

# “Small hive beetle in Italy: update and surveillance program”

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STANDING COMMITTEE ON PLANTS, ANIMALS, FOOD AND FEED  
Section: Animal Health & Welfare Controls and import conditions

Brussels, 3 May 2016

# First identification of both larvae and adults

When:

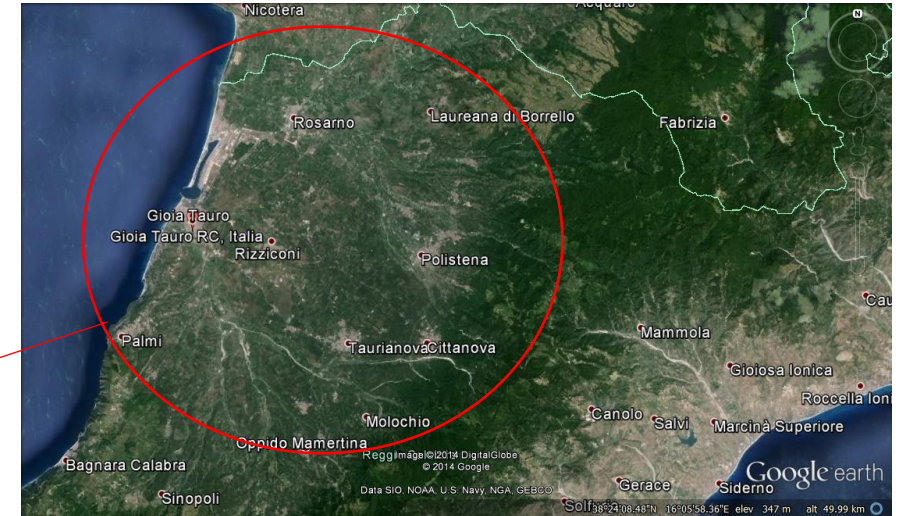
5th September 2014

Where:

Locality: Sovereto

Municipality: Gioia Tauro

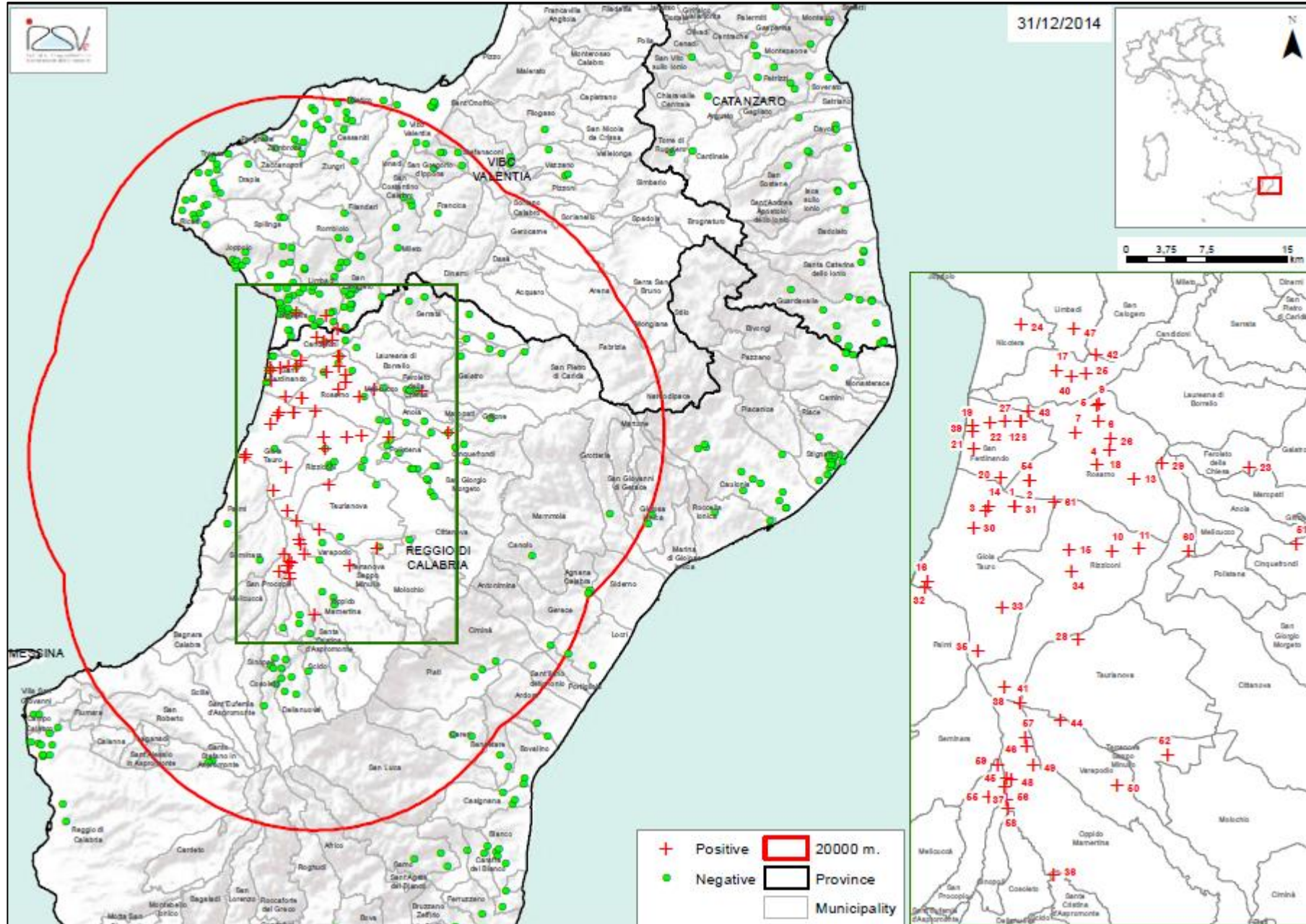
Province: Reggio Calabria



-- Protection zone - 20 km radius

-- Surveillance zone - 100 km radius

# Calabria region: 60 infested apiaries



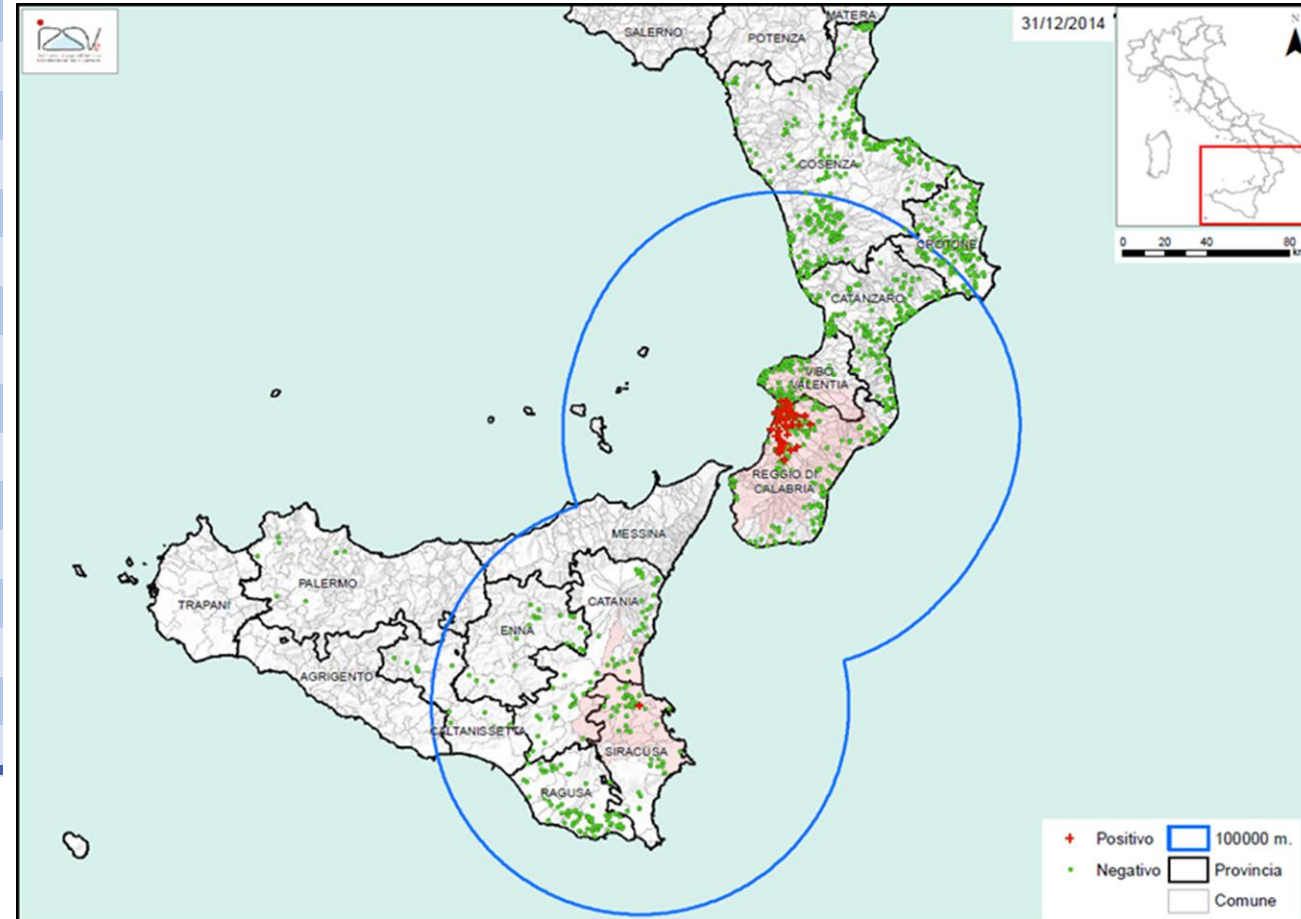


# Surveillance 2014

(n. of inspected apiaries = negative/positive)

	Negative	Positive
<b>Calabria region</b>		
Catanzaro	181	0
Cosenza	300	0
Crotone	212	0
Reggio Calabria	196	57
Vibo Valentia	140	3
<b>Total</b>	<b>1029</b>	<b>60</b>
<b>Sicilia region</b>		
Catania	60	0
Caltanissetta	13	0
Enna	23	0
Palermo	7	0
Ragusa	79	0
Siracusa	46	1
<b>Total</b>	<b>228</b>	<b>1</b>
<b>Gross total</b>	<b>1257</b>	<b>61</b>

31 December 2014



# Measures applied

- 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 according to 5% expected prevalence
- **destruction** of the infested apiaries (@3,200 hives) and **compensation**
- if negative, traps should be applied
- traceability of commercial and migratory movement in and out of the zone

# Measures applied

## 100 km surveillance zone:

- census of apiaries
- visit of apiaries selected on the basis of risk analysis (migration in infested areas, honeybees or materials exchanges) or randomly
- visit of the colonies according to 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

 No positive apiaries in the surveillance zone

2015

Surveillance activity



## SHB surveillance program - Italy - 2015



According to the “Guidelines for the surveillance of the small hive beetle (*Aethina tumida*) infestation” released by the EU RL for honey bee health in March 2015

