# NEW OVERLAP RECORDS IN THE ELODINA ANGULIPENNIS (P.H. LUCAS) GROUP (LEPIDOPTERA: PIERIDAE)

J.T.St.L. MOSS<sup>1</sup>, M. DE BAAR<sup>2</sup> and D.L. HANCOCK<sup>3</sup>

<sup>1</sup>30 Melaleuca Drive, Capalaba, Qld 4157 Queensland Forest Service, Dept of Primary Industries, Meiers Rd, Indooroopilly, Qld 4068 <sup>3</sup>5 Bogong Street, Riverhills, Qld 4074

#### Abstract

New distribution records are provided for *Elodina angulipennis* (P.H. Lucas) and *E. queenslandica kuranda* De Baar & Hancock from the Miriam Vale, Gayndah and Maryborough districts of Queensland. Previous records from Deepwater Creek and Carlisle I. are corrected.

## Introduction

Recent collecting in the SE Queensland coastal region from Miriam Vale to Maryborough has shown an interesting overlap in the distributions of the sibling species *Elodina angulipennis* (P.H. Lucas) and *E. queenslandica kuranda* De Baar & Hancock (Fig. 1). Both species were collected in or near vine forest, *E. q. kuranda* almost exclusively.

# Material examined

E. angulipennis: 30°0°, Bulburin St. For., 31.xii.1993, J.T. Moss; 10°, Binjour Plateau, via Gayndah, 29.xii.1993, J.T. Moss; 10°, Colosseum Ck St. For., via Miriam Vale, 1.i.1994, J.T. Moss.

E. q. kuranda: 10°, 299, Deepwater Nat. Park, via Bundaberg, 19-24.ix.1992, J.T. Moss; 19, Bulburin St. For., 31.xii.1993, J.T. Moss; 20°0°, 399, Koolkooroom Ck, via Ubobo, 30.xii.1993, J.T. Moss; 30°0°, Colosseum Ck St. For., via Miriam Vale, 1.i.1994, J.T. Moss; 50°0°, 599, Mary R. Heads, via Maryborough, 12.iii.1994, M. De Baar & B.R. Meredith; 299, 2?, Carlisle I., via Mackay, xii.1986, J.T. Moss & D.M. Reeves.

# Observations

The presence of *E. q. kuranda* had long been suspected at Mary River Heads, 180 km SSE of the former known limit of the species' distribution (De Baar and Hancock 1993), as a single worn female previously collected there appeared closer to this species than to *E. angulipennis*, known from Saltwater Creek, 15 km to the west. The above records thus confirm the presence of *E. q. kuranda* as far south as the Mary River.

*E. angulipennis* was known previously from Bulburin State Forest near Miriam Vale (De Baar and Hancock 1993) and both it and *E. q. kuranda* are now known to be present. Vegetation in this area is predominantly complex notophyll vine forest (CNVF), with some hoop pine plantings. Both species were collected also in the Colosseum Creek State Forest, NE of Bulburin. The vegetation here is similar but the vine forest is more open, the results of timber extraction more evident.

Near Ubobo (N of Bulburin) is the Koolkooroom Creek araucarian microphyll vine forest (AMVF), with its emergent hoop pines. Here only *E. q. kuranda* was collected. Conversely, dry vine scrub on the Binjour Plateau, 25 km NW of Gayndah, yielded only *E. angulipennis*.



Fig. 1. Distribution of *Elodina angulipennis* and *E. queenslandica kuranda* between Eurimbula and Maryborough, Qld.

# Discussion

Moss et al. (1993) recorded E. q. kuranda from Eurimbula National Park and E. angulipennis from dry littoral rainforest (= mixed notophyll vine forest) at Deepwater National Park, 45 km ESE of Miriam Vale. Subsequent study has shown the latter specimens to belong to E. q. kuranda. Reeves (1988) recorded E. angulipennis from 'dry rainforest gullies' on Carlisle Island, 40 km NNE of Mackay. Further study has shown the species present there to be E. q. kuranda. Available records therefore suggest that E. angulipennis is absent from coastal localities in Queensland, at least north of the Mary River, its place taken by E. q. kuranda. The two species occur sympatrically at least in the Many Peaks Ranges near Miriam Vale. Further inland only E. angulipennis has been recorded and it appears likely that habitat requirements between the two species may differ, with E. q. kuranda preferring moister habitats.

# Acknowledgment

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#### References

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