

## SOME RECORDS OF AUSTRALIAN CALYMPERACEAE (MUSCI)

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### ABSTRACT

3 *Syrrhopodon*, 1 *Mitthyridium* and 5 *Calymperes* species reported below from the Australian collection of S. & T. Pócs.

### INTRODUCTION

The moss species of Calymperaceae family enumerated here were collected in Queensland and in the Northern Territory by T. Pócs and S. Pócs, accompanied and guided by Australian colleagues, during the period of 1999 and 2001. The expedition was conducted within the framework of the Flora of Australia project entitled „Taxonomic Revision and Phytogeographic Evaluation of the genus *Frullania* Raddi (Hepaticae) in Australia and the Adjacent islands” and was founded mainly by the Australian Biological Resources Study (ABRS). One set of voucher specimens is deposited in the Herbarium of Eszterházy College (EGR), and another set goes to the Australian herbaria concerned (Indooroopilly: BRI; Palmerston: DNA; Canberra: CANB). Some paper dealing with Australian Calymperaceae (Reese & Stone 1987, Reese et al. 1991, Reese & 1995, Streiman & 1989) from which one presented the synopsis of the three principal genera and the keys to species. We used this later paper (Reese et al. 1995) for the recognition of collected specimens.

### ENUMERATION OF THE SPECIES

The collecting localities are indicated with numbers [1] after the species names

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### ***Syrrhopodon* Schwaegr.**

*S. armatus* Mitt. [1,4]

It was collected at two localities where it grows in gallery forest on termite mound and corticolous on Palm base. Widespread in tropical part and coastal area of Australia, mostly in low elevation (Reese et al. 1995).

*S. ciliatus* (Hook.)Schwaegr. [5]

It is rupicolous in half open gallery forest. It is a very rare species in Australia where it grows in monsoon vine forests in Northern Territory and Queensland (see Reese et al 1995).

*S. parasiticus* (Brid.) Besch. [15]

It is epiphyllous in mesic riparian forest near the sea level. In Queensland from Mossman down the east coast into northern New South Wales (Reese et al. 1995).

### ***Mitthyridium* Robins.**

*M. fasciculatum* (Hook.& Grev.) H. Robins. [17]

This species was collected in very wet montane rainforest on the summit ridge of Mt. Pershouse where corticolous. Paleotropic species often common in Northern Queensland in Australia (see also Reese et al. 1995).

### ***Calymperes* Sw.**

*C. afzelii* Sw. [1]

This pantropical species was collected in gallery forest dominated by *Pandanus aquatica* and by *Melaleuca viridiflora* below the falls at 20-90 m altitude. Corticolous on tree base.

*C. erosum* C. Muell. [1, 2, 4, 11]

The species was collected in lowland rainforests, in monsoon forest with many palms and in gallery forests in Northern Territory. There is growing on Palm bark, on tree base, on roots and on earth covered rocks. Pantropical species.

*C. graeffeanum* C. Muell. [13]

It grows on decaying wood in tall, closed riverine monsoon forest with 5-8 m tall *Liwinstonia benthamii* undergrowth. Widespread in the paleotropics, from Madagascar far into Oceania (Reese et al. 1995).

*C. motleyi* Mitt. in Dozy & Molk. [1, 3, 7, 8, 10, 11, 12]

Six specimens were collected from this species which shows that it is not rare in the Northern Territory and Queensland in Australia. Corticolous and rupicolous species which occurs in monsoon vine forests, in mangrove vegetation, in riverine forests and in parks on planted trees. Grows mainly in low coastal and near-coastal region from the sea level to 130 m altitude (see also Reese et al. 1995).

*C. tenerum* C. Muell. [6, 7, 9, 12, 14, 16]

This pantropical species not rare in tropical Australia, grows on trees primarily in low coastal vegetation. In the Pócs's collection were found six specimens from riverine monsoon forest, monsoon vine forest and from planted forest and planted park trees.

## COLLECTING LOCALITIES

### Northern Territory

1. Litchfield National Park. Wangi Falls at the W edge of the national park. 13°09.9'S, 130°41.1'E. At 20-90 m alt. Coll.: S. & T. Pócs No 01043/D,E,M,O,Q.