A surveillance program for the whole territory of Italy has been prepared based on:

- ✓ Clinical inspection,
- ✓ to be carried out in Spring 2015,

Territory	Epidemiological units	N. apiaries	N. hives for apiary
Italy (excluded Calabria and Sicily)	Northern	164 non migratory random selected (expected prevalence 2% CI 95%)	2% expected prevalence CI 95%
	Central	164 non migratory random selected (expected prevalence 2% CI 95%)	2% expected prevalence CI 95%
	Southern	164 non migratory random selected (expected prevalence 2% CI 95%)	2% expected prevalence CI 95%

In addition, a clinical inspection of the apiaries once back from migratory period based on risk evaluation + traps application

# National surveillance plan 2015 non migratory apiaries

MACRO REGION	REGION/ AUTONOMOUS PROVINCE	N. NON MIGRATORY APIARIES TO BE INSPECTED	N. M
	VALLE D'AOSTA	10	
	PIEMONTE	33	
	LOMBARDIA	42	
NORTH	LIGURIA	10	
	FRIULI VENEZIA GIULIA	10	
	BOLZANO	12	
	TRENTO	10	
	VENETO	17	
	EMILIA ROMAGNA	33	
	MARCHE	21	
CENTRE	TOSCANA	52	
	UMBRIA	18	
	LAZIO	44	
	ABRUZZO	25	
	MOLISE	10	
SOUTH	CAMPANIA	49	
	BASILICATA	48	
	PUGLIA	14	
	SARDEGNA	52	
		510	



# National surveillance plan 2015 based on risk

MACRO REGION	REGION /AUTONOLOUS PROVINCE	N. APIARIES INSPEC BASED ON RISK
	VALLE D'AOSTA	8
	PIEMONTE	19
	LOMBARDIA	43
<b>NORTH</b>	LIGURIA	4
	FRIULI VENEZIA GIULIA	5
	BOLZANO	0
	TRENTO	38
	VENETO	17
	EMILIA ROMAGNA	16
	MARCHE	0
<b>CENTRE</b>	TOSCANA	0
	UMBRIA	1
	LAZIO	5
	ABRUZZO	9
	MOLISE	9
	CAMPANIA	10
<b>SOUTH</b>	BASILICATA	0
	PUGLIA	20
	SARDEGNA	0
		<b>204</b>



