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Begonia salog (Begoniaceae, section *Baryandra*), a new endemic species from southeastern Luzon, Philippines

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ABSTRACT: *Begonia salog*, a member of section *Baryandra,* is characterized by rhizomatous growth, axillary protandrous inflorescences with boat-shaped bracts, and ovaries with bifid placentae. While sharing glandular hairs on the inflorescence with *B. caramoanensis,* it is distinguished by puberulent petioles (vs. tomentose), broadly serrated, non-ciliate leaf margins (vs. shallowly undulate and ciliate), a glabrous abaxial leaf surface (vs. pilose), glabrous bracts (vs. glandular-hairy), and a glabrous ovary (vs. glandular-hairy). *Begonia salog* is described here as a new species from the karst landscapes of southeastern Luzon, Philippines, with notes on its ecology and habitat, and a preliminary IUCN-based conservation assessment.

KEY WORDS: *Begonia caramoanensis*, biodiversity conservation, comparative morphology, plant endemism, species delimitation.

INTRODUCTION

Begonia Linnaeus (1753: 1056) is a species-rich genus in the family Begoniaceae, comprising approximately 2,200 species distributed across the tropical and subtropical regions of Asia, Africa, and the Americas (Hughes *et al*., 2015–). The genus is taxonomically complex and morphologically diverse, encompassing terrestrial, epiphytic, and lithophytic life forms. Begonias are well known for their asymmetrical leaves, unisexual flowers, and often elaborate vegetative and reproductive structures, features that make them of considerable botanical and horticultural interest (Tebbitt, 2005).

The Philippines is recognized as one of the major global centers of *Begonia* diversity, with around 200 species currently documented—over 90% of which are endemic to the country (Pelser *et al*., 2011 onwards; Rubite *et al*., 2024). Philippine begonias are frequently narrowly distributed, with many taxa confined to specific mountain systems, karst formations, riparian corridors, or ultramafic substrates. These micro-endemic species are particularly vulnerable to environmental pressures, including habitat loss, mining activities, tourism development, and the impacts of climate change. Their restricted distributions underscore the importance of continued botanical exploration and systematic documentation to support effective conservation strategies (Cámara-Leret *et al*., 2020).

The Philippines' complex geological history, characterized by repeated cycles of island formation, connectivity, and isolation driven by fluctuating sea levels, has shaped distinctive patterns of biodiversity and endemism (Heaney *et al*., 2016). These geological and climatic processes have profoundly influenced species distributions and diversification, reinforcing the country's status as a global biodiversity hotspot and a natural laboratory for evolutionary and conservation research (Welton *et al*., 2014; Diesmos *et al*., 2015; Leviton *et al*., 2018). This archipelagic complexity has facilitated multiple episodes of species radiation in megadiverse plant lineages such as *Begonia*, resulting in several independently radiating lineages across different islands (Hughes *et al*., 2015). Within this genus, *Begonia* sect. *Baryandra* A. DC. (1859) remains monophyletic and is endemic to the Malesian region, with its highest diversity concentrated in the Philippines (Rubite *et al*., 2013; Dela Cruz *et al*., 2022; Bucay *et al*., 2025).

Within the Philippines, Southeastern Luzon—particularly the Bicol Region—has emerged as a significant hotspot of *Begonia* endemism (Rubite *et al*., 2018, 2022; Dela Cruz *et al*., 2022; Dela Cruz *et al*., 2024). The region's dynamic landscape is composed of volcanic slopes such as Mt. Isarog, Mt. Labo, and Mt. Malinao, in addition to extensive ultramafic and karst environments, forming a mosaic of specialized microhabitats that promote ecological specialization and

Table 1. Key morphological comparison of ***Begonia salog*** and ***B. caramoanensis***

	B. salog	***B. caramoanensis***
Rhizome		
Vestiture	Glabrous	Subglabrous
Internode length (mm)	13–19	4–8
Petiole		
Vestiture	Puberulent	Tomentose
Lamina		
Margin	Broadly serrated without minute ciliate hairs	Shallowly undulate, almost entirely with ciliate hairs
Abaxial vestiture	Glabrous	Pilose with light green to maroon hispid
Inflorescence		
Inflorescence vestiture	Puberulent	Glandular hairs
Bracts		
Abaxial vestiture	Glabrous	Glandular hairs
Pistillate flower		
Pedicel vestiture	Glabrous	Glandular hairs
Ovary		
Vestiture	Glabrous	Glandular hairs
Abaxial wing shape	Lunate	Broadly crescent-shaped, strongly protruding
Proximal end of the largest wing	Cordate	Acute or rounded
Lateral wings	Narrowly lunate	Narrowly crescent-shaped

rapid species radiation (Balete *et al*., 2013). Recent botanical surveys in these habitats have revealed numerous undescribed taxa, particularly within *Begonia* sect. *Baryandra*, further highlighting the evolutionary significance of the Bicol Region as a center of diversification for Philippine begonias.

