

the time, and so far I have been able to approach without upsetting the founding female. As her offspring emerge I shall try my luck at recording their ongoing story. Wearing long sleeves, gloves and a hat with a fly veil!



A female paper wasp (*Polistes* sp.) guards her new nest



A paper wasp feeds a mature larva with a portion of caterpillar

Photos Densey Clyne

\*\*\*\*\*

**Life history notes on the Orange Ringlet, *Hypocysta adiante adiante* (Hubner, 1831) Lepidoptera: Nymphalidae - Wesley Jenkinson**



The Orange Ringlet is encountered along much of the eastern districts from north-eastern Queensland into southern New South Wales, including areas west of the Great Dividing Range. The species is generally common in south-eastern Queensland.

In Queensland the species is encountered in a variety of habitats where the host grasses are established including coastal heathland, open woodland, eucalypt open-forest and occasionally in suburban gardens where suitable breeding areas are situated nearby. This species tends to

avoid wetter rainforest areas where the Brown Ringlet (*H. metirius*) can be commonly observed within season.

The adults fly close to the ground amongst grasses. They have the typical ringlet ‘bobby’ flight and while basking their wings are periodically opened and closed quickly, revealing the upper-side orange colour. Once disturbed they can fly quite rapidly and can be difficult to follow through understorey vegetation. Both sexes feed from a variety of small native and introduced flowers.



Whilst in flight, the adults can be very easily confused with older worn specimens of the female Rock Ringlet (*H. euphemia*). In comparison to *H. euphemia*, the adults are generally smaller and the eyespots (ocelli) on the upper side forewing are absent.

The sexes are quite similar in appearance. In comparison to the males, the females are generally slightly larger, the forewing is slightly broader and the abdomen is slightly shorter and wider.



***Hypocysta adiante adiante* (Orange Ringlet)**

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

In January 2011 a female was collected near Beaudesert in south-eastern Queensland and kept in captivity. She laid an egg and was then released. This egg was kept for life history studies. Subsequently the larva was successfully raised in captivity on the only confirmed native host, Kangaroo Grass (*Themeda triandra*). The late M. De Baar has successfully raised larvae of this species on Blady Grass (*Imperata cylindrica*) and *Digitaria didactyla* (Braby, 2000), and these may prove to be host grasses.



This egg was cream, smooth, off spherical, approximately 0.8 mm wide x 0.8mm high

Freshly laid egg

The first instar emerged prior to 8.00am and consumed its eggshell shortly afterwards. It was observed feeding during daylight hours and rested on either side of the leaves towards the base of the host plant. Typically like other species in the genus, it was very slow moving and fed from the outer edge of the leaf. The larva raised completed four instars, similar to the closely related *H. metirius*, *H. pseudirius*, *H. irius* and *H. euphemia*, attaining a length of 24mm.



1<sup>st</sup> instar larva



2<sup>nd</sup> instar larva



3<sup>rd</sup> instar larva



4<sup>th</sup> instar larva





Pupa lateral, dorsal and ventral view

The pupa, measuring 13mm in length, was located below a stem of the host plant. It was attached with silk by the cremaster with the head hanging downwards.

The total time from egg to adult was about one month, with egg duration of 5 days, larval duration 20 days and pupal duration of 7 days.

During September 2006 in cooler conditions I also raised this species from egg to adult resulting in a longer life cycle. The egg duration period was 5 days, larval duration 33 days and a pupal duration of 12 days.

Within the new boundary of the Scenic Rim Regional Shire south of Brisbane, I have records of adults from September to May. In this region the adults appear to be more numerous during spring and summer. However, this may relate to the timing of local rainfall triggering fresh growth of the host plants. At this location there are probably two generations per year.

Reference:

Braby, M.F. 2000. *Butterflies of Australia – Their Identification, Biology and Distribution*. vol 2. CSIRO Publishing, Melbourne.



A mating pair, female at top

Photos Wesley Jenkinson

\*\*\*\*\*

## The Danaids, Browns and Nymphs of Tasmania (Lepidoptera: Nymphalidae) - an historical perspective - Peter Hendry

The butterfly family Nymphalidae is represented in Tasmania by three subfamilies with 14 species in eight genera.

### 1. The Danaids: Subfamily Danainae

The **Lesser Wanderer**, *Danaus petilia* (Stoll, 1790) was known for more than 100 years as the subspecies *Danaus chrysippus petilia* until Lushai, Zalucki, Smith, Goulson and Daniels (2005) reinstated it as a species based on DNA and morphological characters. *D. petilia* was described and illustrated (Fig. 1) by Caspar Stoll, a Dutchman, in 1790. The Atlas of Living Australia web page (Accessed Oct. 2013) shows an Australian Museum record for this butterfly, collected by G. A. Waterhouse in 1907, from the Meander Valley on Tasmania's northern slopes. However, Couchman and Couchman (1977) state "the authors were able to record a