## SHB surveillance program - Sicily - 2015

According to the “Guidelines for the surveillance of the small hive beetle (*Aethina tumida*) infestation” released by the EU RL for honey bee health in March 2015

A surveillance program for the territory of Sicily has been prepared based on:

- ✓ clinical inspection to be carried out in Spring 2015
- ✓ Data should be provided by the May 10<sup>th</sup>

*Note: 0008311-31/03/2015-DGSAF-COD\_UO-P: surveillance activity in the territory of Sicily region*

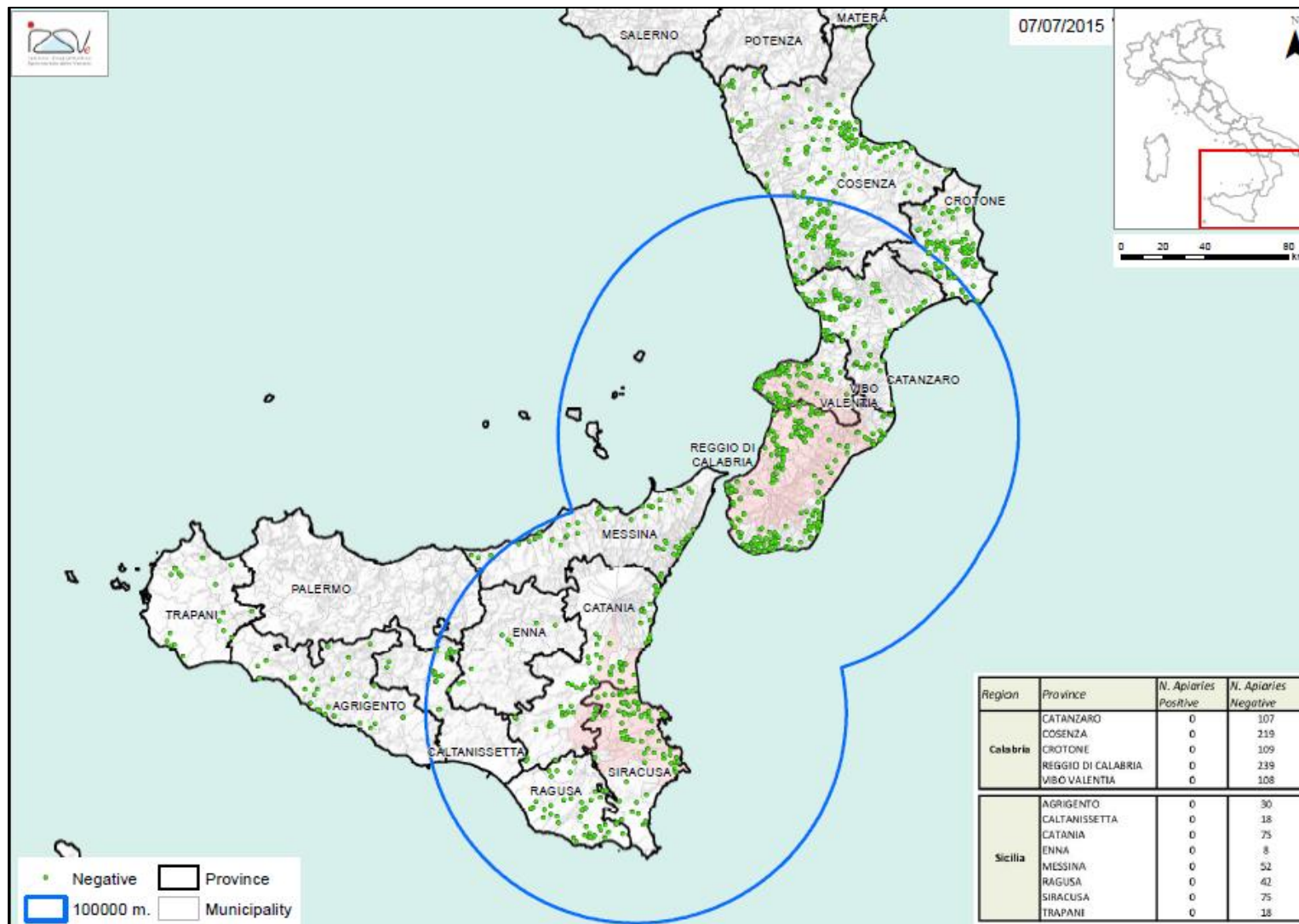
Region	Territory/zones	N. apiaries	N. hives for apiary
Sicily	Catania Siracusa Ragusa	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 5% CI 95%
	rest of territory	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 5% CI 95%

