



Joint Services Health Unit

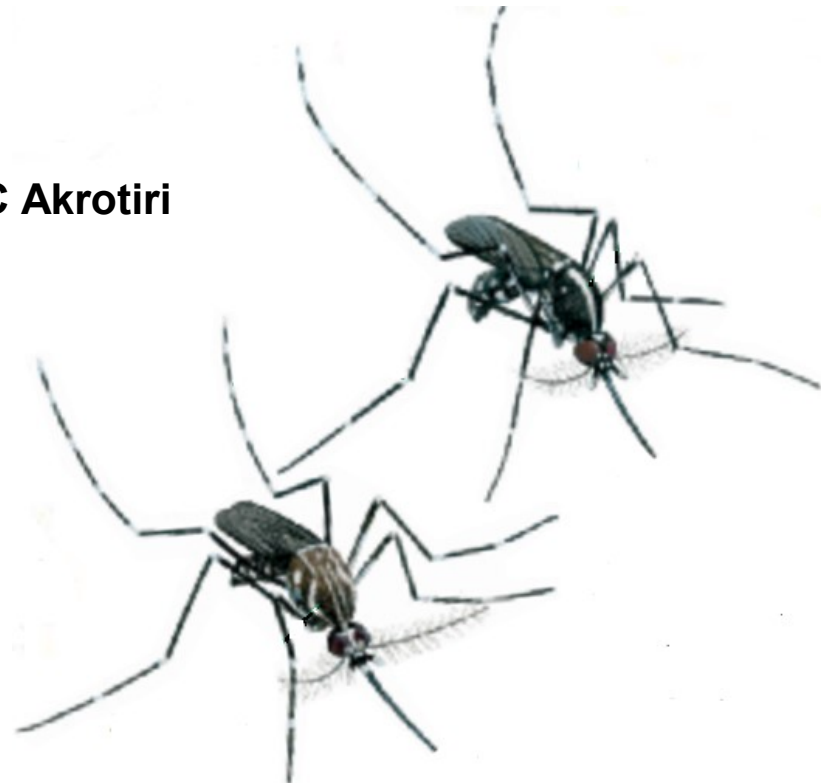


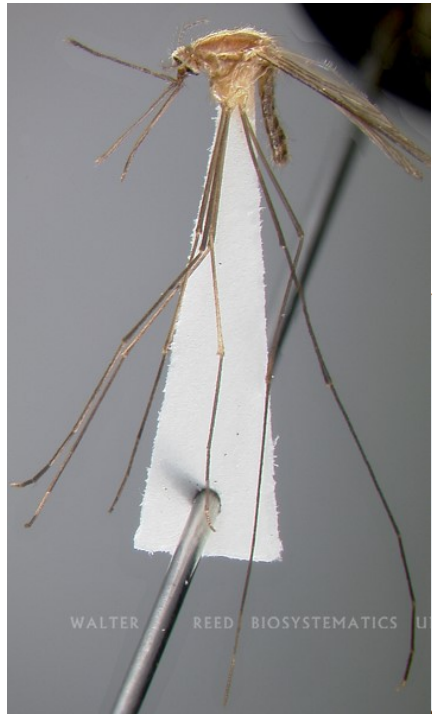
Researching Invasive Species of Kýpros

Invasive mosquitoes- Are we doing enough?

Capacity building workshop 31 August 2017, AEEC Akrotiri

Angeliki F Martinou PhD, DIC
Head Entomologist
Joint Services Health Unit
RAF Akrotiri BFPO 57