In this context, the present paper describes a new species of sect. Baryandra discovered in the karst landscapes of southeastern Luzon. The species is documented through detailed morphological comparisons with its closest congeners, ecological and habitat observations, and a provisional conservation assessment in accordance with IUCN criteria (IUCN, 2024).

MATERIALS AND METHODS

Morphological studies were conducted on at least 10 individuals of *Begonia salog* at the type locality along the Guipangpang River, Barangay Maangas, Municipality of Presentacion, Province of Camarines Sur (Fig. S1). Additional morphological observations were based on herbarium specimens and photographic documentation. The species was examined in comparison with closely allied taxa using relevant literature, online herbarium records, and images from digital databases, including Co's Digital Flora of the Philippines (Pelser *et al*., 2011–) and the *Begonia* Research Centre Online Database (Hughes *et al*., 2015–). Determinations of Area of Occupancy (AOO) and Extent of Occurrence (EOO) were conducted using the GeoCAT tool (Bachman *et al*., 2011), and conservation status was assessed following the IUCN Red List Categories and Criteria (IUCN, 2024), version 3.1, second edition. All collections were made under Wildlife Gratuitous Permit No. 345.

TAXONOMIC TREATMENT

Begonia salog Dela Cruz, Bucay, Corre, & Valiente, ***sp nov.*** (§ *Baryandra*) **Fig. 1**

Type: PHILIPPINES. Luzon Island, Province of Camarines Sur, Barangay Maangas, Guipangpang River, elevation 41 m. 13.7°N, 123.7°E, 31 October 2025, *C.J.P. Dela Cruz 0016* with *M.A.C. Bucay*, *K.B. Corre,* and *J.A.V. Valiente*. (Holotype PNH; Isotype CAHUP)

Diagnosis: *Begonia salog* is characterized by its rhizomatous growth habit, axillary protandrous inflorescences with boat-shaped bracts, and an ovary exhibiting bifid placentation. *Begonia salog* is morphologically similar to *B. caramoanensis* (Rubite *et al*., 2020) in possessing glandular hairs on the inflorescences, but it can be distinguished by several key morphological traits. These include its puberulent (vs. tomentose) petioles; broadly serrate, non-ciliate leaf margins (vs. shallowly undulate to almost entire and ciliate); a glabrous abaxial lamina (vs. pilose with light-green to maroon hispid hairs denser along the veins) abaxial leaf lamina; glabrous (vs. glandular-hairy) bracts; and a glabrous (vs. glandular-hairy) ovary. Additional diagnostic differences between the two taxa are detailed in Table 1.

Description: Monoecious, lithophytic, rhizomatous herb. ***Rhizome*** creeping, pale green to yellowish-green, older portions showing brownish corky patches, up to 14 cm or longer, 13–19 mm in diameter, glabrous with conspicuous petiolar scars, internode length 13–19 long mm. ***Stipules*** membranous and translucent, persistent, broadly triangular to ovate, greenish to reddish toward the apex, keel distinct, bearing fleshy, flattened hairs that are basally fused into a narrow tuft, *ca*. 15 × 8 mm, glabrous,