2. Litchfield National Park. „Patherick's Rain Forest” at the W edge of national park. 13°06.7'S, 130°40'E. At 35-80 m alt. Coll.: S. & T. Pócs No 01041/J,K.

3. Litchfield National Park. „Curtain Cascades” near the W edge of national park. 13°07.3S, 130°40.1' E. At 50 m alt. Coll.: S. & T. Pócs No 01042/D.

4. Litchfield National Park. Greenant Creek. 13°12'S, 130°42'E. At 65-75 m alt. Coll.: S. & T. Pócs No 01044/C,J.

5. Litchfield National Park. Tjaetaba Falls at the head of Greenant Creek. 13°11.5'S, 130°42.2'E. At 120 m alt. Coll.: S. & T. Pócs No 01045/A.

6. Coastal Plain. Howard Springs Nature Park, 25 km ESE of Darwin. 12°27.8'S, 131°04'E. At 10-20 m alt. Coll.: S. & T. Pócs No 01034/B, 01050/D.

7. Coastal Plain. Berry Springs Nature Park. 12°42.1'S, 131°00'E. At 30-35 m alt. Coll.: S. & T. Pócs No 01048/A, AA, AB.

8.. Charles Darwin National Park at the SE side of Darwin town, in Frances Bay of Port Darwin. 12°26.9'S, 130°52.6'E. At sea level. Coll.: S. & T. Pócs No 01051/B.

9. Coastal Plain. Holmes Jungle Nature Park at the NE side of Darwin township area, near to the Airport. 12°24.3'S, 130°55.7'E. At 40 m alt. Coll.: S. & T. Pócs No 01052/C.

10. 4 km S of Daly River junction along the „Scenic Road” (old highway) between Adelaide River and Hayes Creek. 13°32.6'S, 131°13.35'E. At 112 m alt. Coll.: S. & T. Pócs No 01055/B.

11. Robin Falls 1 km W of the „Scenic Road” (old highway) between Adelaide River and Hayes Creek. 13°21.4'S, 131°07.8'E. At 90-130 m alt. Coll.: S. & T. Pócs No 01057/B, C.

12. Douglas Daly Tourist Park along Douglas River. 13°47.9'S, 131°20.1'E. At 110-120 m. alt. Coll.: S. & T. Pócs No 01056/C, D.

13. Kakadu National Park. Mangarre Monsoon Forest along East Alligator River. 12°23.5'S, 132°56.3'E. At 45 m alt. Coll.: S. & T. Pócs No 01059/B.

14. Darwin, Botanical Garden. 12°26'S, 130°49'E. At 5-10 m alt. Coll.: S. & T. Pócs No 01064/C.

### **Northern Queensland**

15. Broadwater State Forest Park 27 km NW of Ingham, at Canoe Creek. 18°27'S, 146°00'E. At 30 m alt. T. Pócs & H. Streimann No 99126/V.

16. Coastal Plain. Cardwell, Caravan Camping at coast. 18°16.4S, 146°01.5'E. Near sea level. Coll.: S. & T. Pócs, accompanied by A. Cairns, E.A. Brown and Ch. Cargill. No 01097/E.

17. Cardwell Range. Kirrama State Forest, on the summit ridge of Mt. Pershouse. 18°13.4'S, 145°48.3'E. At 800 m alt. Coll.: S. & T. Pócs, accompanied by A. Cairns, E.A. Brown and Ch. Cargill. No 01097/C, 01102/J.

#### REFERENCES

- Reese, W. D. & I. G. Stone (1987): New records of Australian Calymperaceae and keys to Australian species of *Calymperes*, *Mitthyridium*, and *Syrrhopodon*. *Journal of Bryology* 14:487–493.
- Reese, W. D., H. Streimann & J. Russell-Smith (1991): New records of Australian Calymperaceae (Musci). *The Bryologist* 94:88–89.
- Reese, W. D. & I. G. Stone (1995): The Calymperaceae of Australia. *J. Hattori Bot. Lab.* 78:1–40.
- Streimann, H. & J. Curnow (1989): Catalogue of mosses of Australia and its external territories. Australian Fauna and Flora Series 10. Canberra.