensis (Oliv.) A.Meeuse = *Paralepistemon shirensis* (Oliv.) Lejoly & Lisowski = *Ipomoea shirensis* Oliv.

Turbina stenosphon (Hallier f.) A.Meeuse = *Ipomoea stenosphon* Hallier f.

Turbina stenosphon var. *pubescens* Verdc. = *Ipomoea stenosphon* var. *pubescens* (Verdc.) J.R.I.Wood & Scotland

Turbina suffruticosa (Burch.) A.Meeuse = *Ipomoea suffruticosa* Burch.

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