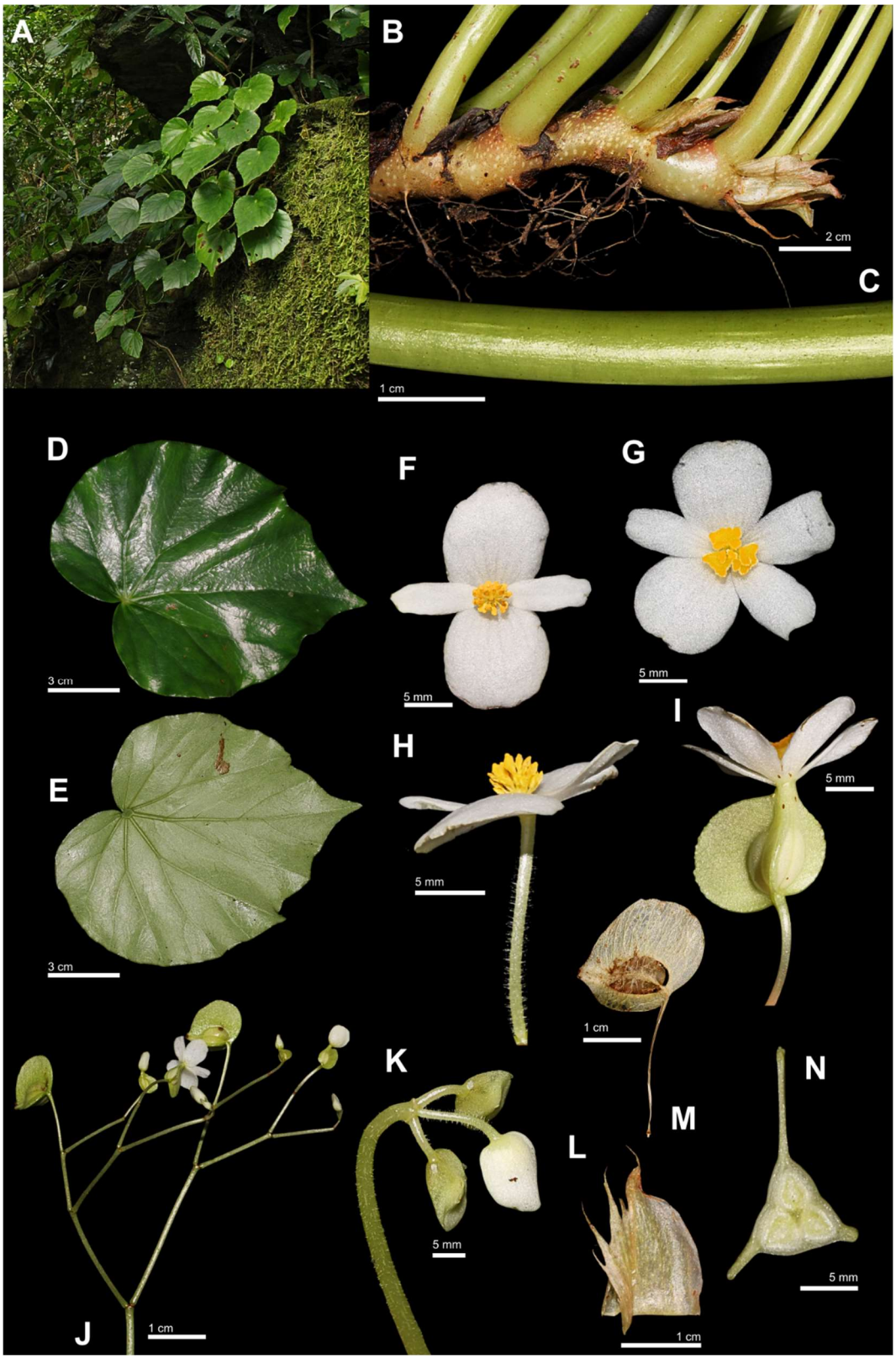

Fig. 1. ***Begonia salog*** Dela Cruz, Bucay, Corre, & Valiente. **A.** Habitat and habit; **B.** Rhizome, showing stipules and petiole base; **C.** Petiole showing vestiture; **D.** Adaxial leaf lamina; **E.** Abaxial leaf lamina; **F.** Staminate flower, face view; **G.** Pistillate flower, face view; **H.** Staminate flower, side view; **I.** Pistillate flower, side view; **J.** Inflorescence; **K.** Immature staminate flower showing the bracts and vestiture; **L.** Dissected stipule; **M.** Capsule; **N.** Ovary cross-section. All from *C.J.P. Dela Cruz 0016* (Holotype, PNH)

