## Doon Watch Nature Series for Dehradun Live Hindustan Times by Sanjay Sondhi

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Mimicking the Tiger!

I watched closely as the mimic of the tiger flew by me. In flight, it looked remarkably similar to the tiger, with faint black stripes on a bright orange coloured background, but when it sat down, its appearance changed completely.

Stumped aren't you, with flying tigers and all! Well, that's because the "tiger" I am referring to, is the Striped Tiger butterfly (*Danaus genutia*), not our national animal! I was on a nature trail at Sahastradhara, and a butterfly called the Common Palmfly (*Elymnias hypermnestra*) was flitting about me.



The male Common Palmfly is black above with blue spots on its forewing margins and an orange border on its hindwing. However, the female Common Palmfly is quite

different on the upperside (though they look similar when the butterfly sits with its wings closed). It is bright orange above with a hint of black stripes. The male and female Common Palmfly are sexually dimorphic, which means that the sexes exist in different forms and look different.

The reason for this difference is interesting. The female Common Palmfly mimics the Striped Tiger butterfly. Not only does it look similar, when flying but its flight method, too, is similar to the Striped Tiger. The Striped Tiger butterfly, which is part of the Milkweed group of butterflies, has chemicals which make the butterfly distasteful to predators. These chemicals are accumulated by the caterpillar of the butterfly, and continue to exist in the adult butterfly. Hence, the Striped Tiger, is avoided by many predators such as birds. However the Common Palmfly does not have the benefit of this protection mechanism. Hence, over time, the female Common Plamfly has evolved to mimic the Striped Tiger in looks and behaviour, and take advantage of its protection mechanism. This type of mimicry is called Batesian mimicry, wherein a species, which is harmless, copies another species which has more evolved mechanisms of protection, in order to increase its own chances of survival. Such are the wonders of the natural world!

The Common Palmfly flies throughout the year in Dehradun. The plant on which its caterpillars feed on are various species of palm, hence they are often found in gardens where palms grow. They have a slow, bounding flght, but they do not fly for long, settling down on the upper surface of a leaf in the shade. The next time you are in your garden, watch out for a flying tiger, and it may just be the Common Palmfly female, fooling you (and its predators!)

Feedback on this column is welcome at sanjay.sondhil@gmail.com

Making a difference: The Christmas Season approaches. If you do celebrate this festival, how about ensuring that you give each other green gifts! As for me, I have gifted myself an e-book reader for Christmas; no longer will I need to buy books, thereby conserving paper! How is that for a nice gift idea for your kids! Merry "Green" Christmas to all my readers!

Photograph caption: Common Palmfly female

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