

Raising Common Crow (*Euploea corinna*) Caterpillars – Paul Klicin

Last issue we explored raising the Monarch butterfly caterpillar along with my own personal experience with raising them.

Another fairly common butterfly is the Common Crow. Its distribution is quite widespread and abundant across Australia.



Common Crow distribution within Australia
Source: Braby. The Complete Field Guide to Butterflies of Australia



They are another very easy caterpillar to raise and kids find them interesting.

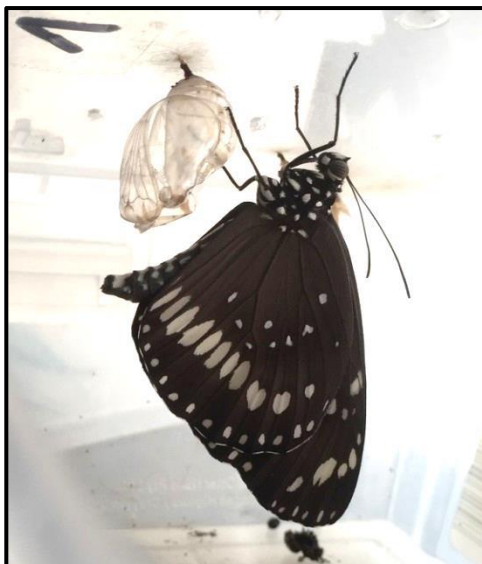
The larval food plant list for this caterpillar is quite extensive and Braby (2016) reports over 50 species of food plants (in the *Apocynaceae* and *Moraceae* families). You should not have too much trouble locating food for this caterpillar. Some common food plants you will often find growing in gardens are the Oleander (*Nerium oleander*) and the Weeping Fig (*Ficus benjamina*). Also quite commonly found in local bushland is the Monkey Rope vine (*Parsonsia straminea*). It is a favourite host plant of the Common Crow and one where you will often find tiny yellow eggs recently laid on the tips of fresh leaf growth. These butterflies will often be seen flying about these vines looking for a place to lay their eggs. These are easy to collect if you decide to and usually the caterpillar hatches within a few days of the eggs being laid. Make sure you have a fresh supply of new growth ready for when these tiny caterpillars hatch. A careful scan of these vines will often reveal a mature caterpillar or two. Being another voracious eater like the Monarch caterpillar, these caterpillars are also fast growing. For an extensive list of host plants for this butterfly and many others please refer to 'Butterfly Host Plants of South-east Queensland and Northern New South Wales'. This book is available for about \$12 from the Butterfly and Other Invertebrates Club.





Common Crow butterfly chrysalises

A unique feature of the Common Crow caterpillar is its shiny silver and sometimes gold chrysalis. In the background of the photo on the right is a just freshly formed pupa which has not yet turned that distinctive silver colour.



Newly emerged Common Crow butterfly

Butterflies emerge quite quickly from the chrysalis. If you want to witness this, and you leave the room for even a minute, you will probably miss it!

It doesn't take long for the butterfly's wings to unfold and dry out.



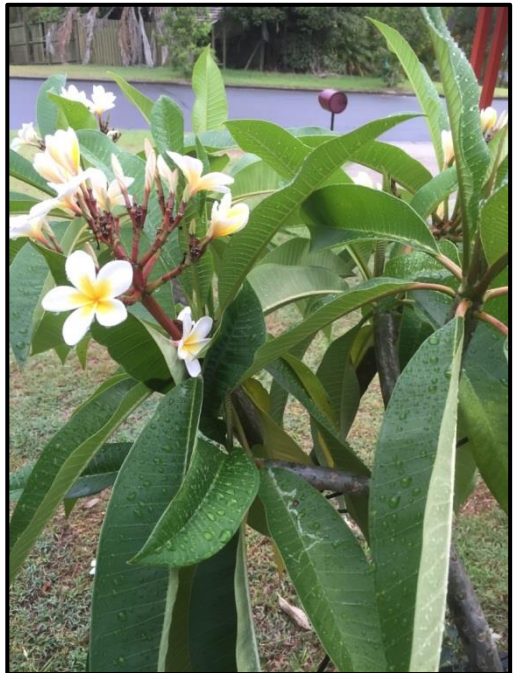
The next step, of course, is to release your newly emerged butterfly. Butterflies are not always ready to fly off straight away and depending on how long you have had them in your enclosure will depend on how ready they are to take flight.

Should you decide to raise these caterpillars please send in your photos with a short story on your experiences as we would love to hear from you.

Common Crow raised on Frangipani (Report on findings and observations) – Paul Klicin

I have recently completed some interesting findings regarding a host plant for the Common Crow that is presently not listed in the current 3rd Edition of the ‘Butterfly Host Plants of South-east Queensland and Northern New South Wales’ booklet.