margin entire, apex aristate, arista *ca*. 2 mm long. ***Leaves*** alternate; **petiole** puberulent, green, terete, 23–29 cm long, *ca.* 7 mm thick; ***lamina*** succulent, asymmetric, widely ovate, up to *ca*. 19 × 15 cm, with the broader side *ca*. 8 cm wide, base cordate; adaxial surface dark green, glabrous, and waxy-shining, subtly bullate between major veins; abaxial surface pale green, glabrous, matte to faintly lustrous; midrib 14–15 cm long; primary and secondary veins are adaxially glabrous and distinctly impressed, giving the blade a puckered appearance; abaxially glabrous, with veins slightly raised and pale green; margins broadly serrated without ciliate hairs; apex acute; venation palmate, primary veins actinodromous, secondary veins craspedodromous. ***Inflorescence*** axillary, bisexual, protandrous, *ca*. 37 cm long, cymose branching five or six times; peduncle 27–28 cm, erect, hyaline pale green, sparsely puberulent, with short, spreading hairs. ***Bracts*** caducous, widely ovate, boat-shaped, *ca*. 6 × 5 mm, glabrous, hyaline, pale green, margins entire, apex broadly acuminate. ***Staminate flower*****:** *pedicel ca*. 16 mm long, white to greenish white, pubescent; **tepals** 4, white, glabrous, margin entire; *outer tepals* 2, widely elliptic, *ca*. 12 × 10 mm, apex rounded; *inner tepals* 2, narrowly oblong, *ca*. 10 × 4 mm, apex rounded; androecium actinomorphic, *ca.* 2 mm in diameter, stamens 27–30, yellow, filaments fused at the base; anthers obovoid, *ca*. 2 mm long. ***Pistillate flower*****:** *pedicel ca*. 18 mm long, glabrous; **tepals** 5, white, glabrous, margin entire; *outer tepals* 2, widely elliptic, *ca*. 9 × 7 mm, apex rounded; *inner tepals* 3, narrowly oblong, *ca*. 10 × 4 mm, apex rounded; **ovary** elliptic, pale green, *ca*. 9 × 5 mm (wings excluded); *wings* 3, unequal, largest wing lunate, distally truncated, proximally cordate, 10 mm long, and 5 mm wide, margin entire; 2 lateral wings unequal, narrowly lunate, *ca*. 10 mm long and 2 mm wide, locules 3, placentae axile, bilamellate; **styles** 3, yellow, bifid, *ca*. 2.5 mm long, **stigmas** spirally twisted and papillose all around; ***Capsule*****:** pedicel *ca*. 18 mm long; body trigonous-ellipsoid, *ca*. 9 × 5 mm (wings excluded), pendulous and recurved; *wings* 3, unequal, largest wing lunate, distally truncated, proximally cordate, 9–10 mm long and *ca*. 5 mm wide; 2 lateral wings unequal, narrowly lunate, 9–10 mm long and *ca*. 2 mm wide.

Etymology: The epithet *salog* comes from the Bicolano word meaning 'river,' referring to the habitat where the plant was first documented.

Distribution and Habitat: *Begonia salog* is endemic to Camarines Sur Province in southeastern Luzon, where it is currently found in Barangay Maangas, Municipality of Presentacion. It grows on semi-shaded and exposed rocky surfaces.

Phenology: Observed flowering and fruiting in October.

Provisional Conservation Assessment: The species is observed to have a restricted Area of Occupancy (AOO) on its type locality, only covering 0.067 km^2. Approximately 200 mature individuals were observed, and the population appeared stable. No immediate habitat degradation is currently anticipated at the type locality. The only potential threat to the population is intense drought. We recommend that the species be listed as Critically Endangered (CR: B1+2ab(iii,v)) based on a possible population decline, a restricted geographic range (EOO and AOO less than 1 km^2), with only one known location and approximately 200 mature individuals, as estimated.

Notes: *Begonia caramoanensis* is morphologically allied to *B. salog*, a relationship that is further supported by their occurrence within the same geographic province in the Bicol Region. Both species share several vegetative and reproductive characteristics typical of section *Baryandra*, but *B. caramoanensis* can be readily distinguished by its subglabrous rhizome (vs. glabrous), shorter internodes measuring 4–8 mm (vs. 13–19 mm), and tomentose petioles (vs. puberulent). The lamina margin of *B. caramoanensis* is shallowly undulate and almost entirely lined with ciliate hairs, whereas *B. salog* possesses broadly serrated margins lacking minute ciliate hairs. The abaxial surface of the lamina in *B. caramoanensis* is pilose with light green to maroon hispid indumentum, denser on the veins, contrasting with the glabrous abaxial surface observed in *B. salog*. *B. caramoanensis* exhibits glandular hairs on the panicle, bracts, pedicels, and ovary, while these structures are glabrous or merely puberulent in *B. salog*. In addition, the ovary of *B. caramoanensis* possesses broadly crescent-shaped, strongly protruded abaxial wings with acute to rounded proximal ends, and narrowly crescent-shaped lateral wings. In contrast, *B. salog* has lunate abaxial wings with cordate proximal ends and narrowly lunate lateral wings. These combined vegetative and reproductive characters support the recognition of *B. salog* as a distinct species.

