

March 2018). On researching the image, I came to the conclusion it was *Danaus chrysippus chrysippus* form *alcippoides*. I had this confirmed by Steven Chong after placing the image on the Butterflies of Singapore and Malaysia Facebook page.

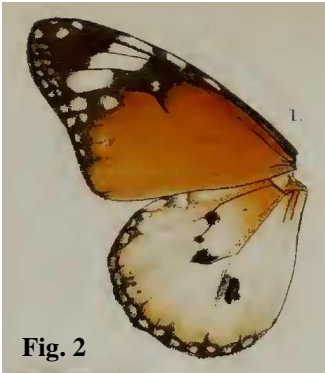


Fig. 2

The butterfly is a form in which the brownish colour in the hindwing is replaced by white. It was first described and illustrated (Fig. 2) as a species, under the genus *Limnas*, by Moore, 1883 in the Proceedings of the Zoological Society of London. It has long since being recognized as a form of *Danaus chrysippus chrysippus*. Moore based his name, *alcippoides*, on another similar form *Alcippus* named and illustrated (Fig. 3) by Cramer, 1777 in *Papillons Exotiques 2*

Photos Peter Hendry



Fig. 3

Life history notes on the Dainty Swallowtail *Papilio (Eleppone) anactus* (W.S. Macleay, 1826) Lepidoptera: Papilionidae –

Wesley Jenkinson

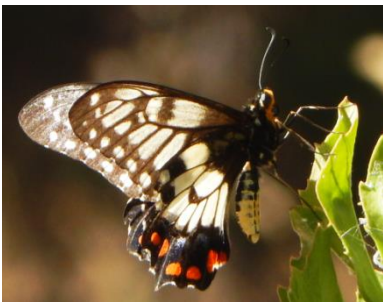


Image 'Heany Park Hill' Rowville, Victoria (courtesy Kelvyn Dunn)

This well-known butterfly (previously known as the Dinky Swallowtail) has been recorded sporadically from Cape York around the eastern and southern Australian districts into South Australia. Some disjunct inland records are also known, including in the Northern Territory. It is known from coastal, subcoastal areas and areas west of the Great Dividing Range. This species has no doubt extended its distribution since the introduction of commercial citrus planting, particularly in the southern states. The adults utilise a varied



range of more open habitats including woodland, eucalypt open forest and dry scrub where the host plants are growing. They can also be found in suburban gardens where citrus trees are established.

Adults are not rapid fliers, however if disturbed they are capable of rapid speed. Males typically defend territories perching on leaves strongly chasing off other rival males. They also hilltop from late morning where they glide around in sunny open areas and settle on vegetation and sticks between 1-3 metres high depending on vegetation height. Females can be observed searching for suitable host trees to oviposit. Flight occurs in both sunny and warm cloudy conditions.

Adults of both sexes feed from small native and exotic flowers. In typical *Papilio* fashion they alight on flowers and feed with the wings constantly vibrating.

In flight adults of *P. anactus* could be confused with males of the Clearwing Swallowtail (*Cressida cressida*), although *P. anactus* are generally smaller and have a different flight pattern. *P. anactus* has more distinct markings on the forewing than *C. cressida* which has a clear forewing with two large black spots in the cell. Also *P. anactus* has a yellow and black abdomen, rather than pink and black and has the subterminal spots on the hindwing as orange-red rather than pinkish red and they are disjunct rather than a continuous semi-circle pattern as on *C. cressida*. Within this species individual adult specimens show variation in general size and slight variation in the size and shape of the markings on the upper side and underside of the wings. Sexes are very similar with the females being slightly larger than males and the abdomen is slightly shorter and wider. They are best determined by the external genitalia.

Wingspans for the pictured adult specimens are males 67mm and females 70mm respectively.

Known host plants listed by various authors in Braby, 2000 include various native and introduced species in the *Citrus* genus, and in addition *Limonia acidissi* and *Geijera parviflora* (Wilga).



Papilio (Eleppone) anactus (Dainty Swallowtail)

Images top left to right: Male, Female

Images lower left to right: Male underside, Female underside



Geijera latifolia has also been recorded as a host plant by M. Eddison (Moss, 2010). All of the known host plants occur in the Rutaceae family.

During September 2005 at Beaudesert, a female was observed laying several eggs on cultivated Rough Bush Lemon (*Citrus jambhiri*) in my garden. She slowly fluttered around the tree and then settled on a young fresh leaf with wings constantly vibrating. The abdomen was curled onto the leaf and then a single egg was laid. This process was repeated several times. Eggs were laid towards the edge of young fresh leaves on either side of the host tree. These eggs were collected and successfully raised to adults. Females will oviposit within a metre of ground level if suitable host leaves are available and occasionally eggs are laid on mature leaves.



The eggs were spherical shaped, approximately 1.0 mm wide, pale yellow when laid progressing to dark yellow over a period of days.



1st instar larva



2nd instar larva



3rd instar larva



4th instar larva



5th instar larva

First instar larvae consumed their eggshells soon after emergence. They later commenced chewing small sections from the outer edge of the leaf. Larvae were found resting openly on a fine silk pad on the upper and lower side of leaves and fed during the day. Larger larvae also rested along stems of the host plant. Larvae have an orange, scented fleshy osmeterium that they protrude which is used as a defence mechanism to deter predators when disturbed. These larvae completed five instars and attained a length of up to 42mm.



Pre-pupa



Pupa



Pupae, measuring 29mm in length, were located on the underside of a stem or a mature leaf of the host plant. They were attached with silk by the cremaster and a central girdle.

The life cycle was completed in just over 1.5 months, with egg duration 10 days, larval duration 21 days and pupal duration 16 days.

Within the new boundary of the Scenic Rim Regional Shire south of Brisbane, the species is seasonal with the adults being on the wing from September until April. The adults are absent during the colder months of the year from May to August. There are probably several generations per year in this region.

Photos, except where previously credited, Wesley Jenkinson

Acknowledgments: I would like to thank John Moss for commenting on the manuscript and Kelvyn Dunn for supplying the adult live image.

References:

Braby, M.F., 2000. *Butterflies of Australia – Their Identification, Biology and Distribution*. vol 1. CSIRO Publishing, Melbourne.
Moss, J.T., 2010. *Butterfly Host Plants of south-east Queensland and northern New South Wales*. 3rd edition, BOIC.

Through their eyes: Exploring the value of butterfly learning for young children – Hannah Powell

Children always have, and possibly always will, love all things creepy-crawly. There are countless books, toys, games and songs that feature these fascinating creatures, however, the true beauty of this love that they share is witnessing their experiences of direct contact. Whenever a six-legged friend is brave enough to descend into the gaze of young children, there are shouts of joy, shiny eyes, children running excitedly around ensuring the entire neighbourhood is aware that “THERE’S A BUG IN THE YARD!”. They then will gather around it, chattering in quiet, almost reverent voices, about their plans to “save” the poor lost thing, about what it’s called, where it came from.

In many ways, this experience is further heightened when it’s a butterfly - who can so easily evade their grasp and their vision - and contact with these magical beings is so fleeting and yet so memorable when it occurs that their excitement at viewing one will last long after they have left their field of vision. They will discuss them, draw them, talk about the colours and wonder together what type it might have been, they will reenact the flight path as they spread their arms like wings and sail around the playground.

