

Short Communication:
***Agalmyla inaequidentata* Hilliard & B.L. Burtt (Gesneriaceae-
Didymocarpoideae): A new genus record for Buru Island, Maluku,
Indonesia**

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Manuscript received: 9 May 2016. Revision accepted: 19 June 2017.

Abstract. Mustaqim WA. 2017. *Short Communication: Agalmyla inaequidentata Hilliard & B.L. Burtt (Gesneriaceae, Trichosporeae, Didymocarpaceae): A new genus record in Buru Island, Maluku, Indonesia. Biodiversitas 18: 1062-1065.* *Agalmyla inaequidentata* Hilliard & B.L. Burtt (Gesneriaceae, Didymocarpoideae) has been discovered for the first time on Buru Island, the first record of the genus on the island. The result expands the distribution of the genus in the Maluku, so that it is now present on the Halmahera, Buru and Seram, the three largest islands in the archipelago. This species differs from other members of *Agalmyla* by the presence of both globular glands and acute hairs on the ovary and style. The number of lateral veins of this species is now also extended from 4–6 to 4–9 on each side of the midrib.

Keywords: *Agalmyla inaequidentata*, Buru Island, Gesneriaceae, new genus record

INTRODUCTION

Agalmyla Bl. is a member of the Gesneriaceae family, belong to subfamily Didymocarpoideae (Weber et al. 2013). The genus consists of perhaps as many as 100 species. The geographical distribution of the genus is confined to the Malesian region (Hilliard and Burtt 2002a). In the last two decades, a number of new species of this genus have been discovered (Hilliard and Burtt 2002b, Middleton and Scott 2008).

Maluku, also known as the Moluccas, belongs to the Wallacea biogeographical region. Six species of *Agalmyla* have been reported to occur on these islands. All of them are endemic here, either on a single or several islands. Among those, the only one that is known to be present on more than one island is *Agalmyla elongata* (Bl.) B.L. Burtt. No genus record has been available from Buru, Aru Islands or Tanimbar (Hilliard and Burtt 2002a).

A specimen belonging to *Agalmyla* has been recently collected in the central part of the Buru Island. A comparison has been conducted based on the most comprehensive checklist of the genus in Hilliard and Burtt (2002). The characters of the specimen were found to match *Agalmyla inaequidentata* Hilliard & B.L. Burtt, formerly an endemic of Seram Island, east of Buru Island (Hilliard and Burtt 2002). This discovery becomes the first record of the genus for this island. The description of the species is prepared based on recently collected material and presented in this account.

MATERIALS AND METHODS

One collection of *Agalmyla inaequidentata* was made from the area of Lake Rana, in the central part of Buru Island, Waereman Village, Fena Leisela District, Buru Regency, Maluku Province, Indonesia (see Figure 1). The specimen has been preserved in the form of dried herbarium specimens and supplemented with spirit material for flowers. The specimens were later deposited in the herbarium of Bogor Botanical Garden, Bogor, West Java (KRB). The literature used in the identification were Hilliard and Burtt (2002a, 2002b) and Middleton and Scott (2008), and examination of digital images of specimens, mainly E (Edinburgh) and Leiden (L). A morphological description has been prepared based on material from the single collection on Buru Island.

RESULTS AND DISCUSSION

Agalmyla inaequidentata Hilliard & B.L. Burtt, Edinburgh J. Bot. 59(1): 82 (2002). – TYPE: Seram, Manusela National Park, north side of Gunung Binaia (now Binaiya), 2000 m, 30 viii 1987, *Argent* C.87106 (holo E photo seen, iso E photo seen).

Climbers to 5 m. Stem rooting on internodes, ca. 3.25 mm diam. in the leafy part, densely appressed pubescent when young, rather tardily glabrescent. Leaves opposite, strongly anisophyllous, reduced leaves caducous, ovate-

oblong, petiole-like part ca. 2.5 mm long, hairs as in developed leaves, blades of largest leaves, 7.75–14.45 × 3.65–5 cm, base cuneate or obtuse, decurrent to petiole, margin distantly serrate or biserrate, dentate, apex acute or slightly acuminate, (6-)7–8(-9) lateral veins on each side of the midrib, including the most basal pair, arcuate near the margin or entirely curved, lateral venation obscure above, distinct beneath, upper surfaces with scattered appressed hairs, more on the midribs, hairs more closely arranged in lower side, denser on the midrib and lateral nerves, petiole 2–5.2 cm long, densely appressed pubescent. Inflorescence axillary, 5-flowered, probably also more, peduncle 10.6–20.8 cm long, green, strongly flushed with red, especially toward apex, with subdense spreading hairs, bracts green, elliptic-oblong, ca. 8 × 2.2 mm. Pedicels dark red, 7–9.5 mm long, covered with upward pointing hairs, of unequal length. Calyx dark red, greenish toward apex, tube 2.8 mm long, lobes subequal, narrowly triangular, 7–7.5 × 2–3 mm, outside covered with densely appressed acute hairs, both sides with minute globular glands, inside at apical part also with short hairs, variable in length, apex of lobes with distinct gland, up to 0.6 mm across, with additional smaller glands on one or both sides, up to 2 each side. Corolla 35 mm long, red, arcuate, tube funnel-shaped, posticous lobes obovate, ca. 6–8 × 3.75 mm, measured on the longest side, sinus between upper lobes 3.5 mm, anticous lobes oblong, slightly sub obovate, 8 × 4 mm,