## SHB surveillance program – Calabria - 2015

Surveillance activity will continue in the whole territory of Calabria as previously established:

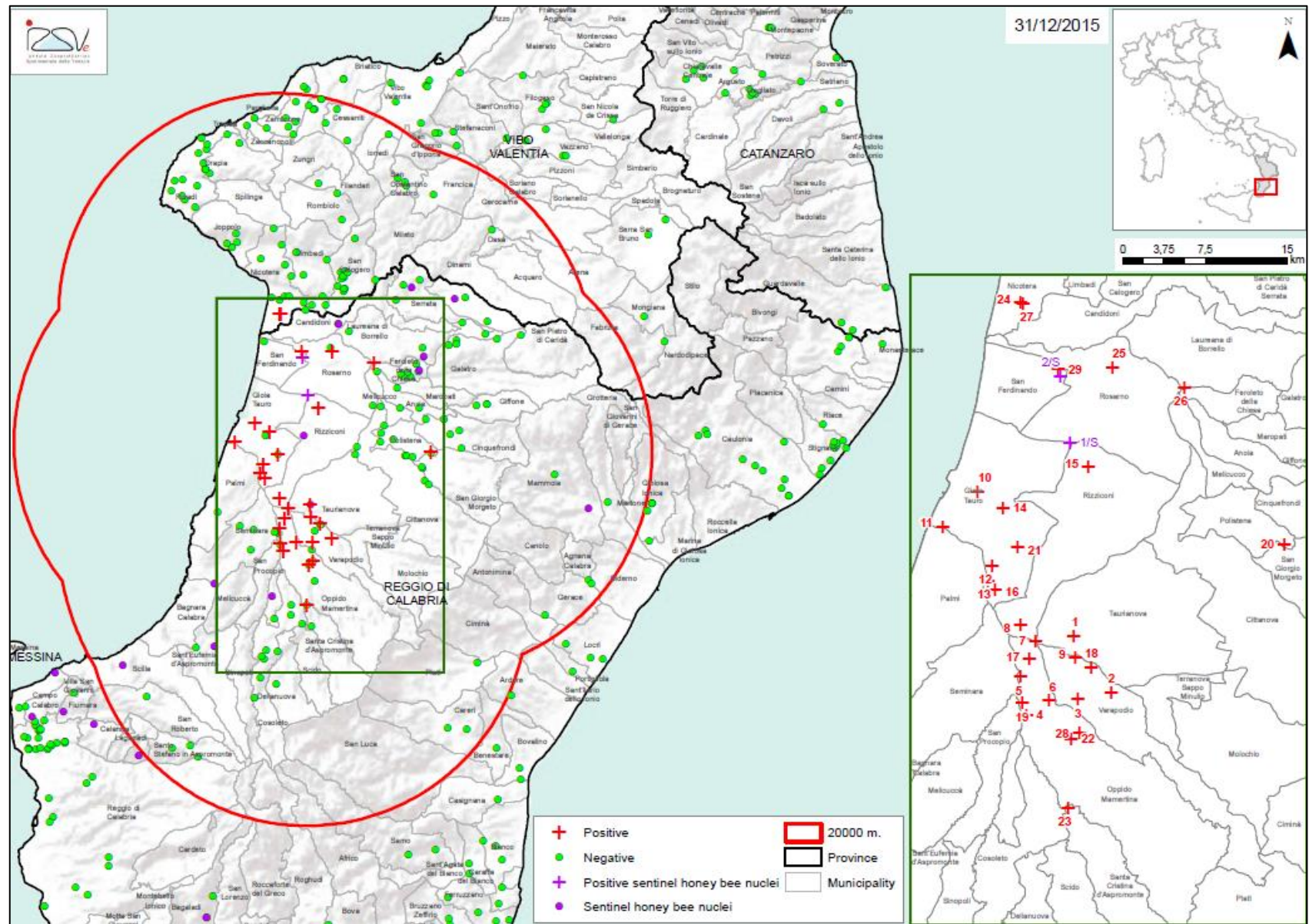
Region	Territory/zones	N.apiaries	N. hives for apiary
Calabria	protection zone	all apiaries	expected prevalence 5% CI 95%
	surveillance zone + the rest of territory	164 random (expected prevalence 2% CI 95%)	expected prevalence 5% CI 95%

