

Aethina tumida (Small Hive Beetle) notified in Calabria region, southern Italy

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Aethina tumida Murray (1867)

Phylum Arthropoda

Class Hexapoda

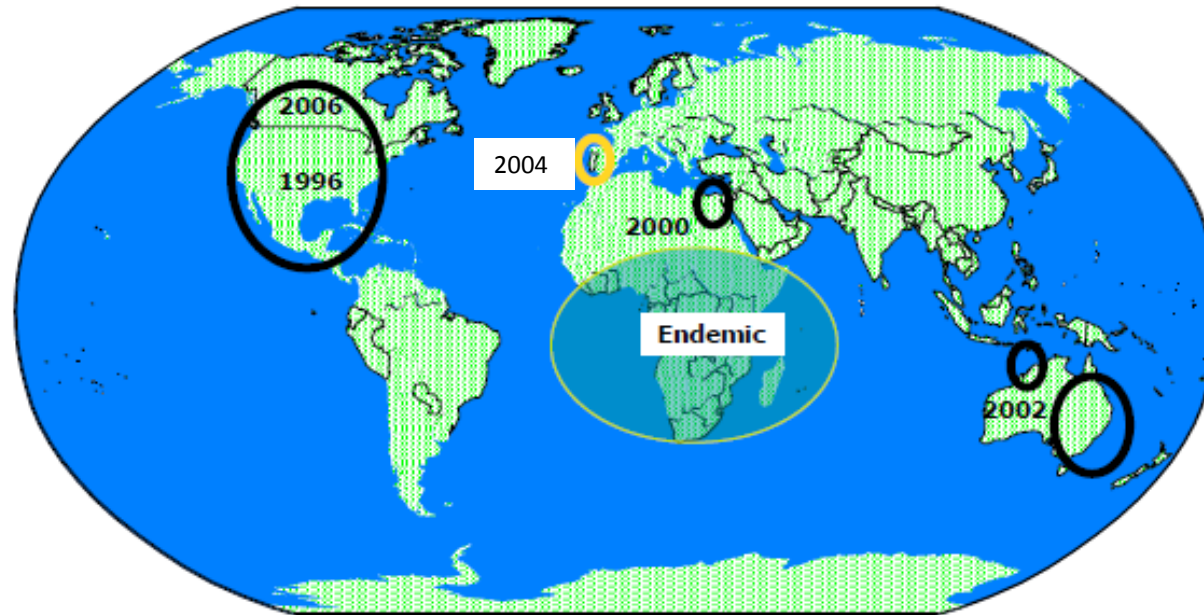
Order *Coleoptera*

Family *Nitidulidae*

Indigenous to South Africa



Distribution of *SHB*

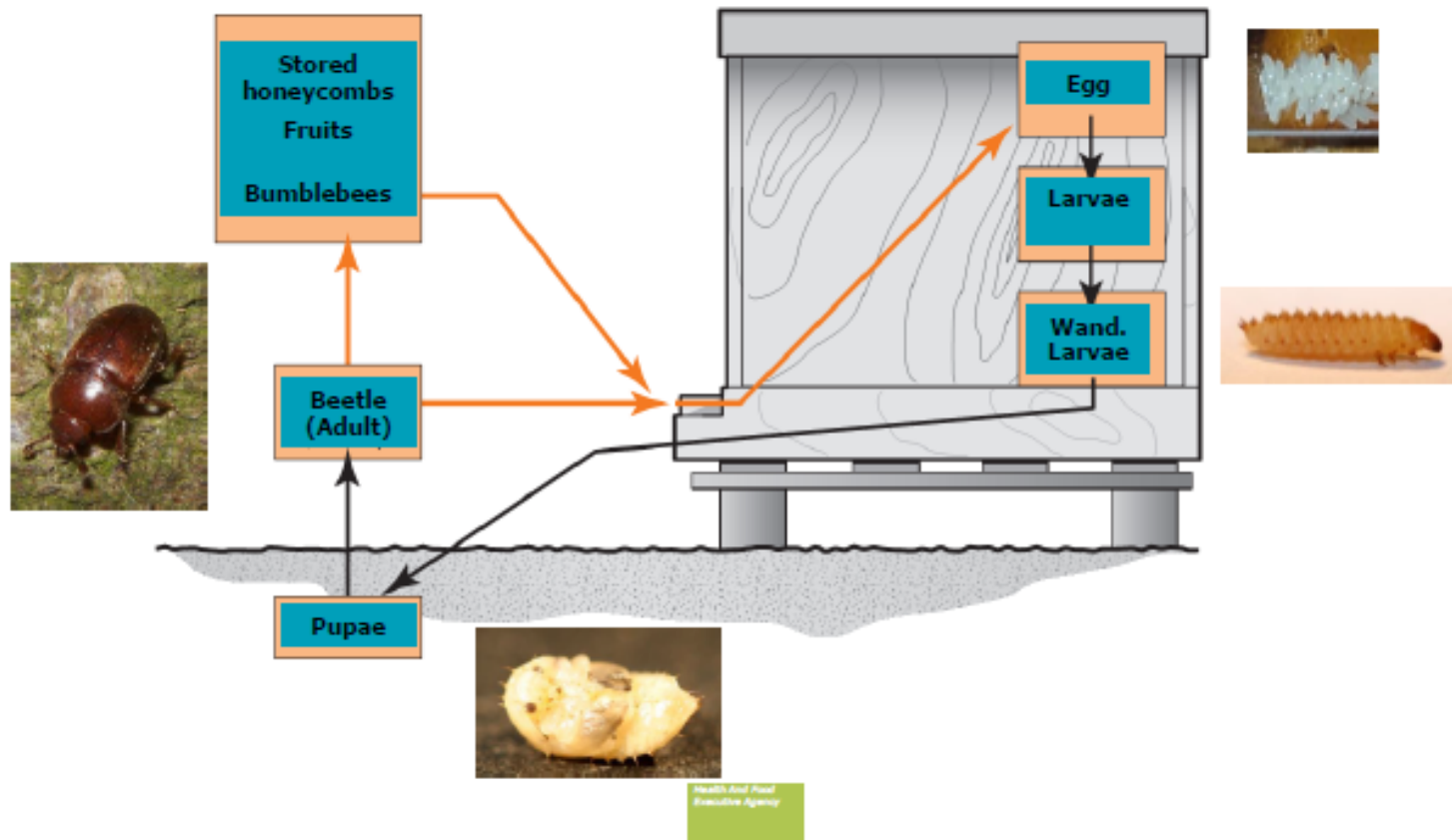


Aethina tumida

Source of infestation:

- Soil
- Fruits
- wood
- Honey bees
- Beekeeping materials

Life cycle: 27-79 days



Aethina tumida - Italy

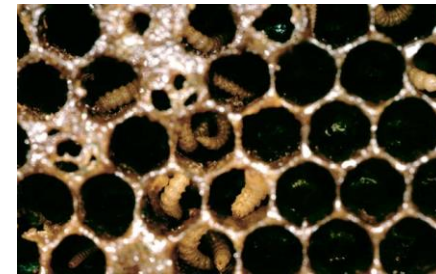
5/09/2014: first report 3 weak nuclei affected by larvae and adults, no other colonies in the same site



locality Sovereto, Gioia Tauro municipality,
Reggio Calabria province



5.09.2014: nuclei packed, killed with ethil acetate and stored at -80°C



6.09.2014: soil treatment with chlorpiriphos

17.09.2014: soil further investigated, escavated and treated with deltamethrin

Calabria region

First identification of both
larvae and adults

Locality: Sovereto

Municipality: Gioia Tauro

Province: Reggio Calabria



20 km and 100 km radius

Aethina tumida

Cronology

10.09.2014: samples of larvae and adults sent to NRL

11.09.2014: confirmation by morphological examination

12.09.2014: note of the Ministry of Health for the first actions

16-17.09.2014: confirmation by EURL based on morphological examination and PCR

Aethina tumida

17/09/2014: second outbreak in an apiary of 41 colonies
Only adults were detected (25 as a total)

