



## Modern sequels to the Kaiserin-Augusta-Fluss itinerary of Carl Ledermann: floristic discoveries from the upper Sepik of Papua New Guinea

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### Abstract

*Inocarpus ademanus* (Fabaceae) is described from lowland environments in the Ambunti District of Papua New Guinea. Ten noteworthy records are also presented from the same area for *Marsdenia ambuntiensis*, *M. lorea*, *Phyllanthera nymanii* (Apocynaceae), *Tetracera lanuginosa* (Dilleniaceae), *Archidendron calliandrum*, *A. kalkmanii*, *Mucuna lamii* (Fabaceae), *Cryptocarya resinosa* (Lauraceae), *Ficus morobensis* (Moraceae), and *Chlamydogramme hollrungii* (Tectariaceae).

**Key words:** *Archidendron*, *Chlamydogramme*, *Cryptocarya*, *Ficus*, *Inocarpus*, *Marsdenia*, *Mucuna*, Papua New Guinea, *Phyllanthera*, *Tetracera*

### Introduction

The Kaiserin-Augusta-Fluss Expedition of 1912–13 has long passed into scientific history but is today still regarded as the most consequential operation ever conducted in Papuasia. During that iconic undertaking, botanist Carl Ludwig Ledermann travelled extensively through the Sepik basin as part of a multidisciplinary team, eventually collecting a total of 6,639 angiosperm numbers over a period of 18–19 months (Steenis-Kruseman 1950). Few duplicates remain of these era-defining gatherings, for the principal sets were destroyed in the 1943 fire at the Berlin Herbarium, effectively erasing the primary basis for the identification of numerous plant species. Veldkamp *et al.* (1988) have provided an informative discussion of the relevant issues surrounding the loss of such a critical botanical corpus.

In 1989, the author and his Momase tree climbers (D. Ama, A. Gambia, T. Jisaka, A. Towati) embarked on a long-term plan for surveying the Augustafuss localities, most of which had never been revisited since the German Territorial Period. Expeditions into the upper Sepik (i.e., the drainage interval upriver from Ambunti) were conducted as a series of linked operations in 1989, 1990, 1994, 1995, 2001, 2004, 2005, 2007, and 2010. At least 14 of the classical localities have been surveyed thus far, including Aprilfluss, Bani-Schlucht, Friedafluss, Hunsteinfluss, Hunsteinspitze, Kamelsrücken-Etappenberg (lower slopes), Lagerberg, Leonhard-Schultze-Fluss, Maifluss, Malu, Peilungsberg, Pyramide, Seerosensee, and sites near Schichtberg (cf. site tabulation in Veldkamp *et al.* 1988). An attempt to reach the enigmatic Lordberg (Ledermann's furthest penetration of the foothill zone) was unsuccessful due to severe storms. However, the 2010 montane expeditions included helicopter-supported entry into habitats which surpassed the historical schedule, and would have been logistically impossible for the German team.

Preliminary study of the cumulative backlog indicates that several scores of floristic discoveries have resulted from the serial program. In upcoming papers the most notable findings will be presented in geographic sequence, moving from Ambunti District to progressively inland localities in retracement of the Augustafuss agenda. The following narrative begins this process with the Waskuk Hills near Hauptlager Malu (the Kaiserin-Augusta-Fluss basecamp, now the modern township of Ambunti; Figs. 1–2).