

# CERD Green Chronicles

## AN ILLUSTRATION SERIES ON THE DIVERSITY OF ANTENNAE IN INSECTS ACROSS DIFFERENT ORDERS OF CLASSIFICATION

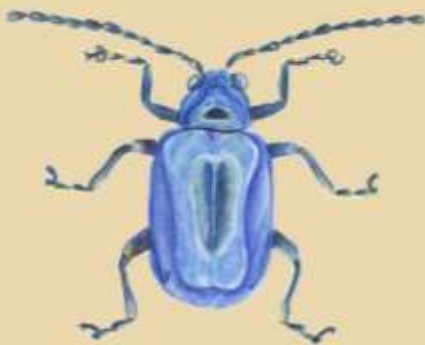
**Megha Ramachandra**

Bangalore, 560061

[megha.ramachandra@outlook.com](mailto:megha.ramachandra@outlook.com)

Presented below is a series of illustrations that I made during 2018 on a diverse range of insects belonging to different orders and genus in the phylogenetic classification. Sketching still life has always fascinated me and insects with their varied forms and colors have held my attention for a long time. No number of long hours that I spend to capture the insect's details would do the real animal any justice, and so I would encourage everyone to look up live images of these insects.

Through this illustration series, I hope to also transfer a bit of this fascination that I have for the natural world to my audience, and remind us to be more aware of the awesomeness of the natural world and try to be less distant to in in whatever capacities that we can. All these illustrations have been done in color pencil, scanned and cleaned up and placed on plates using the open source software, Krita.



**Flea Beetle**  
*Altricia cyanea*

### Color shifter

This is the first insect that I started illustrating. In real life, this insect exhibits a blue metallic iridescence that changes color depending on the angle from which you view it. Hence, this insect was very difficult to sketch and nearly impossible to capture its metallic quality with my color pencils.

### Mosquito Hawks

The crane fly is integral to maintaining our ecosystems as they increase microbial activity by breaking down organic matter. They also keep mosquito levels under control. These insects do not bite but are unnecessarily killed by humans when they come close to us. I wanted to showcase this insect in the series as it is less well known to us.



**Crane fly**  
*Tanyptera atrata*



**Common Parasol**  
*Neurthemis fluctuans*

### The dragonfly

The dragonfly is a popular cultural icon that appears in a lot of stories, songs and so on. Dragonflies are known for the long migrations that they do on a yearly basis. Hoards of dragonflies cross the country, the specific time depends on where you are in the country. It's a large scale event that looks spectacular and worth looking out for every year. This particular dragonfly, like a few other species, uses its darkly spotted wings to provide shade for itself on very sunny days.

### Green Gem

This is perhaps my favorite piece simply because of the various gradients and the beautiful colors that this moth has to offer. The hawk moth is a nocturnal insect, which can be seen fairly easily in India, if we were to look for it, perched high on walls, or at night around plants with many flowers. This took the longest to illustrate due to the fact that I needed to get the symmetry of the colors and its gradients right.



*Daphnis nerii*  
**Oleander Hawk Moth**

### Zombie Maker

This wasp is very interesting as it depends on live cockroaches to provide food for the survival of its offspring. It has evolved a special blend of toxic chemicals that it injects into the cockroach which alters the behavior and metabolism of the cockroach, rendering it into a zombie under the wasp's control. What is interesting to note is that the motor skills of the cockroach are completely intact, and the toxic has an effect on how the brain responds to the toxin. This then allows the wasp to lay her eggs inside the cockroach at a suitable location and then wait for them to hatch knowing that the young ones would have plenty of food available as soon as they are born.



**Emerald Cockroach Wasp**  
*Ampulex compressa*

### Psychedelic pigments

This was an insect that took me time to figure out how I should recreate it. The reason for this difficulty is that, if you go a look at a real life image of the insect, you will see that these colorful pigments that it has are more like texture of pollen grains bound to the hard black underlying shell of the insect. If you were to handle the insect, some of these pigments would fall off. Altogether, with the black background and the placement of the individual colorful pigments, the insect has a very vibrant, near fluorescent effect that gets created, which is quite hard to capture.



**Weevil**  
*Polydrusus formosus*



**Stick Insect**  
*Achrioptera fallax*



**European cockchafer**  
*Melolontha melolontha*



**Giraffe Stag Beetle**  
*Prosopocoilus giraffa*



**Citrus Long-horned Beetle**  
*Anoplophora chinensis*

### Madagascar local

This stick insect is found in the island of Madagascar, and though appears very vibrant here, is in the wild very hard to spot due to its camouflage. Stick insects commonly have extra buds and nodes to make themselves look more like the sticks they hide with. This particular stick insect, through looks so electric here, as nymphs are a dull brown.

### Cockchafer fly!

Commonly found in literature and culture, the cockchafer beetle was often used as toys by children to play with. Many would tie a string to the beetle and make it fly or keep it as a pet. Nikola Tesla allegedly made a simple engine by tying together four of these together as a child. My attraction to the insect comes because of its very pleasing body shape and the very gorgeous and majestic looking antennae.

### Good luck charm

Like the caption suggests, this family of insects is captured, bought and sold heavily across the world for collectors to add to their prized collection, or for good luck charms. Every year, a huge amount of insects are poached and stolen from India and placed on the market for dealers from around the world to purchase. This is disastrous for the ecosystem's stability and balance because these stag beetles are very good eating rotting wood, thereby returning important minerals back to the soil which benefits other plants.

### Citrus tree pest

This beautiful animal in many parts of the world is an invasive species and a pest as it bores on trees rapidly. A single female beetle can lay up to 200 eggs each time inside the tree trunk. When these eggs hatch, the larvae start feeding on the pith and the vascular systems of the tree. These tunnels formed by the larvae eating the vascular system kill the trees. I was drawn to the insect because of its patterned body and long antennae which is usually as long as the insect itself.