

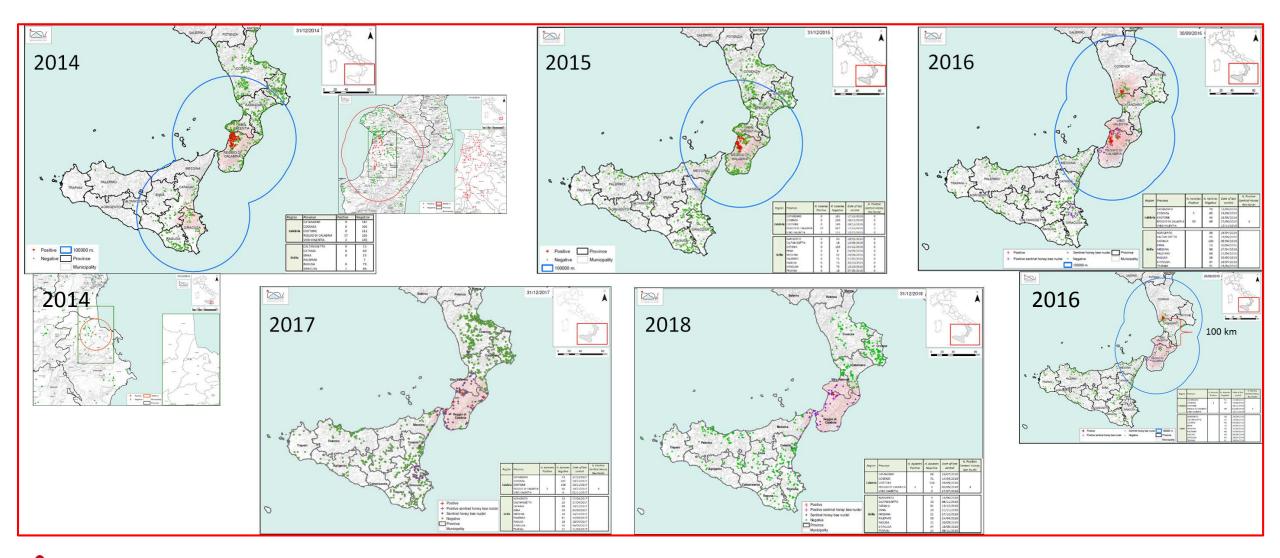
# Update on the epidemiological situation linked to *Aethina tumida* in Italy

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PAFF Standing Committee Brussels, 11-12 February 2021

#### - SHB in southern Italy: the story





## Eradication and/or containment of the infestation - General rules applied in the affected regions

Immediate notification of Aethina tumida

- Restriction of any movement related to honey bee colonies (IN and OUT)
- Census of apiaries and colonies
- 20 km (later 30 km) protection zone:
- Sentinel nuclei (as a tool for surveillance)
- visit of all apiaries
- visit of the colonies according to 5% expected prevalence (95% CI)
- destruction of the infested apiaries (@3,200 hives in 2014; @2,900 in 2015; @3,000 in 2016; 250 in 2017; 3 in 2018) and compensation
- if negative, traps are also applied
- traceability of commercial and migratory movement in the zone

#### • Surveillance zone:

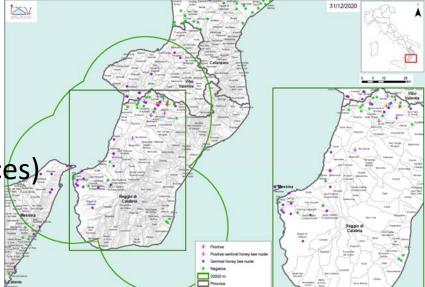
• visit of the apiaries according to 2% expected prevalence (95% CI)



#### Measures currently applied in Calabria region

- Protection zone (Reggio Calabria and Vibo Valentia provinces)
- One surveillance zone (the rest of Calabria region)

Controls:



