

Which insect is that?

There are more than 20,000 species of insects in New Zealand of all shapes and sizes but most of them belong to only five groups or “Orders”. Even if different insects in an order look very different, they all share a few important similarities.

Beetles

Coleoptera



Beetles are known as **Coleoptera** (from the Greek koleos “sheath” + pteron “wing”), which refers to how their first pair of wings have hardened into an “elytra” which covers the second pair of wings (and usually the entire abdomen) as a protective case.

MANUKA BEETLE | *Pyronota festiva*
Māori name: kēkerewai and repowai
Family: Scarabaeidae

In the course of its life this beetle feeds on a range of plants although it’s frequently found on or near mānuka (*Leptospermum scoparium*), hence its name. Mānuka beetles spend a year as larvae living in the ground feeding on the roots of plants like rye grasses and clover. Because of this, they can be considered a pest.



Ants & Bees

Hymenoptera



The **Hymenoptera** include **ants, wasps and bees**. Some of the members of this order are hugely important as pollinators, predators or pests. In this group, the front and hind wings are locked together by a tiny row of hooks (remember that male and queen ants have wings!). It is a little unclear why they’re called Hymenoptera from the Greek humen “membrane” + pteron “wing”.

NATIVE BEE | *Leioproctus fulvoscens*
Family: Colletidae

You may be surprised to know that New Zealand has several of native bee species of its own. They’re generally smaller than the common honey bee and aren’t striped. But the thing that probably makes them most different from honey bees is that they don’t have colonies! As solitary bees, females dig nest holes in the ground. In each chamber, females lay just one egg and supply this underground nursery with pollen to feed their larvae. Although you don’t see them as often as honey bees, native bees are very important pollinators of native flowers.



Butterflies & Moths

Lepidoptera



The **Lepidoptera** includes **moths and butterflies** of which there are 2,000 native species in New Zealand. Moths are usually active during the night and are usually less colourful than butterflies, but there are exceptions. If you’ve ever caught a moth or butterfly in your hand, you might have found a light powder on your hands afterwards. These are the tiny scales which give the group its name (from the Greek lepis “scale” + pteron “wing”).

RED ADMIRAL | *Vanessa gonerilla*
Māori name: kahukura
Family: Nymphalidae

New Zealand has three species of admiral butterfly: two yellow admirals and one red. This species is named for the vibrant red patches on its wings in both Māori (kahukura for “red cloak”) and English (“red admiral”). The red admiral is common throughout the mainland but needs to live in areas which have New Zealand tree nettles (*Urtica ferox*).



Flies

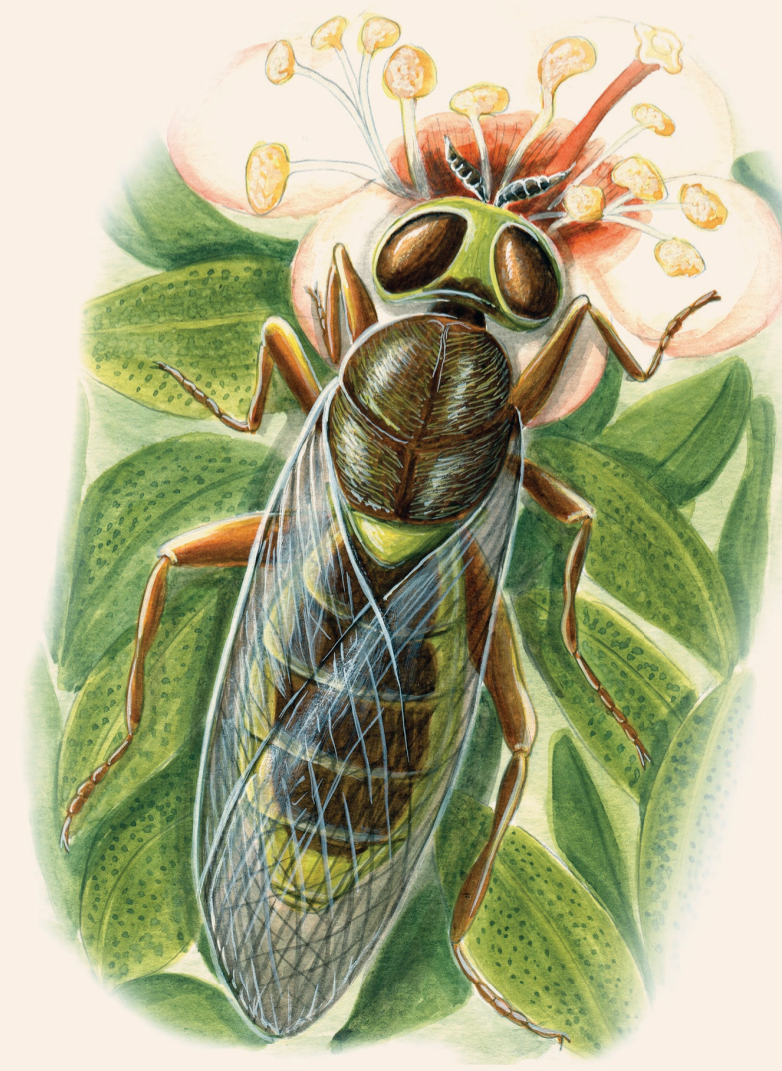
Diptera



We usually think of **flies** as pests but they are hugely important for pollination and breaking down rotting material. Most insects have two pairs of wings but in some cases one pair will be modified to perform another function. In flies, their second pair of wings are reduced into something called “halteres,” which act as a balance and guiding system and is one of the reasons it can be so hard to swat flies. Because of these halteres, flies have only two wings (Greek di “two” + pteron “wing”).

GREEN SOLDIER FLY | *Beris* sp.
Family: Stratomyidae

Green soldier flies, as with hoverflies, native bees and even ants, are important native pollinators. Their larvae can be found in rotting vegetation.



True Bugs

Hemiptera



Hemiptera means half-wing (from the Greek hemi “half” + opteron “wing”). This is because the first pair of wings is hardened at the base while part of the wing is thin and membranous. Entomologists refer to insects in this order as “bugs” although the word can also be used to refer to insects in general. The members of this order can look very different but all members have piercing mouthparts used to suck up fluids, usually from plants, but, sometimes, from inside other insects!

CHORUS CICADA | *Amphisalta zelandica*
Māori name: kihikihi-wawā
Family: Cicadidae

While we think of cicadas as loud, flying insects, they actually spend most of their lives underground. Females lay eggs on plants and the larvae hatch, fall down, and burrow into the ground. On summer nights these cicadas emerge from their burrows to shed their skins. No one knows how long this species stays under the ground but in other species it can be several years.

