

Aedes geniculatus



Aedes geniculatus (Olivier, 1791) hibernates in the larval stage in southern areas, and in the egg stage in northern areas.

Eggs are resistant to both frost and desiccation. Hatching occurs asynchronously during the 2 or 3 months after egg laying sites are flooded with water.



Distribution around the Mediterranean Basin / *Aedes geniculatus* is a Palaearctic species which is wide spread in Europe. The species is also reported in Maghreb, South Caucasus and Middle-East.



Distribution of *Ae. geniculatus* - 2018 / MosKeyTool



Vector surveillance /

The species is not considered as an important vector and thus is not targeted by surveillance. However, the species is regularly found when surveillance of invasive species (*Ae. albopictus*, *Ae. japonicus*) is implemented with ovitraps and can be confused with these species.



Larval habitats / The species grows mainly in tree holes and open tree stumps but it can also colonize small collections of water like rock holes or ground pools. Breeding sites are usually rich in organic matters and tannins.



Host preference / Feed on various mammals, including man and cattle, but also birds and reptiles.

Biting behaviour / Females are crepuscular and day biters. In some areas, especially in southeastern Europe, the species can constitute a nuisance for human in forested areas.

Potential vector of:

Ae. geniculatus is not considered as a mosquito of medical importance.

In experimental studies, the species was susceptible to infection by West Nile virus, *Dirofilaria immitis* and *D. repens*.



References, tools /

The mosquitoes of Europe. An identification and training programme. Schaffner F, Angel G, Geoffroy B, Hervy JP, Rhaïem A, Brunhes J. Montpellier: IRD Éditions. 2001.

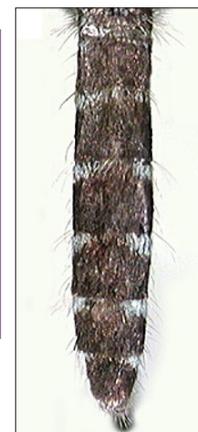
Mosquitoes and Their Control, 2nd ed. Norbert Becker, Dusan Petric, Marija Zgomba, Clive Boase, Madon Minoo, Christine Dahl, Achim Kaiser, Springer, 2010.

Morphological description /

Tergites with basal pale band.

The pale basal band of tergite IV can be either medianly thinned or broken.

A thinned pale band is a characteristic criterion of the species.



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Femurs with a distal white spot. This is a characteristic criterion of the species. Tibias and tarsomeres are entirely black.



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Scutum with continuous bands with silvery and dark scales is also quite characteristic



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Easily confused species

The subgenus *Dahlia* is only represented by 3 species, morphologically very close. Female is morphologically impossible to differentiate from *Ae. gilcolladoi*. However, *Ae. gilcolladoi* is only reported in Spain. Adults are easily confused with *Ae. echinus* and differs from this latter species by the absence of the pale scale patch on the metamer.

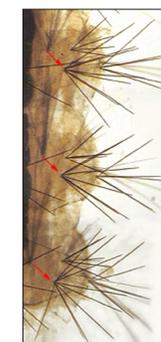
It is possible to distinguish both species at the larval stage thanks to the branching of most setae present on abdominal segments IV to VII. Indeed, *Ae. echinus* (as does *Ae. gilcolladoi*), presents rigid setae usually with 7 branches or more whereas *Ae. geniculatus* has rigid setae with less than 6 branches.



Scale patch absent © WRBU



Ae. geniculatus.
Abdominal setae on segments III to V with less than 6 branches
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Ae. echinus. Most of the setae with 7 branches or more © IRD