- In the protection zone, surveillance based on sentinel nuclei and controls in apiaries according to 10% expected prevalence with 95% Confidence Interval
- Sensitivity of the analytical method (clinical inspection) = 90%
- In the surveillance zone, surveillance based on controls in apiaries according to 2% expected prevalence with 95% Confidence Interval
- Ban of «OUT» movements
- Protection zone: 28 apiaries and 42 sentinel nuclei clinically inspected in 2020
- Surveillance zone: 246 apiaries clinically inspected in 2020



#### Measures adopted in Sicily region following infested sentinel nuclei found in Villa S. Giovanni (RC) – July 2017

**REPUBBLICA ITALIANA** 

Regione Siciliana

ASSESSORATO DELLA SALUTE Dipartimento Regionale per le Attività Sanitarie e Osservatorio Epidemiologico Servizio 10 "Sanità Veterinaria"

Prot./Servizio 10/n 58299

Palermo, 13-7-2017

OGGETTO: Misure straordinarie da adottare a seguito di rinvenimento di Aethina tumida in un nucleo sentinella posizionato presso il Comune di Villa San Giovanni (RC).

AZIENDA SANITARIA PROVINCIALE

Dipartimento di Prevenzione Veterinaria UOC Servizio Sanità Animale antonino.salina@aspct.it sanitaanimale@pec.aspct.it Prot. n. 86083

Categ. Classe Fasc.

Gravina di Catania, li 24 Allegatin, 01 mappa

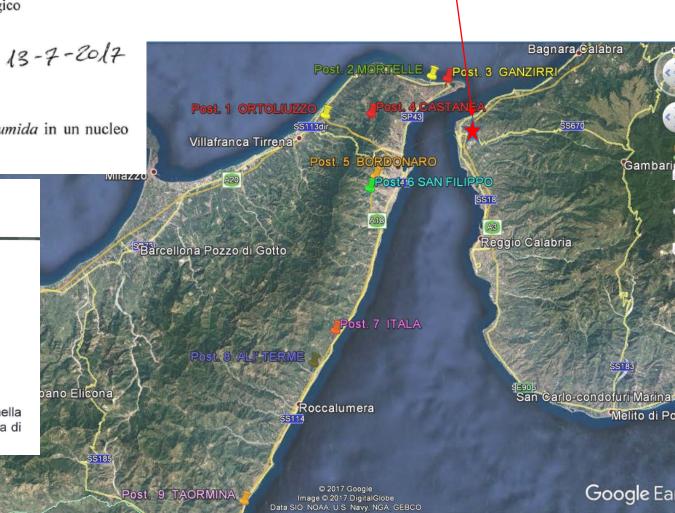
**REGIONE SICILIANA** AZIENDA SANITARIA PROVINCIALE

CATANIA

OGGETTO: Misure straordinarie seguito rinvenimento di Aethina Tumida in nucleo sentinella sito nel comune di Villa San Giovanni ( RC). Posizionamento nuclei sentinella nella provincia di Messina.



Franco Mutinelli, 11-12 February 2021



#### - Measures adopted by Sicily region in 2016 to protect beekeeping industry

REPUBBLICA ITALIANA Regione Siciliana



ASSESSORATO DELLA SALUTE Dipartimento Regionale per le Attività Sanitarie e Osservatorio Epidemiologico Servizio 8 "Sanità Veterinaria"

Prot./Servizio 8/ n. 49614

Palermo, 01-06-2016

**Oggetto**: schema di decreto concernente restrizioni alla movimentazione di materiale a rischio per Aethina tumida dalla Regione Siciliana verso la Regione Calabria.

Articolo 1.

Per quanto espresso in premessa, che qui si intende integralmente ripetuto e trascritto, è vietato introdurre in Sicilia dalla Calabria, materiale apistico vivo in genere e insetti impollinatori.

E' vietato, altresì, il trasferimento di materiale apistico vivo dalla Sicilia verso la Calabria.

