

General organization for veterinary services

Overview on Vector-borne diseases in Egypt



OIE Regional meeting on Vector-borne diseases
in North Africa (3 December 2020)



Introduction

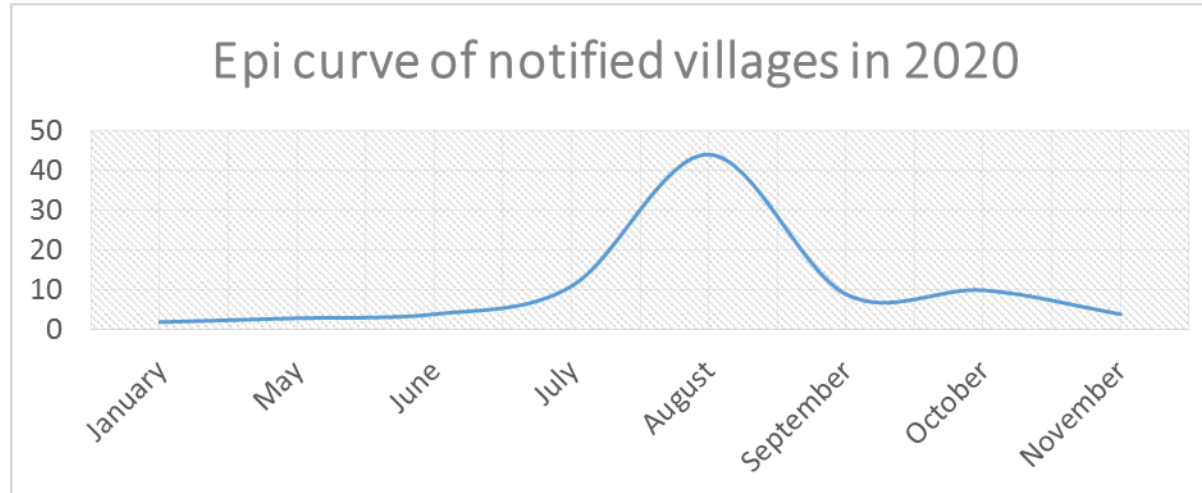
- Egypt is endemic with **Lumpy Skin Disease (LSD)**
- Some VBDs representing a risk of introduction/reemergence:
 - Rift Valley Fever (RVF)**
 - Blue Tongue (BT)**



