

**Life history notes on the Pale Ciliate-blue, *Anthene lycaenoides* (C. Felder, 1860) Lepidoptera: Lycaenidae - Wesley Jenkinson**



The Pale Ciliate-blue has been recorded from the top end of Western Australia, Northern Territory and sporadically from north-eastern Queensland southwards to Cannonvale (near Airlie Beach) central coastal Queensland (in Braby, 2000). It is chiefly known from coastal, sub-coastal regions and sections of the Great Dividing Range. In recent years it has been recorded from several locations in south-eastern Queensland, including two locations near Pomona and Cooroy during January 2015 (R. Mayo, 2015).

Further specimens were raised on *Senna gaudichaudii* at West End, Brisbane (A. Pasieczny, 2015). Both Ross Kendall and John Moss have had them in their gardens at Indooroopilly (2015) and Capalaba (2016) respectively and also feeding on *S. gaudichaudii*. Also recently, I have sighted four females in Beaudesert, two on 24/12/2015 and two on the 7/01/2017. In 2015 I observed one of the females ovipositing on a cultivated *Albizia lebeck* in my garden, however it is unknown if the larvae survived on this tree. At this stage I have not observed any males. Mayo also reported females only. In northern-eastern Queensland the species is usually less common than the Dark Ciliate-blue (*A. seltuttus*).

I have collected the species in monsoon forest near Weipa and savannah woodland in northern Queensland. The species has been reported as common in [North Qld] suburban gardens (Valentine 1979, 1988, in Braby 2000).

The adults are rapid fliers and can be observed flying around the larval host plants.

Wingspans for the pictured males are 25mm and 24mm for the females.



*Anthene lycaenoides* (Pale Ciliate-blue)

Images left to right: male, female, male underside, female underside



A range of host plants in the families Caesalpiniaceae, Euphorbiaceae, Fabaceae, Flagellariaceae, Mimosaceae, Verbenaceae and Sapindaceae are listed by various authors in Braby 2000.



The larvae feed on the flower buds and flowers of the host plants.

During January 2017, a female was observed ovipositing on flower buds on a Golden Rain Tree (*Cassia fistula*) in my garden. She typically flew rapidly throughout the host tree branches and settled in sheltered

positions. She then walked around for a short period and curled her abdomen around the base of flower buds laying eggs singly. The wings were closed during ovipositing. After several eggs were laid the female was captured and kept in captivity with some flower sections of the host plant. She laid 19 eggs the following day and she was released the next day. Ovipositing was observed during early afternoon in hot sunny conditions. These eggs were raised in captivity.



The tiny eggs were white, mandarin shaped with deep round shaped pits, approximately 0.3mm high x 0.5mm wide.

Freshly laid egg of *A. lycaenoides*



1<sup>st</sup> instar larva



2<sup>nd</sup> instar larva



3<sup>rd</sup> instar larva



4<sup>th</sup> instar larva



5<sup>th</sup> instar larva



5<sup>th</sup> instar larva



5<sup>th</sup> instar larva



Pre-pupa



Larvae raised in captivity consumed the top half of eggshell or most of shell after emergence. The camouflaged larvae rested and fed on fresh flower buds of the host plant. The main feeding period appeared to be from dawn throughout the day and dusk with limited feeding during the night. The larvae produced silk threads which were spun around the base of the flower buds as a 'safety mechanism' to stop them falling to the ground. Various colour forms (as pictured) of the final instars occurred with the same host plant and conditions.

Larvae completed five instars and attained a length of 14mm. In natural conditions the larvae are often attended by ants (Eastwood and Fraser 1999, in Braby 2000.) In captivity the larvae were successfully raised without attendant ants.



Pupa dorsal view



Pupa lateral view

Pupae, measuring up to 12mm length, were mainly located below a leaf of the host plant on a silk pad. They were attached with silk by the cremaster and a central girdle. In natural conditions pupae have been recorded on the upperside of leaves of the host plant (Braby 2000).

The total time from egg to the first adult was almost 3 weeks, with egg duration of 3 days, larval duration 11 days and pupal duration of 6 days. The final adult emerged 4 days after the first. Adults were observed emerging between 5.30am and 10.00am.

Within the boundary of the new Scenic Rim Regional Shire south of Brisbane I have adult female records for December 2015 and January 2017. There are records for all months of the year for the adults (in Braby, 2000). It may be possible the species is now permanently established in south-eastern Queensland, particularly in frost free zones. Perhaps the adults have small dispersals from these zones into suitable areas during the summer months, particularly when *C. fistula* is flowering. It is possible the species has arrived via the transport of plants from northern Queensland. Alternatively



their presence may reflect natural southward movement due to warmer climatic conditions.

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Photos Wesley Jenkinson

References:

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## **Invertebrates and Philately – Alan Hyman**

The instinct to collect seems to be encoded within our genetic makeup. Few of us would not have made a collection of some kind – however briefly or haphazardly – at some point in our lives. Coins, cereal cards, antiques, rare maps, sporting memorabilia – all have their individual fascination. Stamps of course have been an all-time favourite and those interested in nature perhaps made an accumulation of shells or butterflies. Except for educational purposes, research or scientific purposes, ethical considerations now temper the taking of natural history specimens in the wild purely as an acquisitive hobby – but there are viable alternatives. Photography is one obvious solution. Another is ‘Thematic Philately’, the collecting of specific subject matter as depicted on postage stamps and related material. This can be quite a flexible process, allowing the individual to collect broad categories or to focus on a restricted field. If one chose ‘invertebrates’ as the subject matter, this could be for example, ‘insects of the world’ on one hand or ‘butterflies of the South Pacific’ on the other.

British stamps invariably exhibit a high degree of design elegance and on the 11<sup>th</sup> July 2013, the Royal Mail issued a set of ten British butterfly stamps, painted by well-known wildlife artist Richard Lewington. (Royal Mail) Head of Stamp Strategy, Philip Parker said: “Every year Royal Mail issues stamps on a wildlife theme and often highlights the plights of threatened species. British butterflies were therefore a natural subject and, unusually for stamps, not much larger than a postage stamp itself”. Many smaller nations have relied on attractive philatelic designs on many subjects for sale to collectors as a source of revenue – and insects, particularly butterflies, have often featured prominently as a theme. Australia has also issued a surprising number of stamps depicting invertebrates, the most recent being in 2016 with a set of four butterflies (Lepidoptera) in May followed by a set of four Jewel