No transfer of colonies from Calabria to Sicily and viceversa



#### - Commission Implementing Decision 2017/370/EU

3.3.2017	EN	Official Journal of the European Union	L 56/213						
		COMMISSION IMPLEMENTING DECISION (EU) 2017/370							
		of 1 March 2017							
amending Commission Implementing Decision 2014/909/EU by extending the period of application of certain protective measures and amending the list of areas subject to protective measures in relation to small hive beetle in Italy									
	Article 1								
Article 4 of Implementing Decision 2014/909/EU is replaced by the following:									
	'Article 4								
	This Decision sh	Sicily delisted							
Article 2									
The row 'Region of Sicily: whole Region' is deleted from the table in the Annex to Implementing Decision 2014/909/EU.									

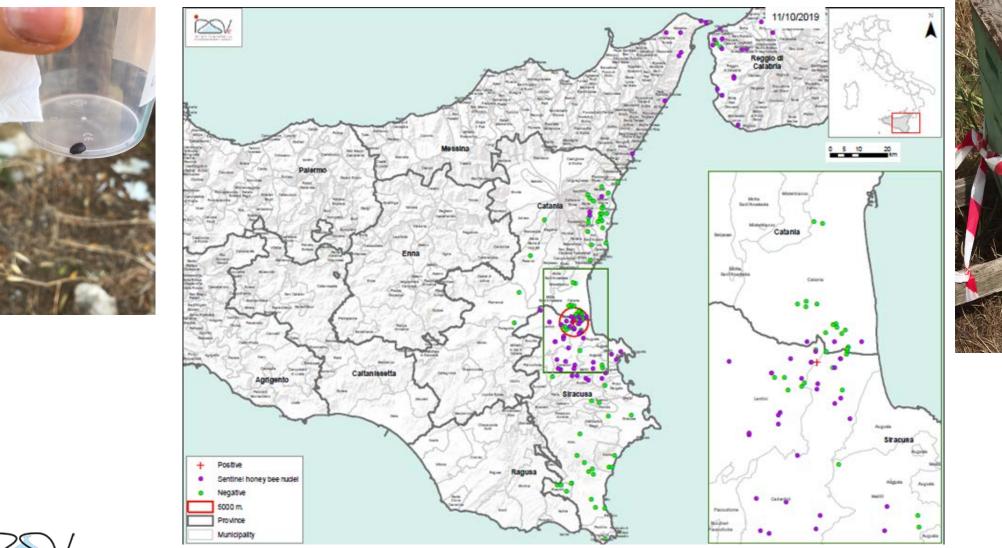


#### June 2019 – New detection of SHB in Sicily - Lentini (SR)

- 2-3 May 2019: n. 64 beehives on a truck in Villa S. Giovanni (RC) put under restriction in the framework of controls carried out in the harbour of Villa S. Giovanni (RC) by Carabinieri forestali in agreement with the Minitry of health and local veterinary services
- Sent under sanitary restriction to Maniace (CT)
- Taken by the owner to Lentini (SR) together with 13 (of 29) beehives stolen in the protection zone
  of Reggio Calabria
- 6 and 20 May 2019: clinical inspection of beehives under sanitary restriction by Veterinary Services of Catania and Siracusa
- 18 June 2019: suspicion of Aethina tumida only two adults and no larvae were found after multiple clinical inspections
- 20 June 2019: suspicion confirmed by NRL
- 22 June 2019: hives closed and colonies killed
- 23 June 2019: all colonies and hives destroyed by fire, soil treated with pyrethroids