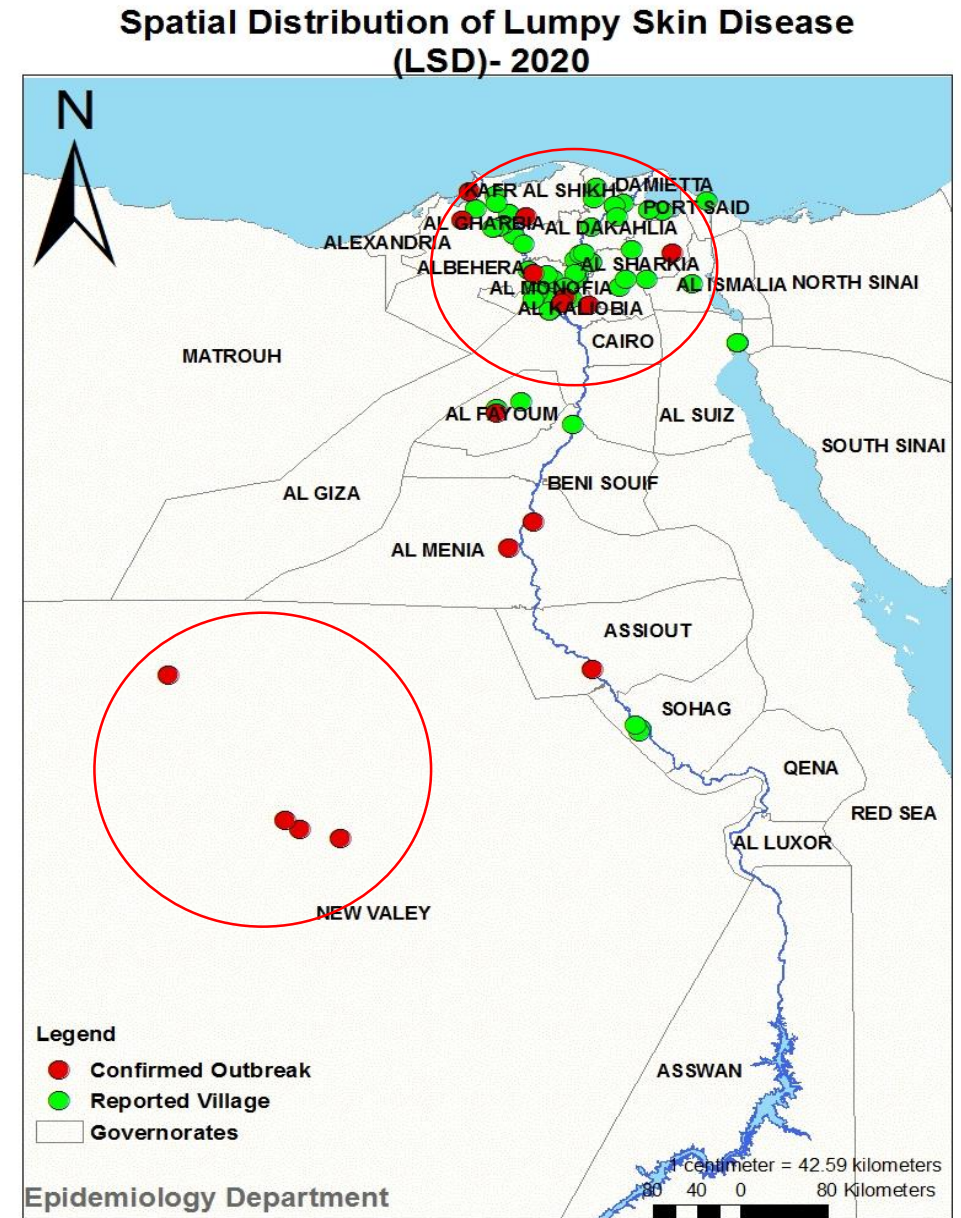
LSD

Current situation Of LSD 2020

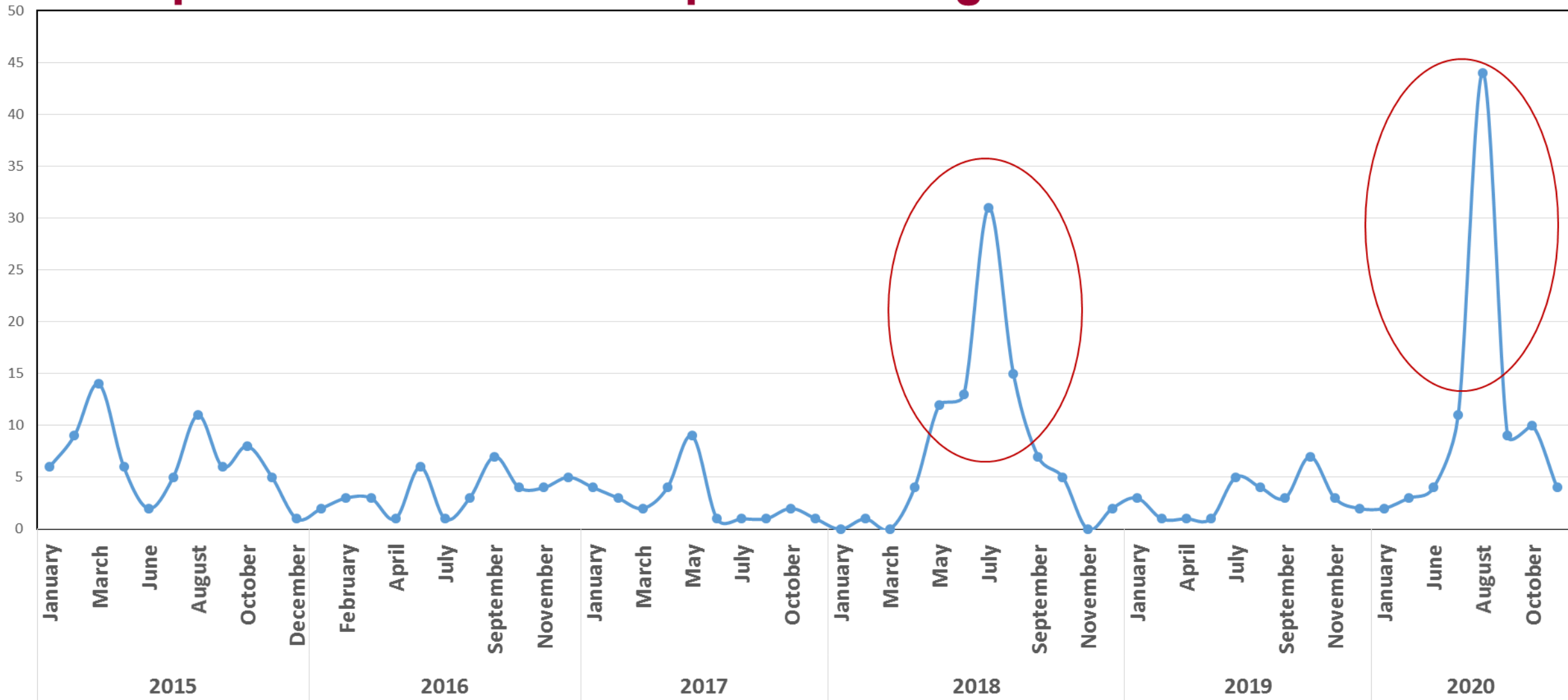
- In 2020 the Suspicion LSD were 87 notifications with 17 confirmed outbreaks which much higher than 2019 that was 30 notification
- Most of cases focus in Delta, Northern east region and Southern west regions