rounded at apex, outside of corolla densely pubescent to near the base, gland-tipped hairs mostly minute, larger ones only at apex of the dorsal side, otherwise found to be shorter than much abundant acute hairs, apex of lobes fringed with gland-tipped hairs, inside of lobes with minute acute hairs, at base of anticous filaments with patch of globose papillae. Stamens 4, shorter than posticous corolla lobes, filament glabrous, anticous anthers inserted at ca. 1.75 cm from corolla base, filaments 1.4 cm long, anthers 2 × 1.5 mm, posticous filaments inserted at 1.875 cm from the corolla base, filaments 1.3 cm long, anthers 1.75 × 1.75 mm. Staminode ca. 0.6 mm long. Disc cupular, 1 mm long, glabrous. Gynoecium 28.5 mm long, stipe glabrous, ca. 3 mm long, ovary ca. 16 mm long, style ca. 7 mm long, both with globular glands and acute hairs, hairs spreading, slightly ascending, stigmatic lobes ca. 1.6 × 1.5 mm, outside covered with acute hairs, minute globular glands, and with some gland-tipped hairs above, inside papillose. Fruit not seen. – Figure 2.

Distribution. Endemic to Maluku Islands: Buru and Seram.

Habitat and ecology. In Buru, only collected once growing on a small treelet, near a stream in the foothills, in a rather semi-shaded to open site, at an elevation of about 806 m. Fl. March. Based on Hilliard and Burtt (2002a), this species can be found at an elevation of 600 to 2400 m.

