

## LAPORAN KEGIATAN

### Kunjungan Singkat ke Hutan Bakau di Pulau Mendanau dan Belitung

#### *Short Visit to the Mangroves in Mendanau and Belitung Islands*



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# Kunjungan Singkat ke Hutan Bakau di Pulau Mendanau dan Belitung<sup>\*)</sup>

## *The Report of a Short Visit to the Mangroves in Mendanau and Belitung Islands*

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### Abstrak

Kunjungan singkat ini bertujuan untuk melacak keberadaan *Ceriops australis* dari suku Rhizophoraceae di Pulau Mendanau dan Belitung. Satu specimen yang berasal dari pulau ini yang diidentifikasi sebagai *Ceriops tagal* (Bilinton Island: *Teijsmann s. n.* [1875] (BO)), diidentifikasi ulang oleh C-R Sheue sebagai *Ceriops australis* (Sheue *et al.* 2009). Studi ini diperlukan untuk mengetahui fitogeografi *Ceriops australis* yang umum ditemukan di bagian Timur Indonesia, dan bermanfaat pada upaya konservasi jenis ini.

Dari pengamatan di beberapa bagian Pulau Mendanau dan Pulau Belitung, kecuali Belitung bagian Selatan, tidak dijumpai *Ceriops australis*. Satu jenis *Bruguiera cylindrica* (Rhizophoraceae) dijumpai di Pulau Mendanau sehingga jumlah jenis bakau di pulau tersebut menjad 19 jenis. Populasi jenis ini jarang dan tersebar.

Hutan bakau di Pulau Mendanau masih terjaga baik dengan keragaman substrat termasuk lumpur, pasir, batu, dan batu karang. Pulau ini menjadi lokasi studi yang baik untuk mengamati asosiasi antara keragaman bakau dan lingkungannya. Masyarakat di Pulau Mendanau seyogyanya bangga memiliki hutan bakau yang masih terjaga baik.

Sedikit disayangkan dijumpai sampah di hutan bakau di sekitar beberapa kampung nelayan. Pendidikan dan pengelolaan sampah yang baik diharapkan akan menjaga fungsi ekosistem bakau secara optimal.

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**Date:**

The visit to Mendanau Island was conducted on 6 – 7 February 2013, dan to Belitung Island on 8 February 2013.

**Brief report of field survey:**

The aim of this trip was to explore whether *Ceriops australis* (Rhizophoraceae) occurs in the Belitung Island region, including Mendanau Island. A specimen originally identified as *Ceriops tagal* (Bilinton Island: *Teijsmann s. n.* [1875] (BO)) was collected from Belitung Island in 1875 by the famous botanist Johannes Elias Teijsmann, the first director of Bogor Botanic Garden. When examined by C-R Sheue in the Bogor Herbarium it was determined to be *Ceriops australis* (Sheue et al 2009). However, this is an old specimen found 138 years ago. If *Ceriops australis* still occurs in the Belitung Island region, it will be the most western population of *C. australis*, dramatically extending its known range. So far, we do not really know the current phytogeographical range of *C. australis*. A better understanding of current distribution range of *C. australis* is critical and essential information for mangrove conservation.

We spent two days exploring mangrove forests in Mendanau Island. The first afternoon we explored the eastern part of Mendanau. Although hampered by heavy rain, we visited two sites (see map as below). *Ceriops tagal* was found in site 1, but no *C. australis* was found in either site. On the second day, we visited mangroves in both northern (site 3) and the southern (site 4) Mendanau. *Ceriops tagal* was found in both sites, but no *C. australis* was found.

Contrary to our prior expectation, *C. australis* was not found on Mendanau Island on this field trip. On a subsequent day we explored several areas on Belitung Island, and again found no *C. australis*, although *C.tagal* was present. Unfortunately, we were not able to survey the southern part of Belitung Island. A visit to this area would provide more comprehensive field data to answer whether *C. australis* still occurs in Belitung Island region in accordance with the 1875 collection.

A new mangrove record was found in northern part of Mendanau Island: *Bruguiera cylindrica* (Rhizophoraceae) on this trip. Thus, the local mangrove flora on Mendanau Island has 19 species. The population of this taxon is sparse and scattered.

Mendanau Island still maintains precious mangroves on diverse sediments including mud, sand, rock and coral rock. It may provide an ideal study site to better understand the association between mangrove floral diversity and the environment. However, trash-dumping in mangroves is common near fishing villages. Education and a better system for treating trash would be helpful to maintain the full functioning of the local mangrove ecosystem.

We deeply appreciate the kind support and hospitality of the Head of Selat Nasik District

and local officers of Mindanao Island. It is a great honor and pleasure to visit such a beautiful island with its rich natural values and stunning mangroves. Mangroves provide an important natural transition between the sea and the land. With these precious and diverse mangroves on Mindanao Island, a natural coastal defense is formed for local residents and property. These mangroves are a valuable resource enhancing the local environment for benefit of the people. Their rich biodiversity is acknowledged by visitors from all parts of the world. The people of Mindanao Island can take great pride in this mangrove resource.

Figures:



Figure 1. The four mangrove sites we visited in this field trip.





Figure 2. Selected photos of mangrove field trip. 1. Our team members. 2. Boardwalk in site 1. 3-4. Mangrove in site 1, seedlings of *C. tagal* are abundant. 5. Close up of *C. tagal* and its flowers (insert). 6. The lower part of many of hypocotyls of *C. tagal* are withered in site 1. 7. A pitcher plant growing very close to mangrove forest. 8. A flower of *Rhizophora apiculata*.





Figure 3. A new mangrove record and beautiful mangroves in Mendanau Island. 1-2. *Bruguiera cylindrica*, a new mangrove record in Mendanau Island found on this trip. 3. Canopy view of mangroves showing emerald green mangrove forest comprised of different taxa. 4. Mangroves provide a critical important habitat to various marine creatures. 5. A sun-bathing lizard in a mangrove forest.