Begonia salog is likewise morphologically comparable to *B. droseroides* (Rubite *et al*., 2018), but differs markedly in its much thicker and longer rhizome (14 cm or longer, 13–19 mm in diameter vs. 3–8 cm long, 4.5–8 mm thick), longer internodes (13–19 mm vs. 3–7 mm), and glabrous rhizome surface (vs. subglabrous to hairy). It further differs in possessing membranous, translucent, glabrous stipules, whereas *B. droseroides* has herbaceous, keeled, and densely hirsute stipules. The leaves of *B. salog* are substantially larger and succulent (ca. 19 × 15 cm vs. 5.4–8.2 × 4.4–7 cm), glossy and entirely glabrous on both surfaces, with broadly serrated margins lacking ciliate hairs, and borne on longer green, puberulent petioles (23–29 cm vs. 4.3–12 cm, reddish and densely sericeous). In contrast, *B. droseroides* has smaller leaves with red puberulous veins abaxially and slightly scalloped to subentire margins lined with red hairs. The inflorescence of *B. salog* is also longer and more extensively branched (ca. 37 cm, branched 5–6 times vs.

12–22 cm, branched 2–3 times) and only sparsely puberulent, whereas *B. droseroides* possesses densely glandular-hairy and slightly viscose inflorescences. Furthermore, *B. salog* bears a longer elliptic ovary (ca. 9 mm vs. ca. 6 mm) with a prominently lunate major wing, while *B. droseroides* is characterized by a trapezoid to crescent-shaped, strongly protruding abaxial wing.

With its recognition, *B. salog* becomes the third species described from Camarines Sur, in the Province of Camarines Sur, together with *B. caramoanensis* and *B. madulidii*. This further emphasizes Camarines Sur as an important local centre of diversity for sect. Baryandra and highlights the need for strengthened conservation efforts, particularly in protected and limestone forest ecosystems where these narrowly endemic species occur.

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LITERATURE CITED

Bachman, S., Moat, J., Hill, A.W., de la Torre, J., Scott, B. 2011 Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool. In: Smith, V., Penev, L. (Eds.) e-Infrastructures for data publishing in biodiversity science. ZooKeys **150**: 117–126.

Balete, D.S., Heaney, L.R., Alviola, P.A., Rickart, E.A. 2013 Diversity and distribution of small mammals in the Bicol Volcanic Belt of Southern Luzon Island, Philippines. National Museum of the Philippines: Journal of Natural History **1**: 61–86.

Bucay, M.A.C., Tandang, D.N., Chen, H.-W., Tsai, L.-W., Rubite, R.R., Chung, K.-F. 2025 Morphological and molecular analyses revealed two new species of *Begonia* sect. *Baryandra* in the Eastern Mindanao Biodiversity Corridor, Philippines. Phytotaxa **698(4)**: 245–256.

