



Syzygium snowianum (Myrtaceae) a new canopy species from the Southern Escarpment of Papua New Guinea

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Abstract

Syzygium snowianum is described from previously inaccessible environments in southern Papua New Guinea. The new species is closest to *S. ubogoense* but is easily distinguished by its taller stature and yellow flowers.

Key words: biodiversity surveys, doline karst, limestone, PNG LNG Pipeline

Introduction

The PNG LNG (Liquified Natural Gas) Pipeline commenced production in 2014, transforming the island state of Papua New Guinea (PNG) into one of the largest hydrocarbon exporters in the Asia-Pacific region. Just four years earlier, the logistically challenging project had been in planning evaluation, awaiting results from a comprehensive biodiversity survey of then-unknown environments. Traversing the largest limestone formations in PNG, the Pipeline provided first entry to karst topographies historically impervious to land exploration. The Juha limestone in particular, yielded numerous biological records including four botanical novelties published thus far. A proposed LNG third train extending to the west was surveyed in 2013. A new set of scientific findings will be published when environmental permitting is completed for that initiative.

Traditionally regarded as Papuasias largest assemblage of woody plants, in recent years *Syzygium* Gaertner (1788: 166) has been progressively expanded by addition of satellite genera through synonymy (Craven 2001, Biffin *et al.* 2006, Craven *et al.* 2006, Craven & Biffin 2010). Although the size of the conspectus is unknown, an estimate of 200+ species for New Guinea (Craven pers. comm., in Takeuchi 2007) has surely increased further.

At the Juha localities (Juha North, Juha South), *Syzygium* is well represented across a variety of limestone and clay substrates. A showy canopy species discovered on doline karst is here described as a new congener allied to *S. ubogoense* Takeuchi (2002: 268).

Methods

Taxonomic descriptions are based on the attributes from dried specimens. Characters determined in situ from living plants are reported separately as ‘field characters’.

Bottled flowers in leak-proof vials are attached to the LAE duplicate for *Takeuchi, Gambia & Jisaka 23684*. Silica-dried leaf samples prepared from the type gathering were unfortunately lost during field shipments to the PNG National Herbarium.

Results

Syzygium snowianum W.N.Takeuchi, *sp. nov.* **Type:**—PAPUA NEW GUINEA. Western Province: Strickland drainage, Juha South, survey track 1 to sinkhole area, mossy premontane forest, 5°54.184’S, 142°26.260’E, 700 m, 1 April 2008, *Takeuchi, Gambia & Jisaka 23684* (holotype A!; isotypes CANB!, L!, LAE!). (Figures 1–2).

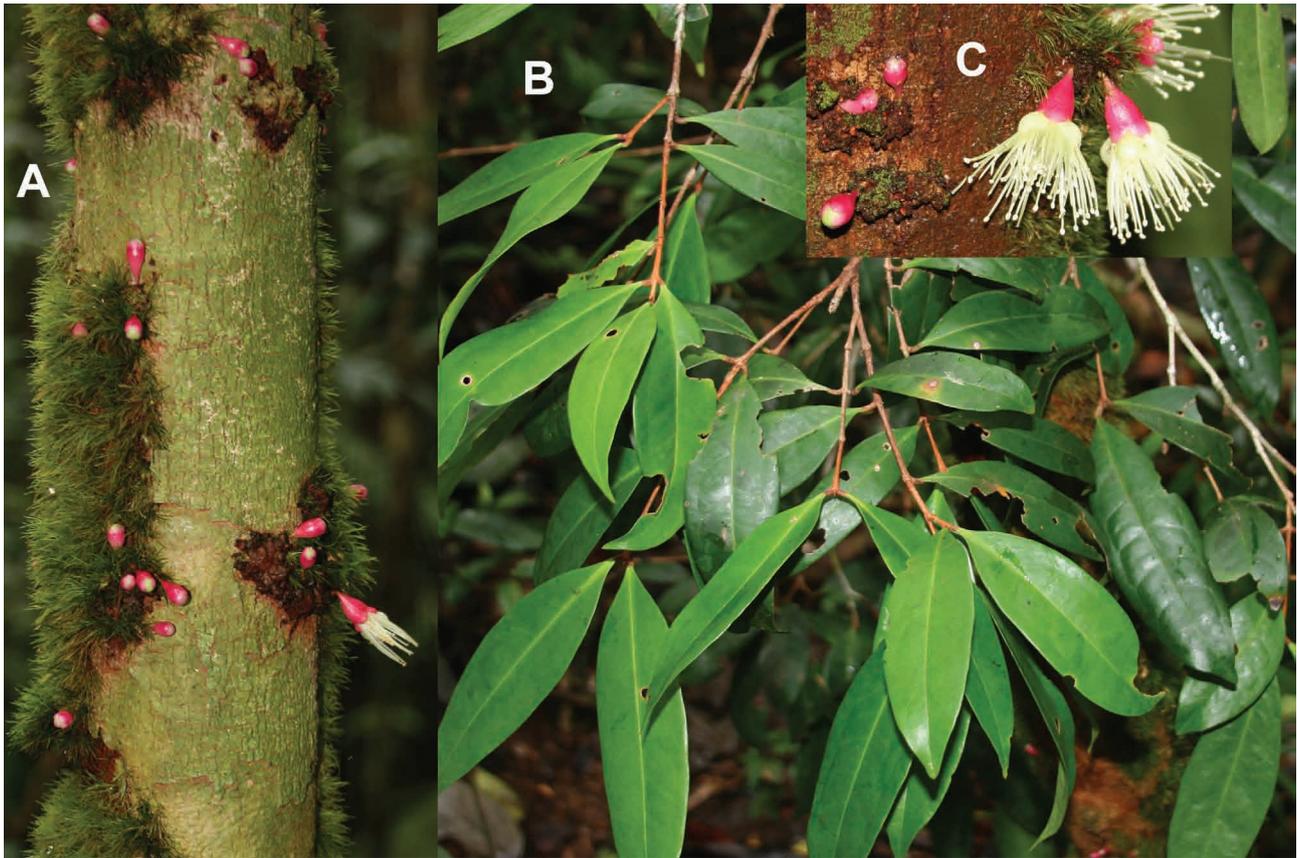


FIGURE 4. *Syzygium ubogoense*. **A**, cauline flowers on a 4 m pole shrub; **B**, leaves, adaxial surfaces; **C**, anthetic flowers. A–C unvouchered, Strickland drainage, April 2008.

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