BEES & WASPS

Volume One

ORDER: HYMENOPTERA

All insects in this group have four transparent wings.

Narrow Waist; Includes bees and wasps. This can be further divided into social bees and solitary bees. Wasps can be divided into social wasps, parasitic wasps and hunting wasps.

European Tube Wasp

Ancistrocerus gazelle *Photo: Doris Tutty*

European Tube wasps arrived in Auckland around 1987 bur are now established throughout the country. They can be found where there is suitable sandy and clay soil near rivers, coastal lakes or ponds.

Female wasps will collect & paralyse caterpillars to put in nest along with her eggs. Once hatched the wasp larvae will feed on the dead caterpillars.

Only the female wasp can sting but it is reported as not painful. I have not tested the theory and prefer to keep the camera between me and the wasp.

Photo: Doris Tutty

EUTANYACRA LICITATORIA

Arrowed are two distinguishing white spots and lines on the tail that separate this wasp from the White Spotted Ichneumonid.

It is a native species that is also found in Australia. The iNaturalist site records sightings of this wasp in Travis Wetlands Christchurch, Mahoe Reserve Lincoln, Glenfalloch Gardens Dunedin & Lake Ellesmere. Eutanyacra licitoria is another parasitoid wasp in the family of ichneumonidae.

Photo: Doris Tutty

GLABRIDORSUM STOKESII

Glabridorsum stokesii is a parasitoid wasp. It was introduced into New Zealand in 1967-69 for the control of oriental fruit moth (*Grapholita molesta)* and light brown apple moth (*Epiphyas postvittans*).

This wasp can be easily mistaken for *Xanthocryptus novozealandicus*, as its colour and markings are very similar. They are two different species and the simplest way to identify which species is to look at the eyes. *Glabridorsum stokesii* eyes are completely surrounded with a white circle. The white circle around the eyes of *Xanthocryptus novozealandicus* are broken at the top. (See *Xanthocryptus novozealandicus* for photos showing the difference.)

The can be found around edges of bush during December to May. However parasitoid wasps are very busy, seldom resting and constantly have quivering antenna. They often have to be followed for some time before they briefly come to rest.

Golden Hunting Wasp

Sphictostethus nitidus

Description

Females are reddish brown with yellow tints and with sooty spots on the wings; the males are also reddish brown with yellow-tinted wings, but these are never spotted. Females are 8.5-22.0mm in length, and males 7.5-15.0mm. They have a bold, jerky gait, and their vivid colour is aposematic (colouration or markings repel predators) to warn off visual predators such as birds and lizards.

HABITAT

S. nitidus shows a preference for open, exposed places and tolerates a wide range of habitats. It has shown itself to be adaptable and is common in suburban back yards, dunes, dry riverbeds, forest clearings, grasslands, and clay banks. Nests can be found from sea level up to at least 1370 m, in various substrates, but often among boulders, and especially beneath flat stones and concrete, where it can gain access to cavities through cracks.

DISTRIBUTION

This species is endemic to New Zealand on both the North and South Islands and some offshore islands.

Information: iNaturalist New Zealand.

DISTRIBUTION/HABITAT

Priocnemis monachus is endemic and widespread in New Zealand where it occupies habitats where its prey are abundant. Typically, the wasps will nest in exposed banks in forests, but may also nest in sand and gardens.

DESCRIPTION

Adults of *Priocnemis monachus* have a metallic bluish-black colouration. The males tend to be smaller than the female, but size is variable even within the same sex. The female reaches up to 26mm in length whilst the male may reach 19mm in length. The body is covered in black hairs.

HOSTS/PREY

Priocnemis monachus are parasitoids. an adult, the wasp will paralyze large spiders and drag them back to their nest to be used as food for the wasps larvae. *P. Monachus* prefers spiders which make lidless burrows in the soil. As adults, the wasp will feed on fruit and nectar from a variety of available plants.

Black Cockroach Hunter Wasp

Black Cockroach Hunter Wasp. *Tachysphex nigerimus.*

Priocnemis monachus

In the above photo the Hunting Wasp has emerged from the plant cover. The spider rears up to attack the wasp. This is a fatal mistake as the hunting wasp moves faster and stings the spider that also paralyses the spider.

The hunting wasp is dragging the paralysed spider back to a prepared nest where she will deposit eggs into the paralysed spider. When the larvae hatch they will eat the spider.

NORTONS GIANT ICHNEUMONOID WASP

Megarhyssa nortoni

This giant ichneumonid wasp was introduced into New Zealand to control the Sirex Wood Wasp.The Sirex Wood Wasp lays eggs inside pine trees and the hatching larvae (grubs) will feed on the wood creating tunnels in the tree trunk.

