

# German wasp

## Vespidae - *Vespula germanica*



### What does it look like?

The German Wasp, ranges in length of 12 – 17 mm long (queens may be up to 20 mm) with a blackish brown abdomen and bright yellow stripes. It is very similar to the common wasp. German wasps have strong black markings including an arrow-shaped mark down the middle of the abdomen and black spots on either side. Wings are long and translucent, legs are yellow and antennae black.

### Why is it a problem?

The German wasp is a successful invader of disturbed environments and natural ecosystems. It establishes large nests and the workers efficiently exploit food resources such as nectar and insects, which native fauna depend on. This species is difficult to control as a new colony can be established from a single inseminated female.

### Control methods

There are a range of insecticides available from hardware and garden stores which have permethrin as the active ingredient. Follow the safety instructions supplied with the insecticide.

The best way to reduce a local wasp population is to find and destroy all the nests in the area. Usually wasps range 50 - 200 metres although they have been known to travel up to 3km. If you search on sunny days, near dawn or dusk, the low light angles will highlight the flight path as wasps enter and leave the nest.

Once a nest has been located, place a dessert spoonful of insecticide at the nest entrance after dark when the wasps have stopped flying. You can use a puffer bottle for this job.

Worker wasps flying in and out will spread the powder into the nest and the colony usually dies within a day. If activity continues repeat the treatment until wasp activity ceases. Don't shine your torch into the nest or wasps will fly up the beam.

Alternatively, a targeted wasp bait is available from Nelson-based company Merchanto. The bait, Vespex, was developed in conjunction with DOC, although we do not supply it. To purchase the bait contact Merchanto. You will have to pass their online test to become an approved user before purchasing. Environment Southland does not supply Vespex.

Note that Vespex may be used on public or private land, but members of the public wishing to carry out wasp control operations on public conservation land need to contact the local DOC office to enquire about the permission process. Environment Southland does not supply wasp toxins to the public.

### Biocontrol

- Biological control has been used to try and achieve widespread control of wasps. Since 1987, a parasitoid (called *Sphecophaga vesparum vesparum*) has been released at hundreds of sites throughout New Zealand. This parasitoid was brought from Europe where it attacks the same wasp species we have here. It lives in wasp nests, feeding on and thus destroying developing wasps. Other trials used include the use of pathogens.

### Insecticide

Chemicals can be used against wasps in two ways - either finding and destroying all nests in the area, or using poison bait. The advantage of poison bait is that foraging wasps carry the poison back to the nest. This means you don't have to find and approach nests. Both methods will only alleviate the problem for the current season, and workers from further away are likely to turn up looking for food. In the next season, the area will almost certainly be reinvaded by queen wasps, which can fly from 30 to 70 kilometres before establishing a nest. The problem will therefore have to be dealt with each year.

### Request info

<https://eservices.es.govt.nz/online-services/new/BiosecurityRFS/step/1?Subject=AnimalPests&Species=15>

### Management programme

- Organisms of interest