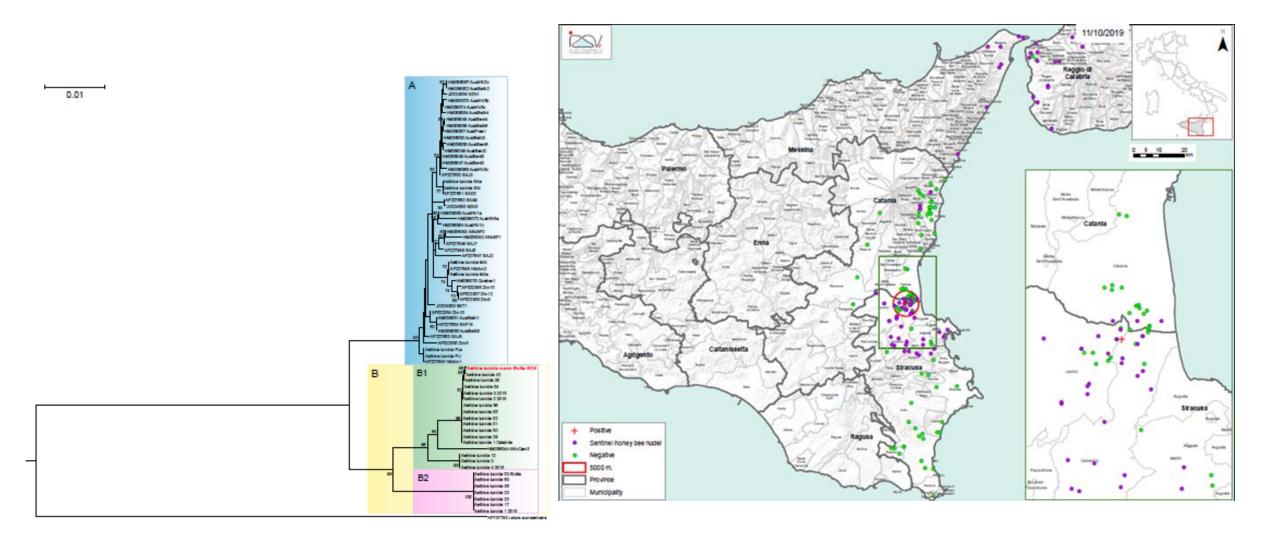
#### Strategy of control after confirmation of Lentini's outbreak

- Protection zone of 5 km radius in the province of Siracusa and Catania where 54 apiaries were registered (16 in Catania province and 38 in Siracusa province)
- The protection zone was further enlarged to <u>20 km</u> radius and a surveillance zone of <u>5 km</u> radius was also added (Decree 10/09/2019)
- <u>131 apiaries</u> were identified in the 20 km protection zone and <u>41 apiaries</u> in the surveillance zone
- All underwent clinical inspections with negative results
- 46 sentinel nuclei were established in and around the protection zone (all of them negative)

	Year	Region	Province	N. of sentinel nuclei	Period of surveillance (sentinel nuclei inspected every 15-20 days)	Result of inspection
	2019	Sicily	Catania	6	January-October	Negative
			Messina	18	January- November	Negative
			Siracusa	26	January-December	Negative
	2020	Sicily	Catania	11	January-November	Negative
			Messina	9	January-December	
<u> </u>			Siracusa	26	January-July	Negative

Istitute Zeeprofilattice

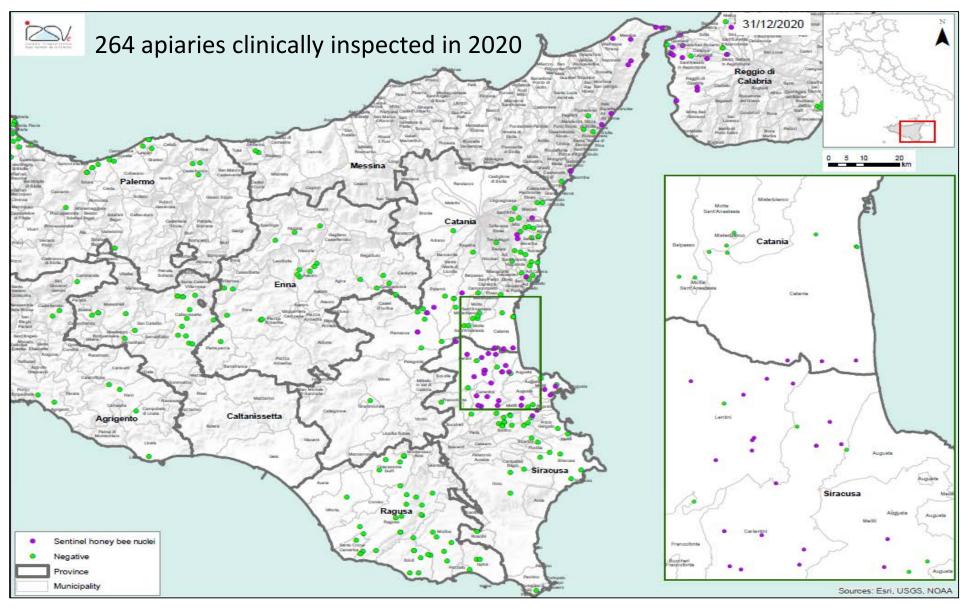
#### June 2019 – New detection of SHB in Sicily - Lentini (SR)



