

Aedes japonicus

Family **Culicidae**

Subfamily **Culicinae**



Aedes japonicus has become the third invasive mosquito species to be reported in Europe after *Aedes albopictus* and *Aedes aegypti*. Its geographical expansion has been facilitated by human activities, such as the international trade in used tyres and a high overwintering survival (diapause). Its distribution in central Europe is also expanding.

Ae. japonicus colonises urbanised environments and females are active during the day, increasing the potential contact this species could have with humans. This species has shown vector competence for dengue and chikungunya viruses, both of which have been recently reported in Europe.

Distribution around the Mediterranean Basin

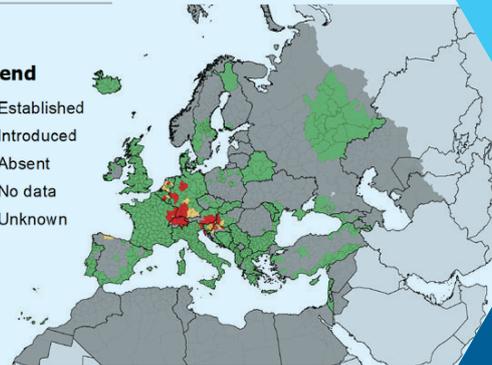


Originated from Asia, *Aedes japonicus japonicus* has spread throughout North America and later into central Europe. He was first reported in France in 2000 where it was eliminated, and has since been reported in several Europe countries (Belgium, Switzerland, Germany, France, Austria, Croatia, the Netherlands, Spain, etc.), showing evidence of its establishment and continuing expansion.



Legend

- Established
- Introduced
- Absent
- No data
- Unknown



Current known distribution of *Aedes japonicus*
January 2019 / VectorNet

Vector surveillance



European map available by ECDC/ VectorNet.

Vector control

- Source reduction: elimination of stagnant water, especially in big containers, that is propitious for larvae
- Spraying of chemical or organic pesticides
- Use of repellent to reduce bites

Transmission

Proved vector of:

West Nile virus (in field)

Japanese encephalitis virus (in field)

Chikungunya virus (in lab)

Dengue virus (in lab)

Rift Valley virus (in lab)

Yellow fever virus (in lab)

References, tools

ECDC Factsheet *Aedes japonicus*:

<https://ecdc.europa.eu/en/disease-vectors/facts/mosquito-factsheets/aedes-japonicus>



Aedes (Hulecoeteomyia) japonicus

Common name: Asian bush, rock pool mosquito

Synonyms: *Ochlerotatus japonicus*
Hulecoeteomyia japonica



MORPHOLOGICAL DESCRIPTION

Adults are relatively large and show a dark and light pattern due to the presence of white scale patches on a black background on the legs and other parts of the body.



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Abdominal terga with lateral and median pale basal patches, that do not form complete basal bands.



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Lines of yellowish scales on a dark/brown background on the scutum.



Body length: 6 mm



Biting behaviour: Adults are often found in forested areas. Active during daytime and crepuscular hours. This species is an aggressive biter and will readily bite humans outside and occasionally inside houses.



Immature habitats: *Ae. japonicus* larvae prefer shady rock holes but can develop in a large range of both natural and artificial aquatic container habitats including tree holes, tyres, bird baths, and all breeding sites rich in organic matter.



Host preference: This species preferentially feeds on mammalian hosts, including humans.

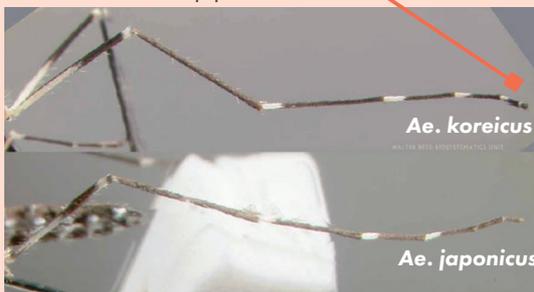


EASILY CONFUSED SPECIES

Aedes koreicus

Presence of a complete basal band on hindtarsomeres 4 & 5, unlike *Ae. japonicus*

Lines of silver-white scales on a blackish/brown background on the scutum



Ae. koreicus

Ae. japonicus

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Subgenus *Stegomyia*

Aedes albopictus

Aedes cretinus

Aedes aegypti

Specific patterns of black and white scales on the scutum



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