



# PLANTS & INSECT POLLINATORS

## BIODIVERSITY & WELL-BEING TOOLKIT INFORMATION BOOKLET

'Preserving the Past,  
Protecting the Present  
& Enriching the Future'



[linktr.ee/montserratbiodiversitytoolkit](https://linktr.ee/montserratbiodiversitytoolkit)



UK Centre for  
Ecology & Hydrology



MINISTRY OF AGRICULTURE, LANDS/HOUSING & THE ENVIRONMENT

# Montserrat's plants and pollinators

This information booklet gives an overview of some the most attractive plants and pollinators on Montserrat.

It was created as part of a wider project to provide information on Montserrat's unique wildlife and how this connects to human health and well-being. Information was gathered from the community and project partners, working on Montserrat and internationally, to create several management options. This supports Option 4: *Caring for wildlife: Supporting native plants, pollinators and other animals on Montserrat*. It also supports the following United Nation's 2030 Sustainable Development Goals:



## Encouraging plants that support pollinators

Native plants are adapted to current conditions, often requiring little maintenance or watering. Plants provide humans with many ecosystem services including: slowing water to reduce erosion, shade, shelter and medicines. However, they have some basic needs. For example, some plants need to be pollinated to reproduce. This can be done by a variety of animals including insects (e.g. bees and moths). Some pollinators are specialised and have a unique relationship with the plant they pollinate, allowing only that specific animal to collect its pollen and nectar.

Montserrat is home to plants and pollinators that are only found here and a few other nearby islands. These species are known as endemics. An example is the amazing bottle bee *Melipona variegatipes*.

## Montserrat's plants and pollinators

### Lantana *Lantana camara*



*Lantana Lantana camara* (left) with its pink and yellow mini-flowers is an attractive plant native to Montserrat, providing a food source to many butterfly species on Montserrat, such as the yellow-tipped flasher *Telegonus anausis* (below, cc Don Henise CC BY 2.0).



## Montserrat's plants and pollinators

### Sage *Croton flavens*



Sage *Croton flavens* (left, cc Marc Botham) provides pollen and nectar to bees as well as rare butterflies, such as the endemic Tropical leafwing *Anaea troglodyta* ssp. *minor* (photo below, cc *Anaea troglodyta minor* Louis Imbeau CC BY 4.0).



## Montserrat's plants and pollinators

### Wild pea/butterfly pea *Centrosema virginianum*



Butterfly pea  
*Centrosema virginianum* (left, cc Virginie Sealys) true to its name, its butterfly-shaped flowers provide a food source for butterflies, including endemic Rusty skipper *Epargyreus zestos* (photo below, cc Mark Yokoyama CC BY 2.0 crop).





## Montserrat's plants and pollinators

### Sleepy Head

#### *Mimosa pudica* var. *pudica*



Sleepy Head *Mimosa pudica* var. *pudica*, a native plant found on Montserrat (left) these spiky pink flower heads provide sugary nectar to endemic Bottle bee *Melipona variegatipes* (photo below, Quentin Groom).



## Montserrat's plants and pollinators

### Milkweed

### *Asclepias curassavica*



Milkweed *Asclepias curassavica* (left, cc Quentin Groom) is the main foodplant for the stunning Monarch *Danaus plexippus megalippe* (below).



## Montserrat's plants and pollinators

### Spanish Needle *Bidens pilosa*



Spanish needle *Bidens pilosa* (above, Ajhermae White) although a small plant its flowers are still a great food source for bees and hoverflies, including Honey bee *Apis mellifera* (right photo, cc Nicolas Venner).





## Montserrat's plants and pollinators

### West Indian milk berry *Chiococca alba*



West Indian milk berry *Chiococca alba* (left, cc Ajhermae White) is not as obvious pollinator plant, but it is loved by caterpillars of large moth species, including West Indies endemic hawkmoth *Cautethia noctuiformis* caterpillars (photo below, Julien Touroult CC BY 4.0) as well as the Tersi Sphinx *Xylophanes tersa* caterpillars.



## Montserrat's plants and pollinators

### Liana

### ***Cissus verticillata* subsp. *verticillata***



Liana *Cissus verticillata* subsp. *verticillata* (left photo, cc Quentin Groom) is useful for a variety of insects including leaf-cutter bees such as the woolly wall bee *Megachile lanata* (below).



## Montserrat's plants and pollinators

### Silk cotton

### *Ceiba pentandra*



The iconic Silk cotton *Ceiba pentandra* (left photo) at Cujoehead is not only culturally important but it is a food plant for bees, butterflies and caterpillars of the Caribbean duskywing *Ephyriades arcas* (below photo, cc Louis Imbeau CC BY 4.0).



## Montserrat's plants and pollinators

### Shrimp plant *Ruellia blechum*



*Ruellia blechum* (left photo, cc. Irene Rosen) has beautiful blue flowers. It provides the spotty endemic butterfly Antillean crescent *Antillea pelops* with food (below photo, cc Mike Raish CC BY 4.0).





## Montserrat's plants and pollinators

### Saltbush *Baccharis dioica*



The Saltbush *Baccharis dioica* (left photo, cc Valentina Leal Monroy CC BY NC) is a food source for several species of butterflies, such as endemic butterfly Angerona hairstreak *Thecla angerona* (below photo, cc David Clements).





# Using iNaturalist to upload a species record

If you are interested to know how you can help record species visit this free online portal: [www.inaturalist.org](http://www.inaturalist.org) and go to the project "Biodiversity of Montserrat". Some photo guides have been made for certain species on iNaturalist e.g beetles, butterflies and spiders.



- Register for an iNaturalist account at [www.inaturalist.org](http://www.inaturalist.org) (better on a laptop/PC for sign-up)
- Open the iNaturalist app on your smart phone
- Touch the camera icon.
- Take a photo (or select a photo from your photo library).
- Fill in details you want to add on where you observed the species, additional notes; location as Montserrat.
- Touch the Save button.
- Touch Upload.

# Flower Insect Timed Count (FIT Count)



FIT Counts are a simple 10-minute survey where you watch a small patch of flowers and count the different insects that visit. It's designed for anyone to do and helps scientists learn more about how pollinators are doing. This is important because they play a key role in growing our food and supporting nature. You can help track changes in insect numbers over time and supporting efforts to protect these vital creatures.

Step-by-Step Guide to Using the FIT Count App

1. Download the FIT Count App (App Store/Google Play).

2. Set Up Your Account

- Open the app and register with name and email address.
- Choose your location as Montserrat to help with data mapping.

3. Prepare for the Survey

- Weather Conditions: Ensure it's dry and preferably early morning or later evening when not too hot.
- Location: Select a 50×50 cm patch of flowers, preferably from the target list.
- Target Flower: Choose a flower from the FIT Count target list

4. Conduct the 10-Minute Count

- Start the timer within the app.
- Observe and record all insect groups visiting the target flowers

5. Record Environmental Conditions

- Note the sky conditions (e.g. clear, partly cloudy).
- Assess the wind strength (e.g. calm, breezy).
- Record the type of habitat (e.g. garden,).

6. Save and Submit Your Data

- After completing the count, save your observations within the app.
- You can submit data immediately if you have an internet connection or save it to upload later.

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