Newly detected beetles genetically similar to those of Reggio Calabria (2014)

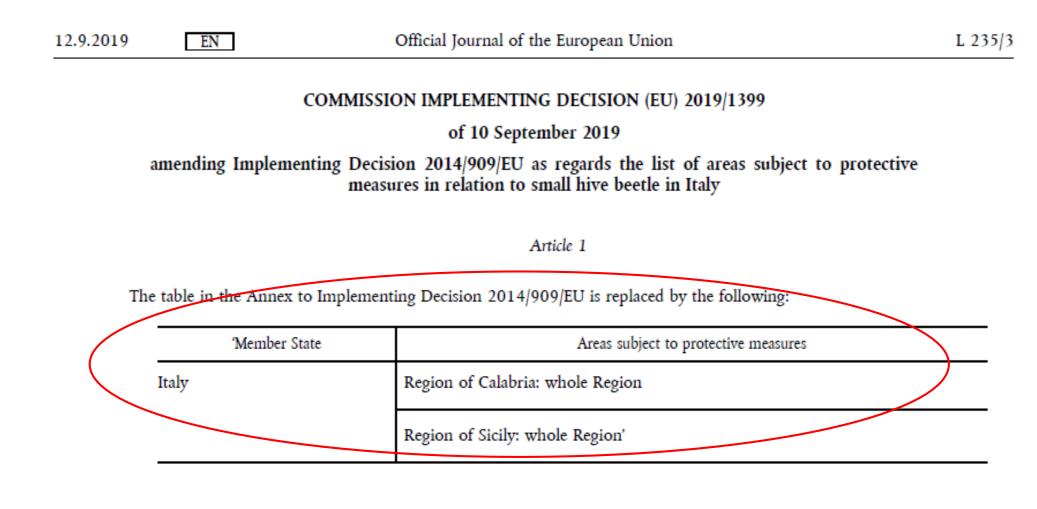


#### - Epidemiological situation: Sicily, December 31st, 2020





#### **Commission Implementing Decision 2019/1399/EU**



#### **Back to November 2014**



#### Sicily: February 2020, protection zone lifted

Codice Fiscale 80012000826 Partita I.V.A. 02711070827



#### ASSESSORATO DELLA SALUTE Dipartimento Regionale per le Attività Sanitarie e Osservatorio Epidemiologico Servizio 10 "Sanità Veterinaria"

