

## Assessment of Lepidoptera pollinator species diversity data in East Africa

### Butterfly Fact Sheet

*Esther Kioko, Alex Mutinda, Augustine Luanga, Duncan Mwinzi and Oliver Cramswel Genga*

*Invertebrate Zoology Section, Zoology Department, National Museums of Kenya*

### **THE CHRISTMAS BUTTERFLY**

The Christmas butterfly belongs to a family of butterflies known as Papilionidae (the swallowtails with hindwing with prominent tails). The scientific name for the Christmas butterfly is *Papilio demodocus* and the common name is also referred to the citrus butterfly or the orange dog and is found all over Kenya. It loves flying in gardens and bushes feeding on nectar from flowers using its long straw like mouth. In the process of visiting flowers, it transfers pollen from flower to flower using the wings, mouth parts and other parts of the body making them produce fruit and seed. This process is called **pollination**. Through pollination, plants continue to grow and give us and other animals food.



*Figure 1: The Christmas butterfly sipping nectar from flowers*

The Christmas butterfly lays eggs on cultivated citrus trees like the lemon and orange tree as well as their wild relatives thus the other names, citrus butterfly and orange dog. The butterfly loves the citrus trees because they are shiny and smell nice and the female butterflies find them using sensors on the tips of the front legs.

#### *The Life cycle of the Christmas butterfly*

The life cycle of this butterfly has four stages: Egg-Larva-Pupa- Adult

**Eggs:** The female Christmas butterfly lays eggs on leaves of citrus trees, domesticated and wild ones too.



*Figure 2: Papilio butterfly eggs on leaves of a citrus seedling*

**Larvae:** Eggs hatch into little caterpillars (larvae) that look like bird droppings. They eat the citrus tree leaves and grow into green patterned big caterpillars that blend with the leaves.



*Figure 3: Young Christmas butterfly caterpillars that look like bird droppings*



*Figure 4: Maturing Christmas butterfly caterpillars blending with leaves*

**Pupae:** The grown up caterpillar stops eating and changes into a different stage, called the pupa. It does not eat; it is a resting stage during which the caterpillar changes into a butterfly.



*Figure 5: Pupae of the Christmas butterfly*

**Adult:** The adult Christmas butterfly emerges from the pupa with wings folded and stretches them out ready for flying.



*Figure 6: Christmas butterfly with wings stretched out ready for flight*

**What can be done to save butterflies and other insect pollinators?**

1. Plant many flowers especially indigenous plants for them to get their sweet food, nectar.
2. Plant plants that the butterflies like to lay their eggs on and that are food for their caterpillars.
3. Reduce or eliminate the use of chemical pesticides.
4. Read about what is being done to promote pollinators and tell people about the importance of insect pollinators to us and the need to protect them and their environment.



Figure 7: A tree nursery with seedlings of *Clausena anisata*, a wild citrus plant used for food by the Christmas butterfly caterpillars

The Project “Assessment of Lepidoptera pollinator species diversity data in East Africa” is a regional collaboration of partners, National Museums of Kenya, Makerere University and National Museum of Tanzania working together to enhance the understanding of butterflies and moths and other insect pollinators in Kenya, Uganda and Tanzania.

For more information please contact the project PI  
Dr Esther N. Kioko  
Zoology Department, National Museums of Kenya  
P.O Box 40658-00100, Nairobi, Kenya  
Email. Ekioko@museums.or.ke