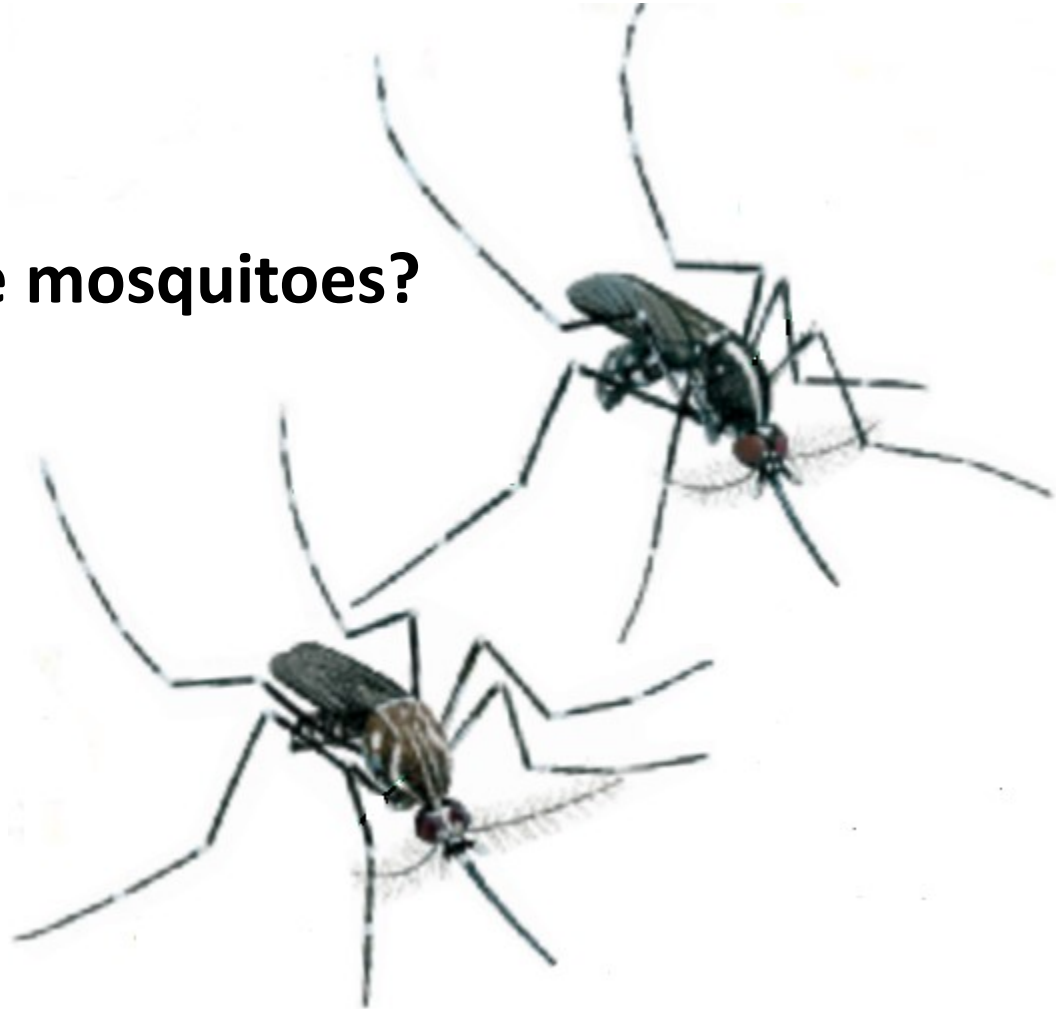




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Why bother with invasive mosquitoes?





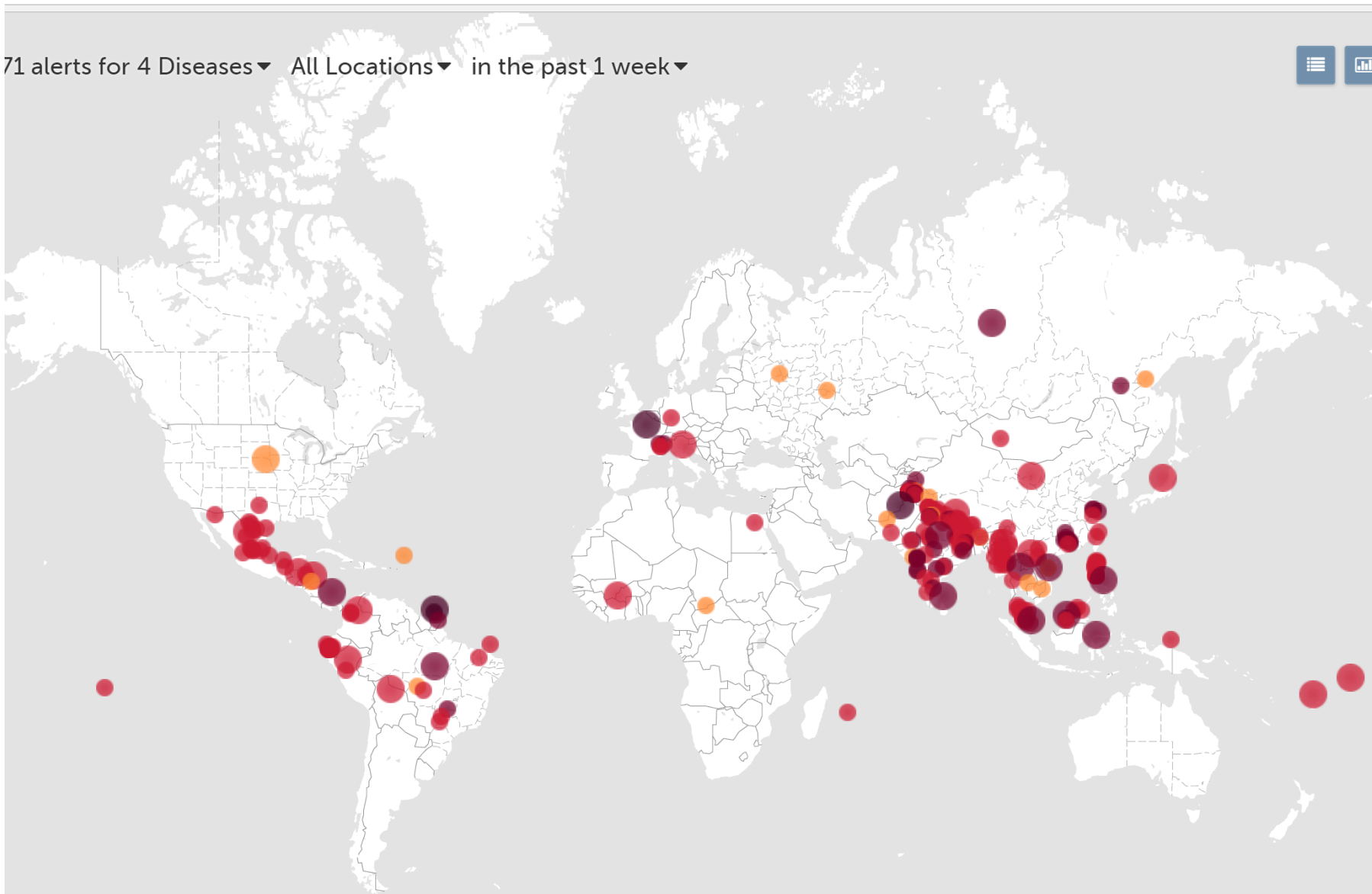
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www.healthmap.org/en/