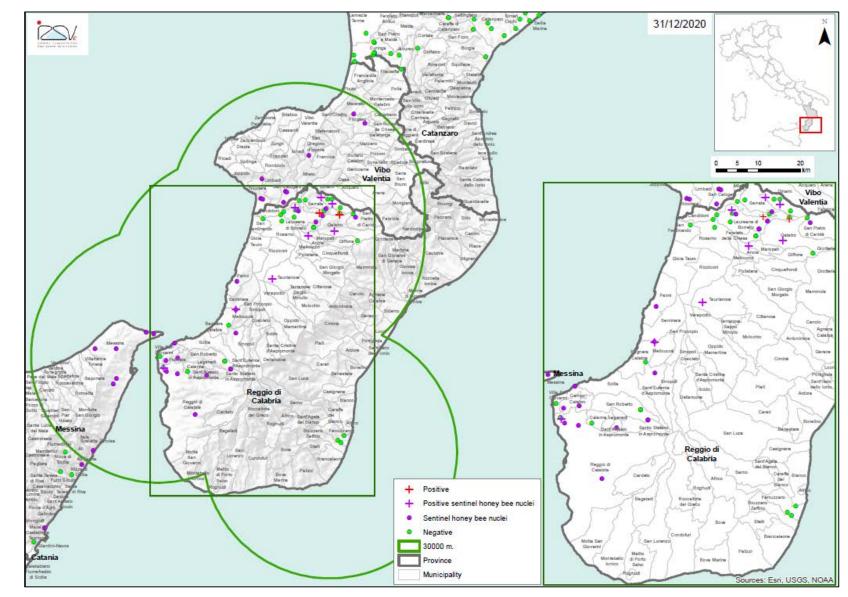
Prot. n. 6565

Palermo, 2/02/2020

Oggetto: DDG n. 164 del 20 febbraio 2020 "Revoca della zona di protezione nei confronti del parassita delle api Aethina tumida nei territori delle province di Siracusa e Catania".

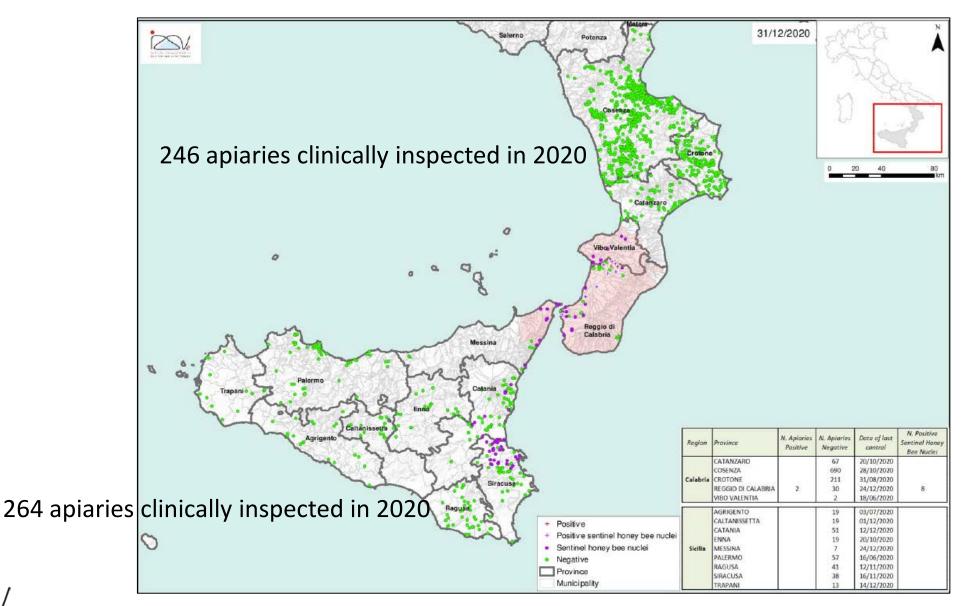


#### - Epidemiological situation: Calabria, December 31st, 2020





#### – Epidemiological situation: December 31st, 2020





## National surveillance program plus 4 ports (Genoa, Livorno, Neaples, Salerno)

National surveillance plan 2020 - non migratory apiaries randomly selected (303)



National surveillance plan 2020 migratory apiaries (risk-based) (119)





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#### Outbreaks recorded as of Febraury 2021

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Year	2014	2015	2016	2017	2018	2019	2020	2021	Total
CALABRIA	60	29	41	11	5	4	9	1	160
APIARY	57	29	40	3		1			130
NATURAL COLONY	1		1	2	1	1	1		7
SENTINEL	2			6	4	2	8	1	23
SICILY	1					1			2
APIARY	1					1			2
Grand total	61	29	41	11	5	5	9	1	162
									\ /



#### **Epidemiological situation: February 2nd, 2021**

The new case concerns a sentil nucleus in Campo Calabro (RC)