About 12 months ago I was walking past a flowering Frangipani (*Plumeria rubra*) in my front garden and spotted a rather mature Common Crow caterpillar feeding on a leaf. Apart from the Monarch and Orchard Swallowtail, at this point in time, I was quite ignorant about the different varieties of host plant that different butterflies use. I contacted former, and now current, club President, Ross Kendall to quiz him about my find. If memory serves me correctly, Ross asked me if I was sure that I had identified the plant correctly as the Frangipani was not regarded as a host plant for the Common Crow. If I had indeed correctly identified the plant and the caterpillar was able to complete its life cycle and go all the way through to



Frangipani (*Plumeria rubra*)

become a butterfly, this may be something worth writing about in the future as a new host plant. As I was new to butterflies and their host plants, I began to doubt myself as obviously the Frangipani was not listed in any printed sources that I could find. I pondered upon this for a short time before doing some research online and as it turned out, I had in fact identified the Frangipani plant correctly.

While it was not totally unheard of to find Common Crow caterpillars feeding on the Frangipani plant, the tales often told by others were that due to the sap of the

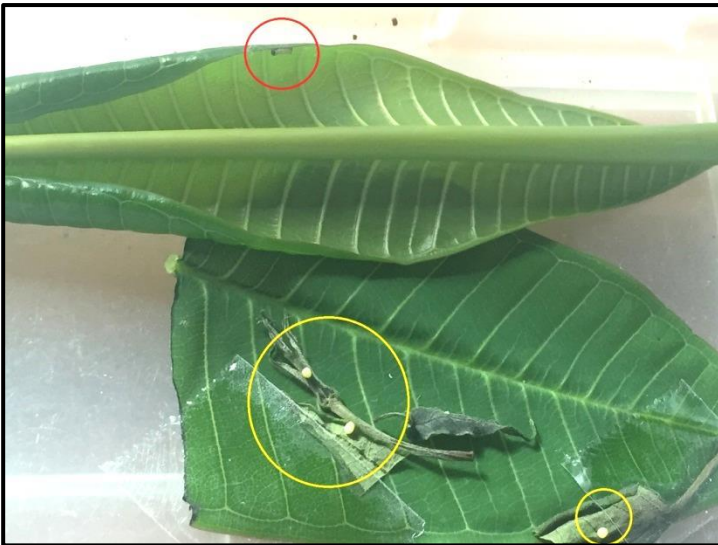


Frangipani being poisonous, more often than not the caterpillars would either die or the butterfly would fail to emerge from the chrysalis having died during metamorphosis.

As this was an unusual find, I removed the caterpillar from the Frangipani plant and decided to hand raise it. Perhaps I was lucky on this occasion but the caterpillar eventually pupated and emerged as a healthy butterfly. Considering that the Frangipani belongs to the Apocynaceae family (scientific classification) as reported in Braby's 'The Complete Field Guide to Butterflies of Australia' (2016) of being in the family of host plant to the Common Crow, I guess this should not come as a complete surprise.

After my first success in raising this caterpillar on Frangipani, I decided to prove this again but this time for a full life cycle. However, it was now coming into winter and the Frangipani dropped all its leaves so I would have to wait until Spring.

Once the warm weather returned and my Frangipani was covered in leaves again I visited some local bushland and collected 4 egg specimens of the Common Crow butterfly that had been laid on some Monkey Rope vine.



The 4 Common Crow butterfly eggs were left attached to the leaf of the Monkey Rope vine and taped down onto a Frangipani leaf to prevent the original host plant leaf from curling up when dried out. This was more for the purpose of being able to observe the eggs

easily. Within 2 days the first caterpillar hatched from its egg (top of frame circled in red). The 2 eggs together circled in yellow hatched a day later. The 4th sole egg failed to hatch.



I noticed that whilst the Common Crow caterpillars appeared to grow more slowly than normal they had no problem feeding on the Frangipani leaf.



Common Crow caterpillar on Frangipani leaf



Notice how the early instar caterpillar avoids eating the secondary or lateral vein of the leaf that contains the poisonous sap of the Frangipani leaf. As the caterpillars grew larger they appeared to become less discerning regarding this practice and appeared more capable of devouring the secondary leaf vein whenever they felt like it (see later photos).



One morning, during the process of hand raising these caterpillars, I noticed a considerable size difference of one of the three caterpillars. Two had grown significantly larger overnight while the third caterpillar was still quite small. The following day the small caterpillar died leaving two caterpillars from the original four eggs collected.

An interesting observation I made was how the caterpillar chewed a hole in the secondary vein of the leaf to stem the flow of the poisonous sap. These chew holes shown in the photograph are very fresh and have just been made by the caterpillar. It will now make its way over to the edge of the leaf to begin feeding without the fear of being poisoned. A very clever caterpillar, indeed!





A good image of the strategically placed caterpillar chew marks designed to stem the flow of the Frangipani's poisonous sap.