Last week's outbreaks

Zika, Chikungunya, yellow fever, dengue fever

71 alerts for 4 Diseases ▾ All Locations ▾ in the past 1 week ▾



How did the non endemic vector borne diseases travel around the world?



Invasive mosquitoes



NO BORDERS

Six new disease vector species found in Europe since 1990:

- Ae. albopictus*: 20 countries
- Ae. aegypti*: Madeira, Netherlands
- Ae. koreicus*: Belgium, Italy
- Ae. atropalpus*: Netherlands
- Ae. triseriatus* : France





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ECDC vector maps April 2017

Countries/Regions not viewable in the main map extent*



Malta



Monaco



San Marino



Gibraltar



Liechtenstein



Azores (PT)



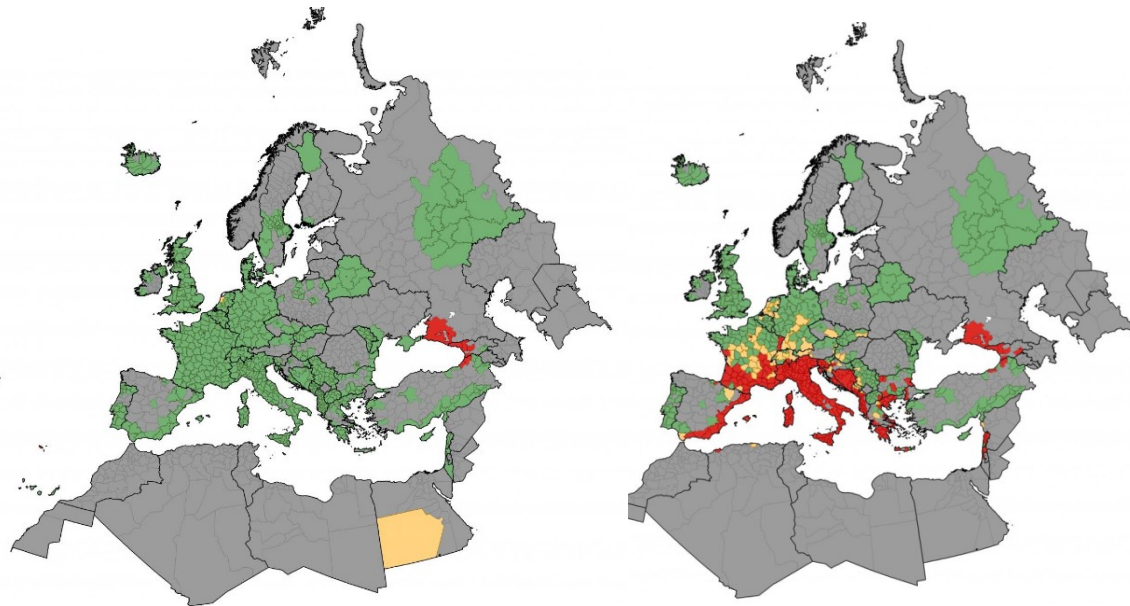
Canary Islands (ES)



