

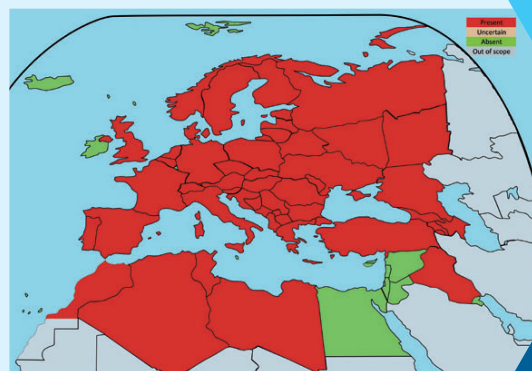


*Aedes vexans* is a cosmopolitan species, present on every continent especially throughout Holarctic and Oriental regions. It is a multivoltine species breeding preferentially in temporary water bodies after flooding events. Its development cycle is fast. Adult activity occurs during spring and summer and can constitute an important nuisance due to a periodic extreme abundance and aggressive human biting behaviour. Adults can migrate long distances and create nuisance up to 40 to 50 km away from their breeding sites. Overwintering occurs at the egg stage.

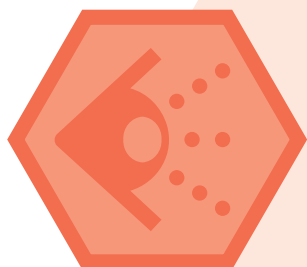


## Distribution around the Mediterranean Basin

*Aedes vexans* consists of 3 subspecies in East Asia (*Ae. vexans niponii*), in Africa (*Ae. vexans arabiensis*) and in Europe (*Ae. vexans vexans*). The latter taxon is widely distributed in Central Europe, Scandinavia and throughout the Mediterranean basin.



Distribution of *Aedes vexans*  
2018 / MosKeyTool



## Vector surveillance

Surveillance of larvae in productive breeding sites can be implemented as this mosquito can generate strong nuisance.

## Vector control

- Environmental management (draining, planting trees, filling,...)
- Use chemical or biological insecticides, including *Bacillus thuringiensis israelensis*.
- Personal protection against mosquito bites.

## Transmission

### Proved vector of:

- Tahyna virus
- *Dirofilaria immitis* (dog heartworm)  
In Africa, *Ae. vexans arabiensis* has been involved in Rift Valley fever virus transmission

### Potential vector of:

- West Nile virus
- Eastern equine encephalitis virus
- American *Aedes vexans* mosquitoes are also competent for Zika virus



## 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**, 2<sup>nd</sup> ed. Norbert Becker, Dusan Petric, Marija Zgomba, Clive Boase, Madon Minoo, Christine Dahl, Achim Kaiser, Springer, 2010.

# Aedes (Aedimorphus) vexans

Common name: (inland) Floodwater Mosquito



## MORPHOLOGICAL DESCRIPTION

Easily recognized by terga IV-V with pale bilobed basal bands

However, among the *Ae. vexans* population of Mediterranean Africa, ornamentation of abdominal tergites can be formed of continuous white bands



Tarsi with pale basal rings



Scutum with an indefinite pattern of yellow only or yellow and cream scales



**Body length: 7 mm**



**Biting behaviour:** This species is one of the most fierce day biters of humans. Females bites throughout the nycthemeral cycle, particularly at dusk.



**Immature habitats:** Immatures are found in inundated areas such as floodplain of river or lakes with fluctuating water levels, with or without vegetation. In Europe, the species is commonly found with *Ae. sticticus*.

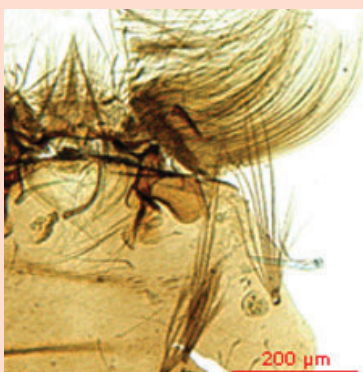


**Host preference:** Feed on man and cattle.



## EASILY CONFUSED SPECIES

Adults are easily identified based on the above-mentioned criteria. However, larvae are close to the species of *Cinereus* group and can be distinguished by the frontal cephalic setae inserted on a zig-zag line, and with 2-3 branches.



**Aedes cinereus**  
F. Schaffner Coll.

**Aedes vexans**  
F. Schaffner Coll.