locality Gallina, S. Fernando municipality,
Reggio Calabria province

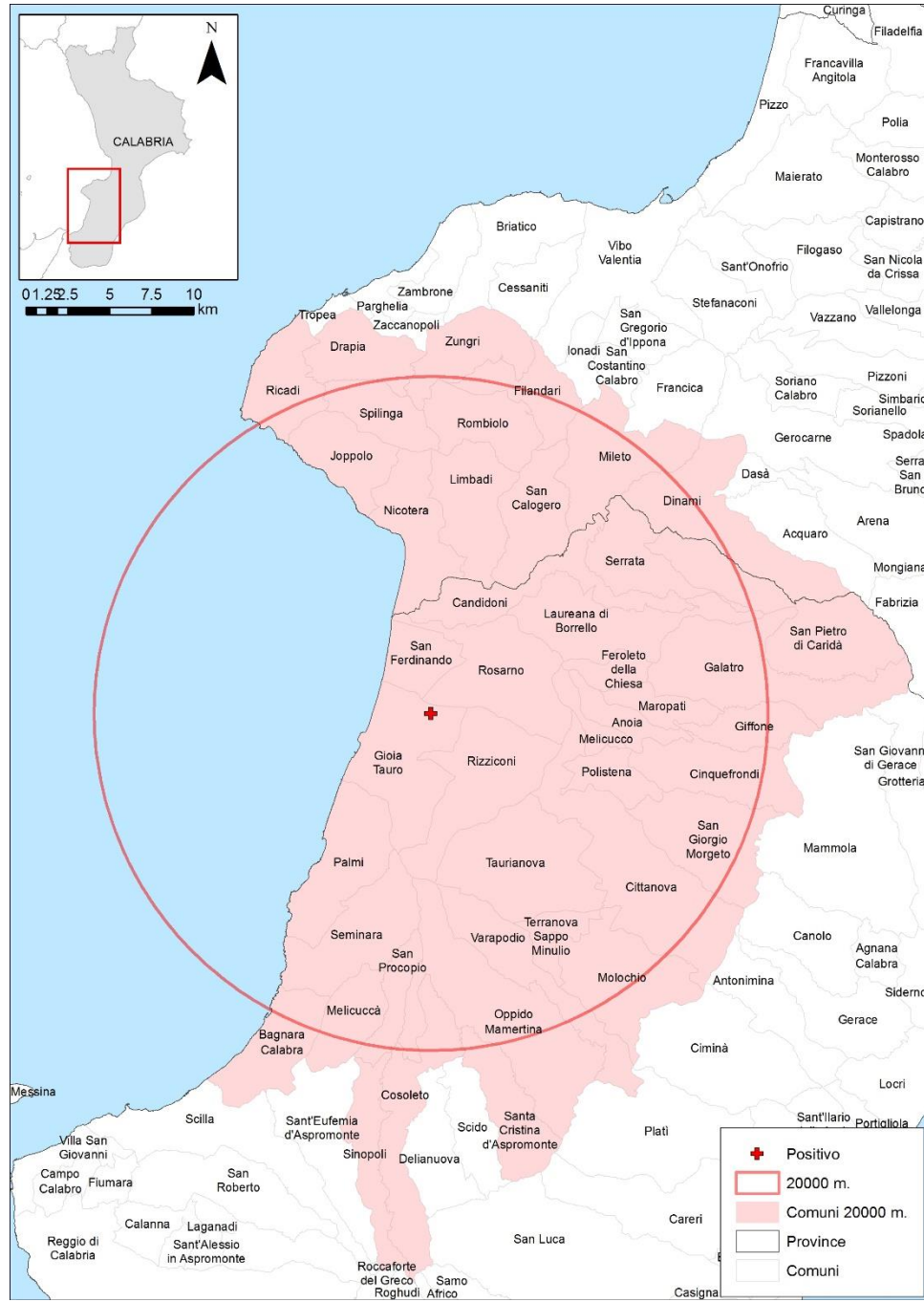
18.09.2014: OIE notification

19.09.2014: Decree of Veterinary Services of Calabria region
signed with measures directed at eradicating outbreaks and
preventing further spreading



12.09.2014

20 km radius



17.09.2014

20 km radius



4 apiaries visited with negative results in a radius of 2 km

Aethina tumida

15-18.09.2014: NRL and EURL in the area of interest

Meeting with representatives of regional and local Veterinary Services

Field inspection of the site of first detection

Field inspection of 5 apiaries in a radius of 2 km

1 of these was positive (2nd case), the remaining 4 were negative

Aethina tumida

EU Regulation

Regulation (EC) n. 1398/2003 of the Commission, of 5 August 2003,

Decision 2003/881/EC of the Commission, of 11 December 2003

Decision 2004/216/EC of the Commission, of 1 March 2004

Regulation (UE) N. 206/2010 of the Commission, of 12 March 2010

Aethina tumida

In Italy *Aethina tumida* is a notifiable disease
(Order of the Ministry of Health 20.04.2004, prophylaxis
of *Aethina tumida* and *Tropilaelaps* spp.)

Measured adopted by the Authority (Regional Order)

- Immediate notification of *Aethina tumida*
- Restriction of any movement related to honey bee colonies (IN and OUT)
- Census of apiaries and colonies
- 20 km protection zone:
 - census of apiaries
 - visit of all apiaries
 - visit of the colonies on the basis of a 5% expected prevalence
 - destruction of the infested apiaries
 - if negative, traps should be applied
 - traceability of commercial and migratory movement in and out of the zone
- Since the outbreaks are very close to the Gioia Tauro port, an investigation is in progress to trace movements of commodities from at risk areas (South Africa, USA, Australia); the port is not authorized to receive live animals



Measured adopted by the Authority

- 100 km surveillance zone
- census of apiaries
- visit of random selected apiaries
- visit of the colonies on the basis of a 2% expected prevalence
- destruction of infested apiaries
- if negative, traps should be applied
- traceability of commercial and migratory movement in and out of the zone



Thank you for your attention