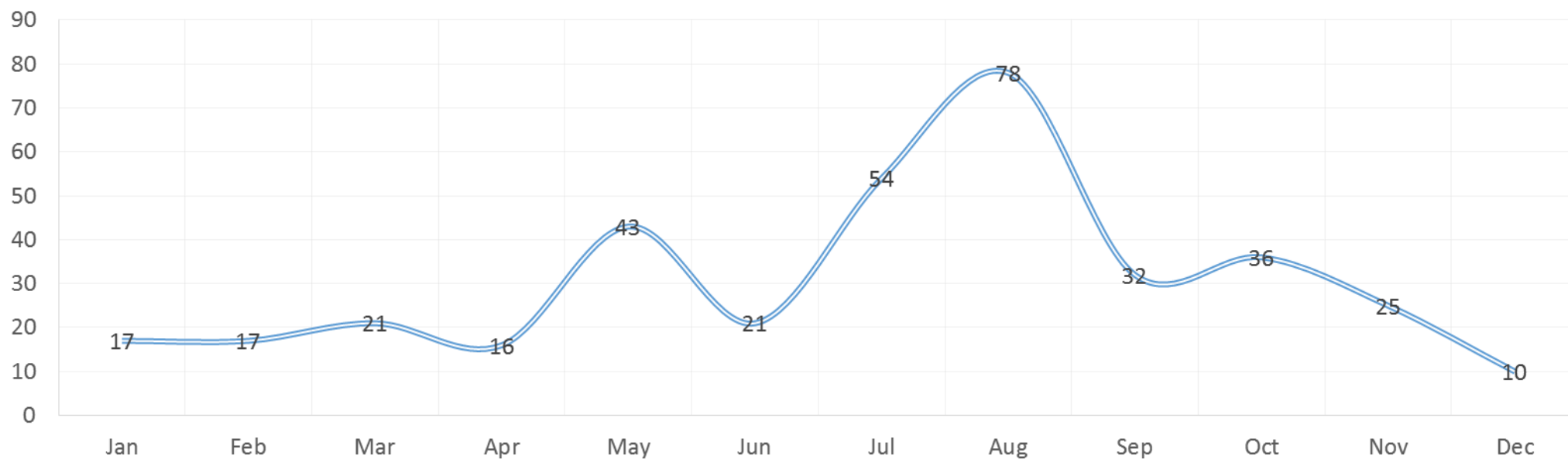
The Epi curve showed that the most notified villages between July and September with highly increase in August



Epi curve of LSD for reported villages 2015-2020



SEASONAL TREND IN EGYPT OF LSD 2015-2020



The most predominate season for LSD is Summer season / vector season

Active Surveillance for LSD 2020

- In August 2020 a **hazard specific surveillance for LSD** has conducted in **27 governorates**, on clinical and case definition of LSD