Cámara-Leret, R., Frodin, D.G., Adema, F., Anderson, C., Appelhans, M.S., Argent, G., Arias Guerrero, S., Ashton, P., Baker, W.J., Barfod, A.S., Barrington, D., Borosova, R., Bramley, G.L.C., Briggs, M., Buerki, S., Cahen, D., Callmander, M.W., Cheek, M., Chen, C.-W., Conn, B.J., Coode, M.J.E., Darbyshire, I., Dawson, S., Dransfield, J., Drinkell, C., Duyfjes, B., Ebihara, A., Ezedin, Z., Fu, L.-F., Gideon, O., Girmansyah, D., Govaerts, R., Fortune-Hopkins, H., Hassemer, G., Hay, A., Heatubun, C.D., Hind, D.J.N., Hoch, P., Homot, P., Hovenkamp, P., Hughes, M., Jebb, M., Jennings, L., Jimbo, T., Kessler, M., Kiew, R., Knapp, S., Lamei, P., Lehnert, M., Lewis, G.P., Linder, H.P., Lindsay, S., Low, Y.W., Lucas, E., Mancera, J.P., Monro, A.K., Moore, A., Middleton, D.J., Nagamasu, H., Newman, M.F., Nic Lughadha, E., Melo, P.H.A., Ohlsen, D.J., Pannell, C.M., Parris, B., Pearce, L., Penneys, D.S., Perrie, L.R., Petoe, P., Poulsen, A.D., Prance, G.T., Quakenbush, J.P., Raes, N., Rodda, M., Rogers, Z.S., Schuiteman, A., Schwartsburd, P., Scotland, R.W., Simmons, M.P., Simpson, D.A., Stevens, P., Sundue, M., Testo, W., Trias-Blasi, A., Turner, I., Utteridge, T., Walsingham, L., Webber, B.L., Wei, R., Weiblen, G.D., Weigend, M., Weston, P., de Wilde, W., Wilkie, P., Wilmot-Dear, C.M., Wilson, H.P., Wood, J.R.I., Zhang, L.-B., van Welzen, P.C. 2020 New Guinea has the world's richest island flora. Nature **584(7822)**: 579–583.

Dela Cruz, C.J.P., Collantes, J.P.R., Ang, Y.P. 2022 *Begonia francisabuidii*, (section Baryandra, Begoniaceae) a new species endemic to Albay, Luzon Island, Philippines. Taiwania **67(2)**: 223–228.

Dela Cruz, C.J.P., Collantes, J.P.R., Bustamante, R.A.A., Ang, Y.P. 2024 Insights on *Begonia jagori* (Begoniaceae), a cryptic species of Albay Province, Luzon Island, Philippines. Phytotaxa **637(3)**: 291–295.

Diesmos, A.C., Watters, J., Huron, N., Davis, D., Alcala, A., Crombie, R., Afuang, L., Gee-Das, G., Sison, R., Sanguila, M., Penrod, M., Labonte, M., Davey, C., Austine Leon, E., Diesmos, M., Sy, E. 2015 Amphibians of the Philippines, Part I: Checklist of the species. Proc. Calif. Acad. Sci. **62(4)**: 457–539.

Heaney, L.R., Balete, D.S., Rickart, E.A. 2016 The Mammals of Luzon Island: Biogeography and Natural History of a Philippine Fauna. pp. 40–50. Johns Hopkins Univ. Press, Baltimore, MD, USA.

Hughes, M., Rubite, R. R., Blanc, P., Chung, K.-F., Peng, C.-I 2015 The Miocene to Pleistocene colonization of the Philippine archipelago by *Begonia* sect. *Baryandra* (Begoniaceae). Amer. J. Bot. **102(5)**: 1–12.

Hughes, M., Moonlight, P.W., Jara-Muñoz, A., Tebbitt, M.C., Wilson, H.P., Zhong, K., Mills, T., Sreenath, M., Pullan, M. 2015– Begonia Resource Centre. Available from: http://padme.rbge.org.uk/begonia/ (accessed 2 Aug. 2026).

IUCN Standards and Petitions Committee 2024 Guidelines for Using the IUCN Red List Categories and Criteria. Version 16. Prepared by the Standards and Petitions Committee. Available from: https://www.iucnredlist.org/documents/RedListGuidelines.pdf (accessed 2 Aug. 2026).

Leviton, A.E., Siler, C.D., Weinell, J.L., Brown, R.M. 2018 Synopsis of the snakes of the Philippines, a synthesis of data from biodiversity repositories, field studies, and the literature. Proc. Calif. Acad. Sci. **64(14)**: 399–568.

Pelser, P.B., Barcelona, J.F., Nickrent, D.L. (eds.) 2011 onwards. Co's Digital Flora of the Philippines. Available from: https://www.philippineplants.org/ (accessed 2 Aug. 2026).

Rubite, R.R., Hughes, M., Alejandro, G.J.D., Peng, C.-I 2013 Recircumscription of *Begonia* sect. *Baryandra* (Begoniaceae): evidence from molecular data. Bot. Stud. **54(1)**: 1–17.