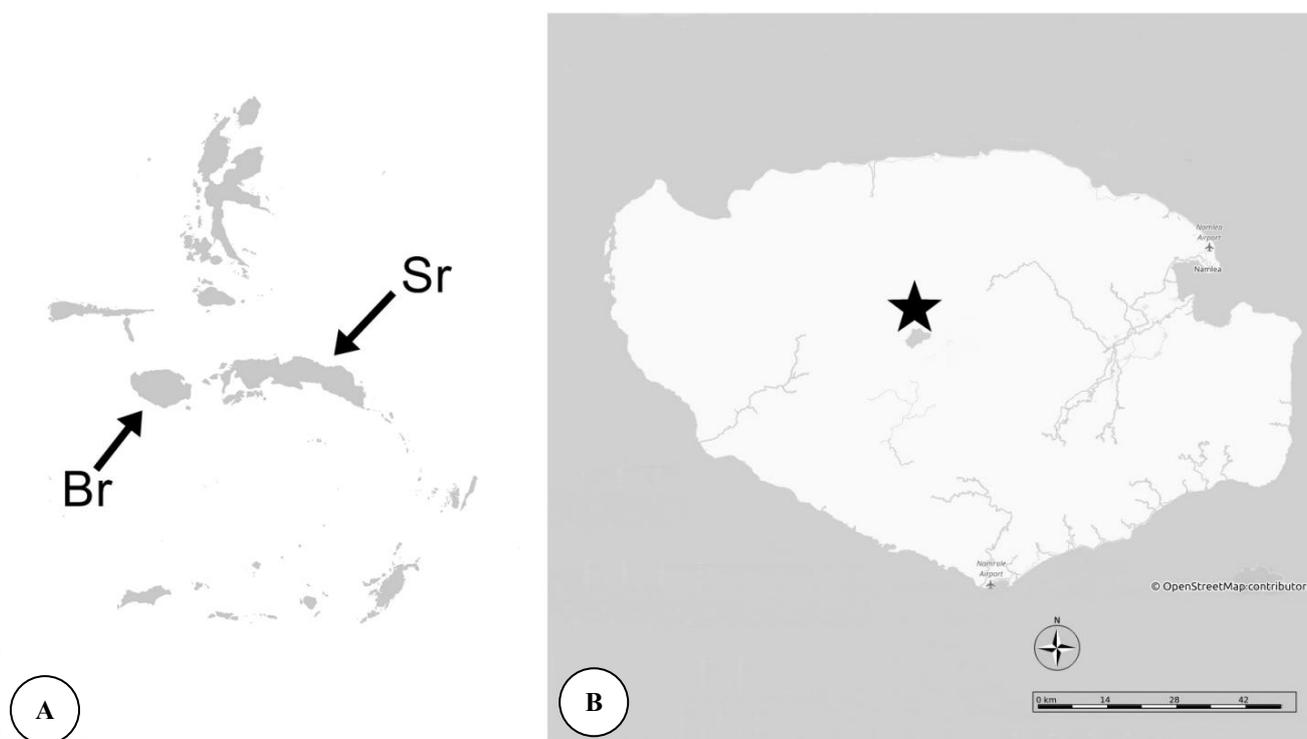


Figure 1. A. Map showing Buru (Br) and Seram (Sr) Island within the Maluku Islands, the native range of *Agalmyla inaequidentata*. B. Collecting locality of *Agalmyla inaequidentata* on Buru Island.



Figure 2. Inflorescence from a living plant of *Agalmyla inaequidentata* (Photo: W.A. Mustaqim)

Notes. This species can be recognized by a combination of the absence of a ring or tuft of hairs at the base of the corolla tube inside, stamens not surpassing the corolla, glabrous filaments, peduncle longer than 8 cm, and a calyx tube that is distinct and shorter than the lobes. A unique character of the species is the presence of both globular glands and acute hairs on the ovary and style (Hilliard and Burtt 2002a). The current specimen from Buru slightly differs in the number of the lateral veins on each side of the midrib, that is 7–8 and rarely 6 or up to 9, compared to 4–6 and also the longer calyx tube that is up to 2.8 mm long, compared to 2.3 mm long as the longest record. The gland-tipped hairs on the corolla are also less abundant than in the type materials. Ovary were found to be 1.6 cm long, much shorter than the previously known (2.2–2.7cm) and is probably caused by the fact that flower the the genus are protandrous (Hilliard & Burtt 2002a).

Since the number of lateral veins in this species is now up to 9, the key are no longer worked, therefore the identification key of Hilliard and Burtt (2002a, page 71, couplet 12) has been modified. The modification is as follows:

- 12a. Ovary glabrous. Lateral veins 7–8 each side of the midrib (Maluku Islands (Obi)) 26. *A. obiana*
 12b. Ovary either clad in minute globular glands, sometimes with glandular hairs as well. Lateral veins usually 3–6 or rarely to 9 each side of the midrib 13

Besides the current record, another species with larger, pinker flowers has been seen by the author on Buru Island, but no collection has been made due to collecting conditions. It was seen to grow epiphytically on a tree along the road, probably 7 km north from the present collection. In the future, more field exploration almost certainly will reveal more records or even a new species.

Specimen examined: **Buru.** Buru Regency, Fena Leisela District, Waereman, northwest side of Lake Rana, 806 m, (S 3° 22' 56.5" E 126° 32' 52.2") *WA Mustaqim 176* (KRB).

Additional specimens seen: **Seram.** Manusela National Park, north side of Gunung Binaia (Binaiya), 30 viii 1987, *Argent C.87106* (holo E (image E00062887! (<http://data.rbge.org.uk/herb/E00062887>))); iso E (image E00062888! (<http://data.rbge.org.uk/herb/E00062888>)), L (image L.3794889! (<http://data.biodiversitydata.nl/naturalis/specimen/L.3794889>))); Mittel-Seran, G. Piraia (Binaija), Baumfarmregion, S 3° 23' E 129° 26', *Stresemman 338* (L (image with barcode L.2825401! (<http://data.biodiversitydata.nl/naturalis/specimen/L.2825401>))); Kaniki, 600 m, 24 xi 1917, *Kornassi 536* (L (image L.2825399! (<http://data.biodiversitydata.nl/naturalis/specimen/L.2825399>))); U (image U.1336391! (<http://data.biodiversitydata.nl/naturalis/specimen/U.1336391>))).

ACKNOWLEDGEMENTS

The author thanks Maj. Gen. Agus Sutomo as Chief Commander of the Ekspedisi NKRI Koridor Maluku & Maluku Utara 2014 and all his staffs, especially to Capt. Dedy Dwi Cahyadi, who supported plant collecting in remote areas of Buru Island, Maluku, Indonesia. To all members of Team Flora Fauna subkorwil 03/Namlea who give invaluable helps in the field. Also to Inggit Puji Astuti for her encouragement and support and also invaluable help. The author also deeply indebted to anonymous reviewers who give invaluable suggestion to the manuscript.

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