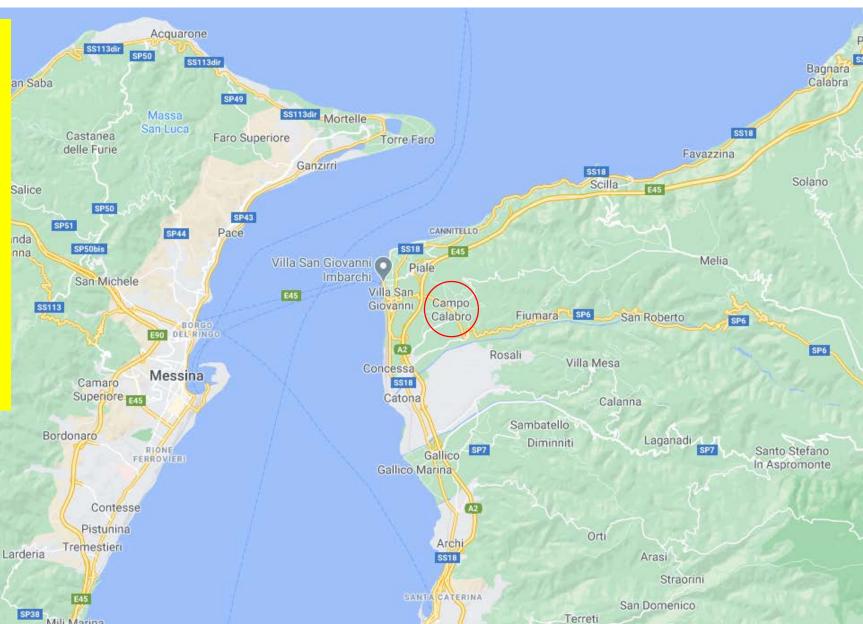
It is north-eastward to previous occurrence in Catona (RC) in October 2020

It is not located on the coast of the Strait of Messina

It does not change the epidemiological situation



Franco Mutinelli, 11-12 February 2021



### Consiglio Superiore di Sanità (Technical-scientific Advisor to the Ministry of Health) - February 2018

#### PARERE FAVOREVOLE

alla sostituzione, nella zona di protezione della provincia di Reggio Calabria, delle "Misure straordinarie di eradicazione e di indennizzo conseguente all'infestazione di Aethina tumida" che prevedono la distruzione dell'intero apiario in caso di presenza del coleottero infestante, con misure di contenimento alternative che limitino l'approccio distruttivo nei confronti degli alveari.

#### FAVOURABLE OPINION

the replacement, in the protection zone of the province of Reggio Calabria, of the "Extraordinary eradication measures and compensation resulting from the infestation of *Aethina tumida* " which provide for the destruction of the entire apiary in the event of the presence of the infesting beetle, with <u>alternative containment measures that limit the destructive approach to hives</u>.



### - Decree 10 September 2019 (Annex 1 revised on 11 October 2019) MINISTERO DELLA SALUTE

DECRETO 10 settembre 2019

Modifica e integrazione al decreto 19 novembre 2014 recante «Misure straordinarie di eradicazione e indennizzo conseguente all'infestazione da Aethina tumida». (19A05744)

(GU n.220 del 19-9-2019)

DECRETO 11 ottobre 2019 Modifica dell'allegato 1 del decreto 19 novembre 2014, recante «Misure straordinarie di eradicazione e indennizzo conseguente all'infestazione da Aethina tumida». (GU n.248 del 22-10-2019)

Protection zone = 20 km radius

Surveillance zone = at least 5 km radius

Selective stamping out in the apiary



#### - Conclusive remarks

- Veterinary Services of Calabria: active with sentinels and further actions under preparation
- Regional Government: Act of 19 November 2014 under revision in agreement with Decree 10 September 2019 (selective stamping out)
- Veterinary Services of Sicily: very active in collaboration with local beekeepers and beekeeping associations.
- <u>Controls in harbour at the Strait of Messina (Sicily Calabria) were effective to stop illegal</u> <u>movements</u>
- Request for «delisting» of Sicily region (Commission Implementing Decision 2019/1399/EU, applicable until 21 April 2021) taking into account that only one outbreak was ascertained in 2019 (following the action of Carabinieri forestali) and no further cases have been detected through the surveillance plan
- No other cases have been detected in the rest of the Italian territory based on the national surveillance plan



### Thank you for your attention

http://www.izsvenezie.com/aethina-tumida-in-italy/