Rubite, R.R., Peng, C.-I., Chung, K.F., Lin, C.W., Evangelista, L.T., Tandang, D.M., Callado, J.R.C., Hughes, M. 2018 Three new species of Begonia (section *Baryandra*, Begoniaceae) from Luzon Island, the Philippines. Phytotaxa **347(3)**: 201–212.

Rubite, R.R., Irabagon, M.L., Palacio, D.J.E., Ang, Y.P., Bustamante, R.A.A. 2020 *Begonia caramoanensis* (sect. *Baryandra*, Begoniaceae): a new species from Camarines Sur, Philippines. Phytotaxa **439(3)**: 287–294.

Rubite, R.R., Ubaldo, D.B.H., Salcedo, J.C., Chung, K.-F., Evangelista, L.T., Tandang, D.N., Hughes, M. 2022 *Begonia hemicardia* (sect. *Petermannia*, Begoniaceae), a resurrected heterotypic synonym and nomen nudum. Edinb. J. Bot. **79(1)**: 1–7.

Rubite, R.R., Chung, K.-F., Hughes, M. (eds.) 2024 *Begonia* of the Philippines: A photographic guide to selected Philippine species of Begonia. KBCC Press, Taipei, Taiwan.

Tebbitt, M.C. 2005 Begonias: Cultivation, Identification, and Natural History. Timber Press, Portland, OR, USA. 272 pp.

Welton, L.J., Travers, S.L., Siler, C.D., Brown, R.M. 2014 Integrative taxonomy and phylogeny-based species delimitation of Philippine water monitor lizards (*Varanus salvator* complex) with descriptions of two new cryptic species. Zootaxa **3881(3)**: 201–227.

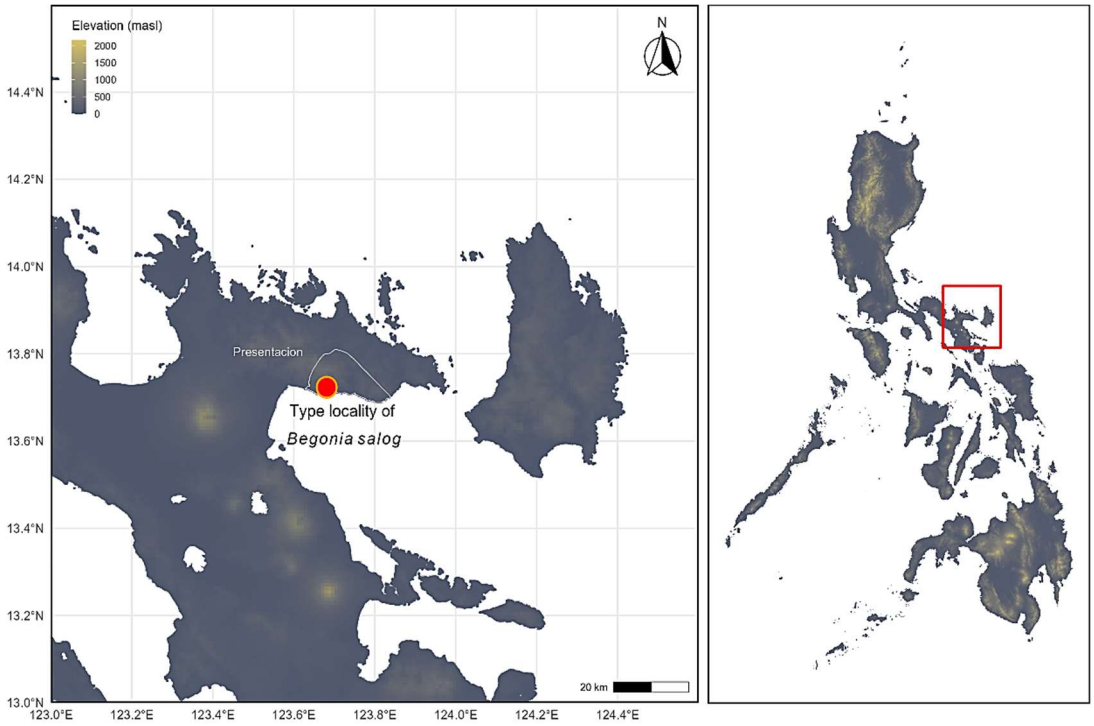

Fig S1. Map showing the type locality of ***Begonia salog***.