# Anopheles sacharovi

## Family Culicidae

## Subfamily **Anophelinae**



Anopheles sacharovi is an important malaria vector of the Maculipennis complex across Europe, and remains principal vector in Turkey. It has been the target of a number of focused anti-vector campaigns across its range including Israel, Greece, Armenia and Turkey. Yet this species still persists in all areas. Anopheles sacharovi is highly plastic in both adult behaviour and its use of larval habitats.



# Distribution around the Mediterranean Basin

Historically it is a known vector of malaria in Armenia and a proven vector in Turkey, Syria, northern Iraq and Iran but also Greece. It is also regarded as the principal potential vector in regions of southern Europe. Anopheles sacharovi was responsible for malaria transmission in Greece in 2011.



Distribution of Anopheles sacharovi 2018 / MosKeyTool



Anopheles sacharovi is a target species for surveillance in Armenia and Turkey.

#### Vector control

The large-scale decline of malaria vectors in Italy in the 1920s and 30s employed a variety of strategies, including land reclamation (involving digging drainage channels to drain swamps), larviciding (including aerial treatments), and huts to trap overwintering females.

Larvae are difficult to control due to numerous aquatic habitats.

#### **Transmission**

Proved vector of:

#### **Human malaria parasites**

(Plasmodium falciparum and P. vivax)





### References, tools

### **ECDC Factsheet Anopheles sacharovi:**

http://ecdc.europa.eu/en/healthtopics/vectors/mosquitoes/pages/anopheles-sacharovi-factsheet.aspx

## **Anopheles (Anopheles)** sacharovi

# **NORPHOLOGICAL DESCRIPTION**

The only member of the Maculipennis morphologically identifiable





Lack of a large pale median band on the scutum



Absence of a patch of clear scales on the wing fringe



## **Body length: 7 mm**



Biting behaviour: Adult females bite humans indoors and outside. Majority feed in the evening.



Immature habitats: In the Mediterranean area it breeds typically in large brackish marshes though larvae may at times be found in a wide variety of habitats.



Host preference: Highly anthropophilic but also feed on a wide range of hosts including sheep, goats, cattle, horses, birds, rabbits, rodents, and domestic pets.



## **EASILY CONFUSED SPECIES**

### Anopheles maculipennis s.l.



The species belonging to the Maculipennis complex -except An. sacharovi- have a patch of clear scales on the extremity of the wing fringe, and a large pale medium band on the scutum.