The Common Crow caterpillars continued to happily feed on Frangipani leaf.



I was surprised when not long after this photograph was taken the smaller of the two caterpillars decided to pupate while the other larger caterpillar continued to feed for another two days before pupating.





Raised on Frangipani leaf, Common Crow caterpillar test subject number one prepares to pupate. Two days later its mate did the same albeit with a significant size difference.



The moment of truth had arrived. Will the Common Crow butterflies emerge after being hand raised on Frangipani leaves or will they die before completing their life cycle as often previously reported?



The first Common Crow butterfly showing its colours is about to emerge.



First Common Crow butterfly test subject hand raised on Frangipani leaves.





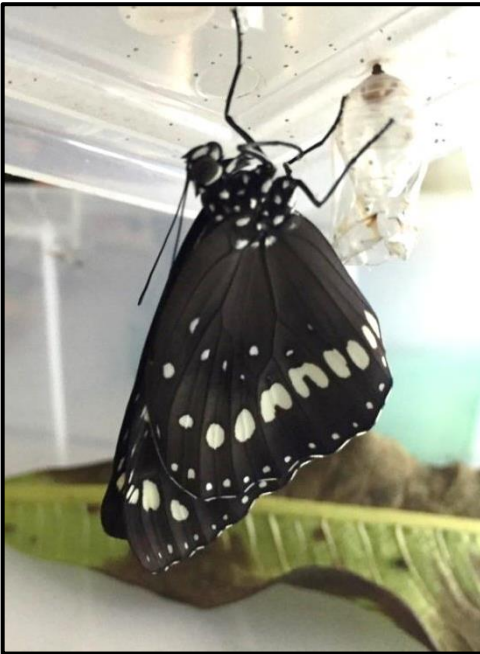
Second Common Crow test subject hand raised on Frangipani leaves approximately 30 minutes before the butterfly emerged (left) and newly emerged butterfly.



Conclusion

Although the Common Crow caterpillars did not appear to grow to their full potential in size before pupating, as well as appearing to grow more slowly than what I have previously witnessed when raising them on other popular host plants, it cannot be ascertained with certainty that the reason for this was due to them being fed on Frangipani leaves or whether this was due to other environmental factors. Further research would need to be carried out

by raising an uncontrolled group of caterpillars on, for example, Oleander leaves and to compare this group with a control group of caterpillars raised simultaneously on Frangipani leaves to see if there are any observable differences in growth speed and size under identical environmental conditions.



Ready for release

Following this, I believe the next logical step would be to attempt to raise Common Crow butterfly larvae on other Frangipani species such as *P. obtusa*, *P. alba*, and *P. pudica*.

In conclusion, I successfully raised Common Crow butterfly (*Euploea corinna*) larvae on Frangipani (*P. rubra*) on two separate occasions and based on my findings and observations contained within this report I believe, with certainty, that Frangipani (*P. rubra*) should be classified as a host



plant for the Common Crow butterfly and should be recorded as such.*

It is my intention to petition to have the Frangipani (*P. rubra*) included as one of the listed host plants of the Common Crow butterfly (*E. corinna*) in any future updated reprints of 'The Butterfly Host Plants of South-east Queensland and Northern New South Wales' book and any other Butterfly and Other Invertebrates Club (BOIC) hosted digital media.

Next Issue: Raising Orchard Swallowtail caterpillars
If you have more questions or to see more please go to
<https://www.facebook.com/butterfliesandcaterpillars/>
or
<https://www.facebook.com/groups/187619097411/>

Reference

Braby, M., 2016. *The Complete Field Guide to Butterflies of Australia*. Second Edition. CSIRO Publishing.

Photos Paul Klicin

* Ed: Braby, 2000 in *Butterflies of Australia Their Identification, Biology and Distribution Vol 2*, notes several examples of eggs being laid and larvae found on *Plumeria acutifolia* (a variety of *P. rubra*) with some dying in early instar but several completing development to adulthood.

PRESIDENT'S REPORT FOR THE 2017 AGM

You will be aware that, due to unforeseen circumstances, members of the BOIC committee elected me to the position of club president in December 2016. I have resumed this role with a determination that the good work of the club will continue and that the stated aims of the club will be pursued with renewed vigour.

I thank Frank Jordan for his all too brief contribution during 2016 and wish him well in his future endeavours.

Our Vice-President for 2016, Alisha, has always been a cheerful participant in our activities and a steadying influence during the past year. We will miss her smiling face. We have witnessed the joy that she and Jon and have experienced in the parenting of Stanley and wish them further happiness with the imminent arrival of the fourth member of their family.

Lois has decided to "retire" from our committee. All of us thank her for her wonderful contribution of beautiful paintings and drawings over the years, for her informative reports and the often-entertaining articles about invertebrates in her garden.