Madeira (PT)



Jan Mayen (NO)



Countries/Regions not viewable in the main map extent*



Malta



Monaco



San Marino



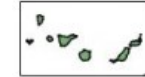
Gibraltar



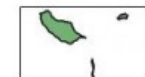
Liechtenstein



Azores (PT)



Canary Islands (ES)



Madeira (PT)



Jan Mayen (NO)



Legend

- Established
- Introduced
- Absent
- No data
- Unknown



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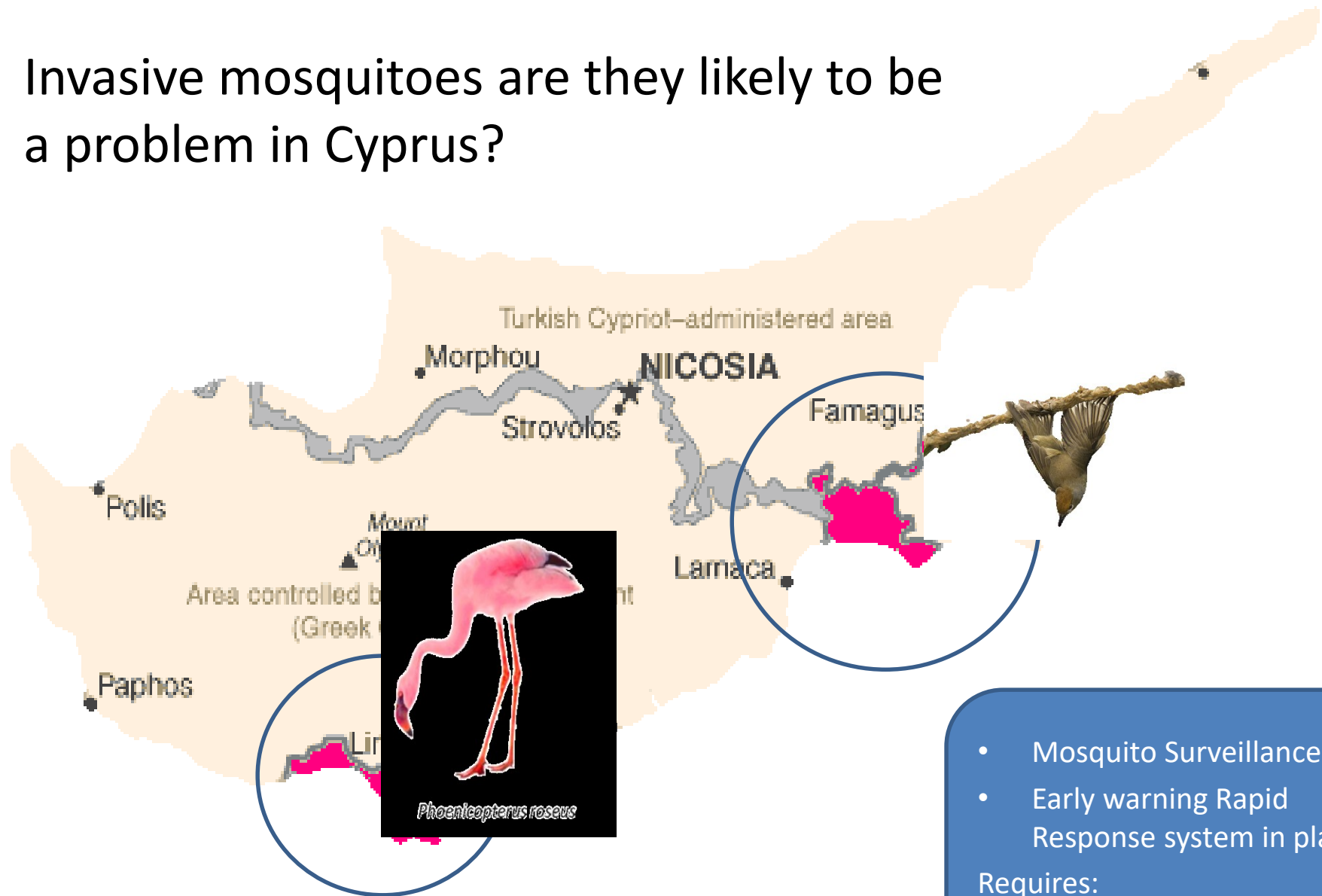
Container species