Number of visited villages

3883

Number of visited farm /
household

67425

Number of villages
corresponding to case definition

40



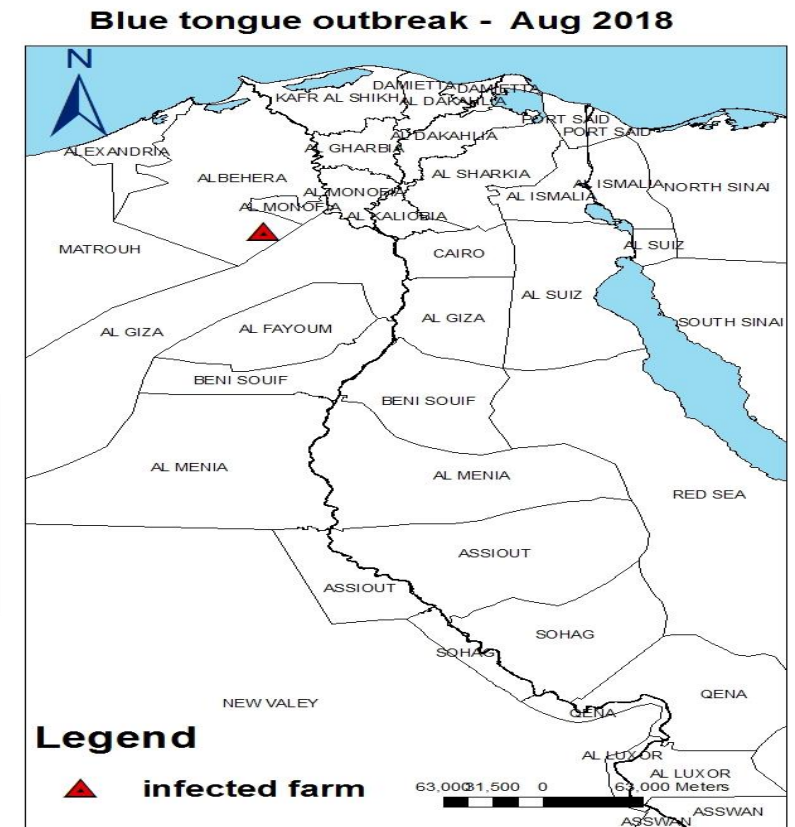


BT

Current situation Of BT

- In 2018 an outbreak limited to one zones, in cattle Farm at Wadi Elnatron district, Al Buhayrah governorate
- Started 30 Aug 2018, resolved 26 Nov 2018 (submitted to OIE 11 Mar. 2019)
- Confirmed by real-time PCR as serotype 4
- Date of previous/last occurrence 1974.

Species	Susceptible	Cases	Deaths
Cattle	484	70	35



Active Surveillance for Blue tongue disease 2018-2019

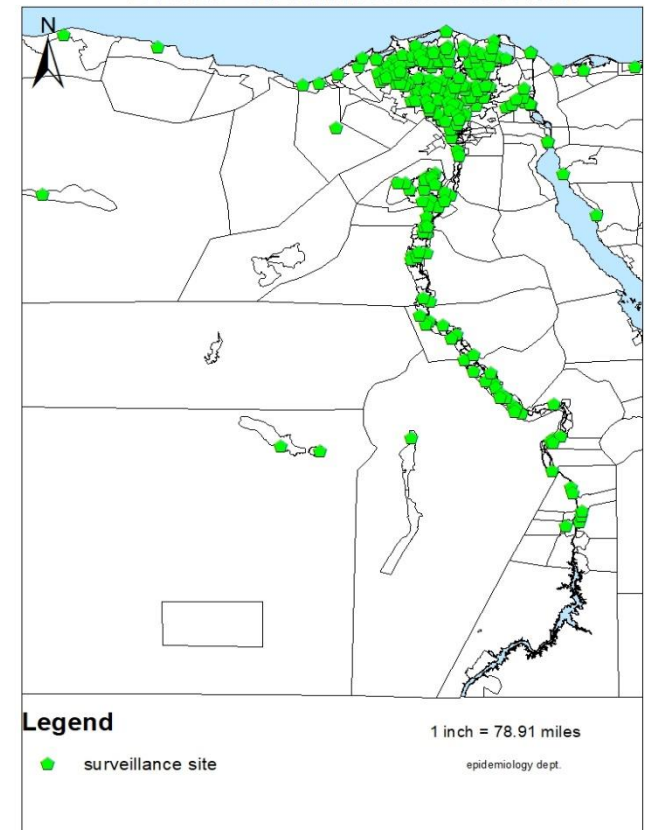
- In November 2018- jan 2019 a nation wide Sero- surveillance was conducted among large and small ruminants in addition to antigen detection – samples from 283 village / farm distributed allover Egypt

Total number of samples
3963

Number of samples of cattle
2049

Number of samples of sheep
1914

BT Sero -Surveillance sites 2018-2019





RVF



Current situation Of RVF

- No active cases since 2004
- In 2017 the Epi - study in collaboration with CReSA institute , Barcelona, Spain to conduct a risk map of RVF. The study published under title “ Understanding the legal trade of cattle and camels and the derived risk of Rift Valley Fever introduction into and transmission within Egypt”

<https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0006143>

- According to the recommendation from the above mentioned study, A risk based surveillance was conducted in 2017 for detection of RVFV during an inter-epidemic period (IEP) in some Hotspot Areas of Egypt by collection of 1647 samples from 22 governorates

General Measures for control Vector-borne diseases in Egypt

- Surveillance for Early detection or estimation of pattern of diseases
- Massive vaccination against LSD, Sheep Pox, RVF
- Vector Control (spray of stagnant water, canals and farm at risk with pesticides)
- Quarantine measures at borders for imported animals
- Strengthen the measures to control smuggling animals
- Awareness (Circular letters, posters, campaigns.....)
- Cooperation between veterinary, health, and environmental Authorities for Control of zoonotic vector born diseases through :
 - Regular One health platform meeting (Multisector) ensure good communication for surveillance data between national authorities
 - Joint outbreak investigation missions.
 - Sharing the Entomological surveillance (MOH) results (mosquito sampling and testing PCR)



*Thanks
for your attention*