



# Keep an eye out for yellow-legged hornets

## Background

Two yellow-legged hornets (*Vespa velutina*) have recently been sighted in the Auckland region.

This non-native pest hornet is not known to be present in New Zealand. Biosecurity New Zealand wants to hear from anyone who has seen this insect, to help us confirm there are no others in the area. At this time, there is no evidence of a wider population or nests.

## The threat

The yellow-legged hornet (Figure 1) has not been detected in New Zealand before, although it is found widely across Southeast Asia and has been introduced to Europe and USA. This hornet feeds both on insects (including honeybees) as well as tree sap and fruit.

## What does the hornet look like?

The yellow-legged hornet is large, (2 cm to 3 cm long) with a black head and a yellow face, black thorax, and legs with black femur and tibia and yellow tarsi. Between the first and second abdominal segment is a narrow yellow band, and the fourth abdominal segment is yellow, with the remainder being black or dark brown. The wings are a smoky brown colour and not transparent like other common wasps.

Figure 1. Yellow-legged hornet.

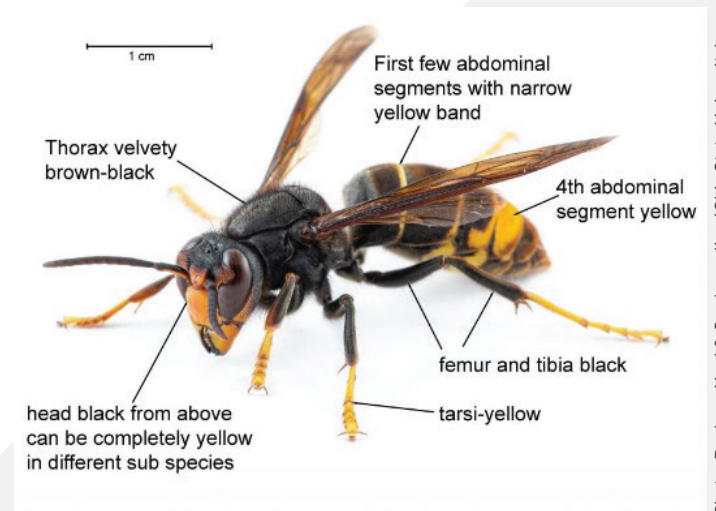
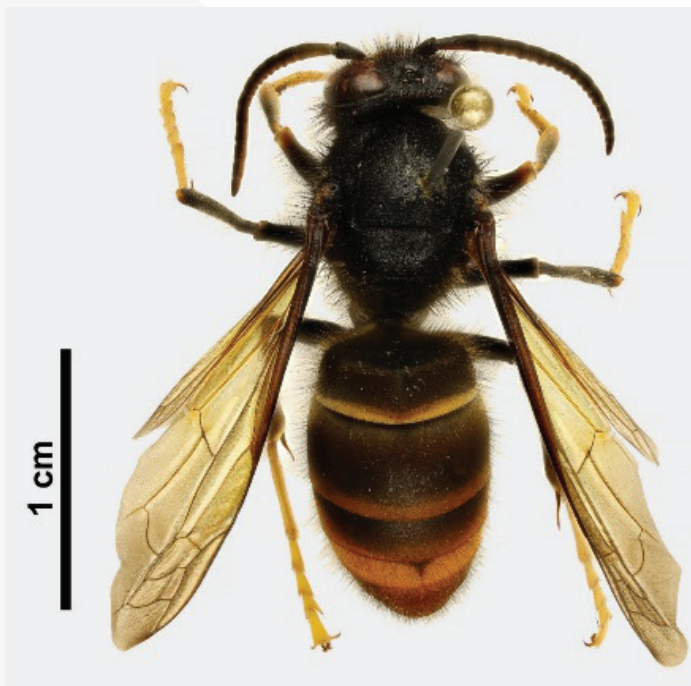


Photo: Biosecurity New Zealand Plant Health & Environment Laboratory

Photo: Buckeye Yard & Garden online (Ohio State University)  
<https://bygl.osu.edu/node/2321>

Any potential finds of the yellow-legged hornet or its nest should be photographed, and reported online at [report.mpi.govt.nz](http://report.mpi.govt.nz) or to the Biosecurity New Zealand exotic pest and disease hotline **0800 80 99 66**

## Common wasps already in New Zealand

A hornet is a type of wasp. There are five species of social wasps currently established in New Zealand. These wasps are all much smaller than the yellow-legged hornet, measuring between 11 mm and 16 mm. The differences in the colour and markings on these species are illustrated in figure 2.

## The yellow-legged hornet's nest

Yellow-legged hornets construct large nests (up to 60 cm wide to 80 cm tall), usually high up in trees (Figure 3) or under the eaves of buildings. It suspends many layers of cells together and “wraps them up” to form a football sized structure, shown here. Do not disturb the nest if you see one, instead photograph it and contact Biosecurity New Zealand.

Figure 2. Yellow-legged hornet (far left) compared to species established in New Zealand: (from left to right) German wasp (*Vespa germanica*), Asian paper wasp (*Polistes chinensis*) and Australian paper wasp (*Polistes humilis*).



Figure 3. Yellow-legged hornet nest.



Photo: Daniel Heuclin, France

Figure 4. An example of an open celled nest of a paper wasp.



Photo: littlej

## Common wasp nests already in New Zealand

The Chinese and Australian paper wasps also like to construct aerial nests in similar locations to the hornet. However, they can be easily distinguished from hornet nests as the cells of paper wasp nests (Figure 4) have open rather than wrapped cells.

German and common wasps (established in New Zealand) construct large nests that look quite similar to that of the hornet nest, but these are usually built underground. If the nest is constructed above ground, they are not usually attached to branches of trees and shrubs.

## Where would I find the hornet?

In countries where they are present, they are commonly found near houses and buildings, in grassy areas and clearings. They have also been observed foraging in urban gardens, parks, and rooftop gardens.

Female hornets will protect themselves by stinging, and can sting repeatedly. Getting too close to a hornet nest or disturbing them in flight, may result in attack.

If you are stung and experience shortness of breath, a rash or pronounced swelling, seek medical attention immediately. If you are stung on the mouth, face or neck, or if pain and swelling persist for a few days, seek medical advice.

## What do I do if I spot one?

Any potential finds of the yellow-legged hornet or its nest should be photographed, and reported online at [report.mpi.govt.nz](https://report.mpi.govt.nz) or to the Biosecurity New Zealand exotic pest and disease hotline **0800 80 99 66**.