Invasive *Aedes* mosquitoes

<i>Ae. aegypti</i>	<i>Ae. albopictus</i>	<i>Ae. atropalpus</i>	<i>Ae. J. japonicus</i>	<i>Ae. korakus</i>	<i>Ae. triseriatus</i>
A. Silver scales in a shape of a lyre	A. Median silver-scale line	A. Mixed yellow and dark scales, dark median stripe	A. 5 stripes of golden scales, submedians long	A. 5 stripes of golden scales, submedians short	A. Broad median dark-scale band, sides with silver scales
B. Pale lateral marks and thin basal bands	B. Thin basal pale bands, laterally enlarged	B. Pale basal bands	B. Pale lateral and median patches	B. Pale lateral and median patches	B. Pale lateral patches
C. Segment V entirely white	C. Segment V entirely white	C. Inter-articular pale bands S. V white	C. Segments IV & V black	C. Segments IV and V with basal pale bands	C. Tarsi entirely dark

Invasive mosquitoes are they likely to be a problem in Cyprus?



- Mosquito Surveillance
- Early warning Rapid Response system in place

Requires:

Collaboration, co-ordination,
good coverage



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Extensive surveillance network within SBAs with a range of tools



BG sentinel trap



Gravid trap



CO₂ trap



Mosquito magnet





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Can we do more?

- Collaborative between public health authorities and other stakeholders
- Monitoring for vector borne diseases
- **Raising awareness**
- **Citizen science initiatives**



Mosquito Alert



REPORT



BREEDING SITE

REPORT



MOSQUITO

MY MAP



VALIDATE



PHOTOS



NOTIFICATIONS

0



MISSIONS

0

MOSQUITO



ALERT



ZanzaMapp.it



MOSQUITO ALERT

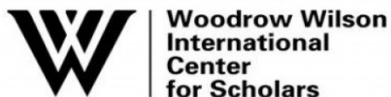


muggenradar.nl

PRESS RELEASE

Pioneering UN Backed, Citizen Led Alliance against Mosquito Borne Diseases Joins Global Fight to Save 2.7 Million Lives Every Year

Initiative Empowers National Networks, Stakeholders and Governments to Generate and Access Real-time Data and Tools through UN Electronic Platform 'Environment Live'



Celebrity Videos Sports Πολιτική Ελλάδα Διεθνή Police Energy Gold News Health

REPORTER

Αναζήτηση...

Blue Air

15% ΕΚΠΤΩΣΗ
Λάρνακα → Βουκουρέστι
Κλουζ-Ναπόκα
Τρανσυλβανία



Διεθνή

Πρωτοβουλία ΟΗΕ κατά των κουνουπιών: Ευθύνονται για το θάνατο 2,7 εκ. ανθρώπων ετησίως

08/05/2017 16:53



ΠΟΗ ΕΙΔΗΣΕΩΝ

- 12:12 • **Ελλάδα:** Λέσβος: Φώναζε τα ονόματα παιδιών της ενώ εκείνα καίγονταν ζωντανά
- 12:04 • **Διεθνή:** Δραματικές στιγμές για δέκα ελληνικά χωριά στην Αλβανία (pics)
- 12:02 • **Ποδόσφαιρο Ελλάδα:** «Κάτω από εκατομμύριο ο Γιαννιώτας»
- 11:54 • **Police Reporter:** Αθώος δηλώνει ο Χρίστος Γεωργίου για τις πινακίδες
- 11:30 • **Celebrity People:** Ο Calvin Harris ο ακριβοπληρωμένος Dj!
- 11:17 • **Celebrity People:** Στα δικαστήρια Ju Theroux & Jennifer Aniston!
- 11:10 • **Πολιτική:** Κυβέρνηση: Να δούμε αν θα κάνουν πράξη αυτά που λένε για τους Μαρωνίτες
- 11:09 • **Ποδόσφαιρο Διεθνή:** Επιστρέφει δυναμικά για Ντεμπελέ η Μπαρτσελόνα
- 11:03 • **Celebrity Agenda:** Septemberfest - Nicosia Beer Fun Festival 2017

Mosquito species...pptx

Bicout_Ludwig_ER...pdf

Bicout_Ludwig_ER...pdf

2305 Invasive spec...pdf



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Thank you very much