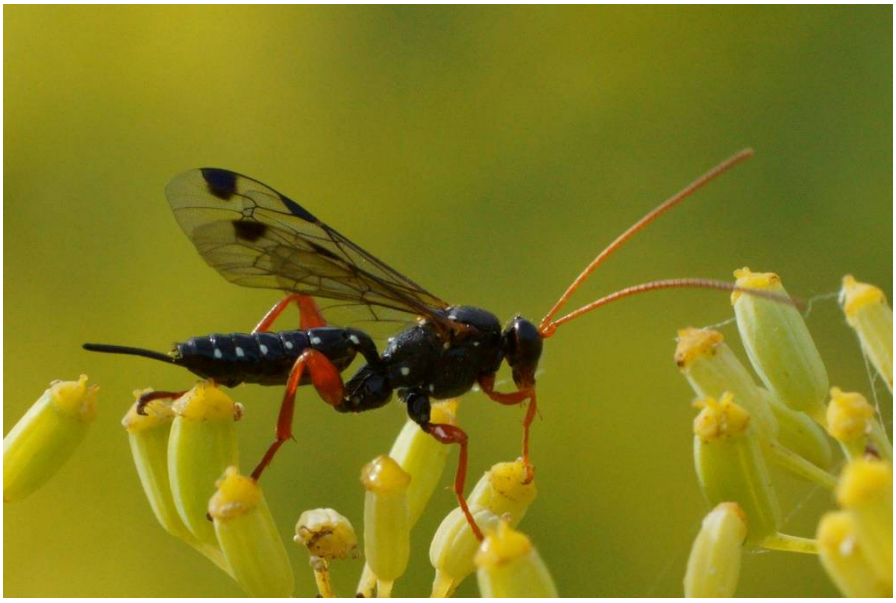
The above photo shows the female wasp. Her body length is around 36mm and her ovipositor, extending from the back of her body extends a further 51mm to 76mm. It looks like a fearsome stinger but is only used to lay eggs inside the tunnels of the Sirex Wood Wasp tunnels. She can drill the entire length of the ovipositor into the tree trunk. The eggs hatch and the larvae eat the Sirex Wood Wasp grubs.

Since Nortons wasps feed on nectar they can be found on flowering plants close to pine plantations. The above photo was taken near a pine plantation on the north side of Lake Ellesmere/Waihola.

White Spotted Ichnuemonid Wasp

Echthomorpha intricatoria.

The White Spotted Ichnuemonid wasp arrived from Australia. They lay eggs inside the chrysalis of admiral butterflies. The above photo shows a female in a typical pose with her antennae curled down touching the native nettle (onga onga) leaf. Her antennae are constantly quivering to locate a chrysalis underneath the leaf.



The female wasp has her ovipositor (the two spikes at the back) ready to drill through the leaf into a Red Admiral chrysalis underneath the leaf.

White spotted wasps are very busy, constantly flying and landing briefly. They can be found around native bush areas where there is a population of the native tree nettle, onga onga. For example bush sites around Banks Peninsular with a population of Red Admiral butterflies are worth investigating. They are active from December to February.

Since they are constantly on the move the day does have to be warm and sunny.

XANTHOCRYPTUS NOVOZEALANDICUS

Photo: Doris Tutty

Female showing ovipositor at back. *Photo Doris Tutty*

Xanthocryptus novozealandicus, the **lemon tree borer parasite**, is a wasp in the family Ichneumonidae. It is a native insect of New Zealand. It is also found in Australia. Females hunt for larvae of wood-boring beetles around March, including the lemon tree borer (*Oemona hirta*), a native cerambycid that tunnels into citrus trees and many native species. When a suitable host is found, the female pushes her ovipositor through the wood and injects her eggs into the grub. This specific parasite prefers to prey on larger second year larvae due to its larger size.

New Zealand range: Information iNaturalist.

The species can be found across both the North and South Island. On the North Island populations can be found in Northland, Auckland, The Bay of Plenty, Manawatū-Whanganui, Waikato, Hawke's Bay, and Wellington. For the South Island they can be seen in Tasman, Nelson, the West Coast, as well as parts of Canterbury and Otago. They have been seen occupying natural forests within New Zealand as well as in small clearings.

Note: There is a similar looking wasp, *Glabridorsum stokesii*, that has been introduced from Australia for the control of Oriental Fruit moth. The easiest way to tell them apart is to check the white surrounding the eye. *Glabridorsum* has the white band completely surround the eye whereas with *Xanthocryptus* the circle is broken.

Glabridorsum White ring encircling eyes .

Xanthocryptus White ring broken at the top.