# Calabria and Sicily regions - Surveillance zone and results of surveillance from 1 January to 30 August 2015



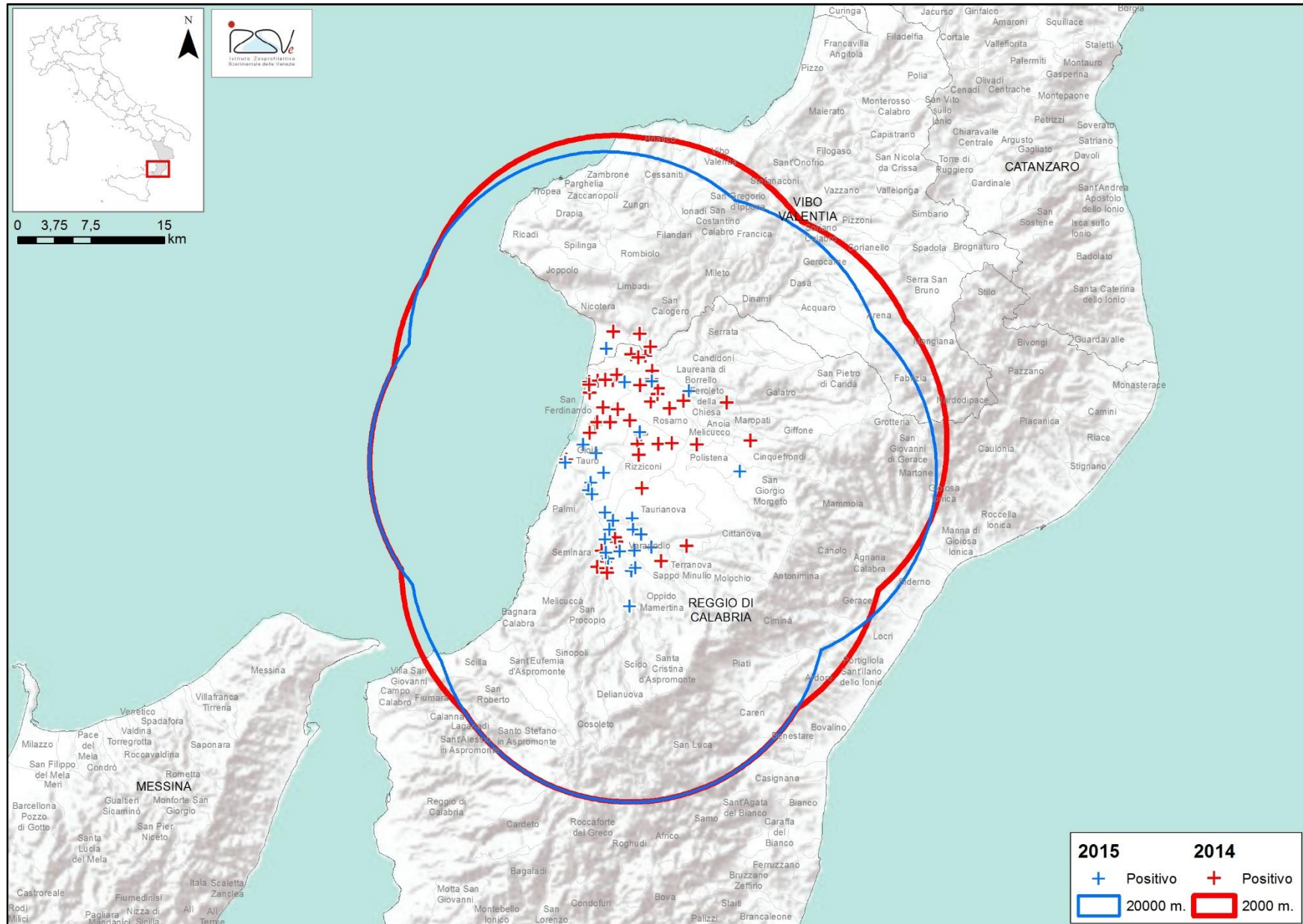


# The situation as of 31 December 2015: 29 infested apiaries



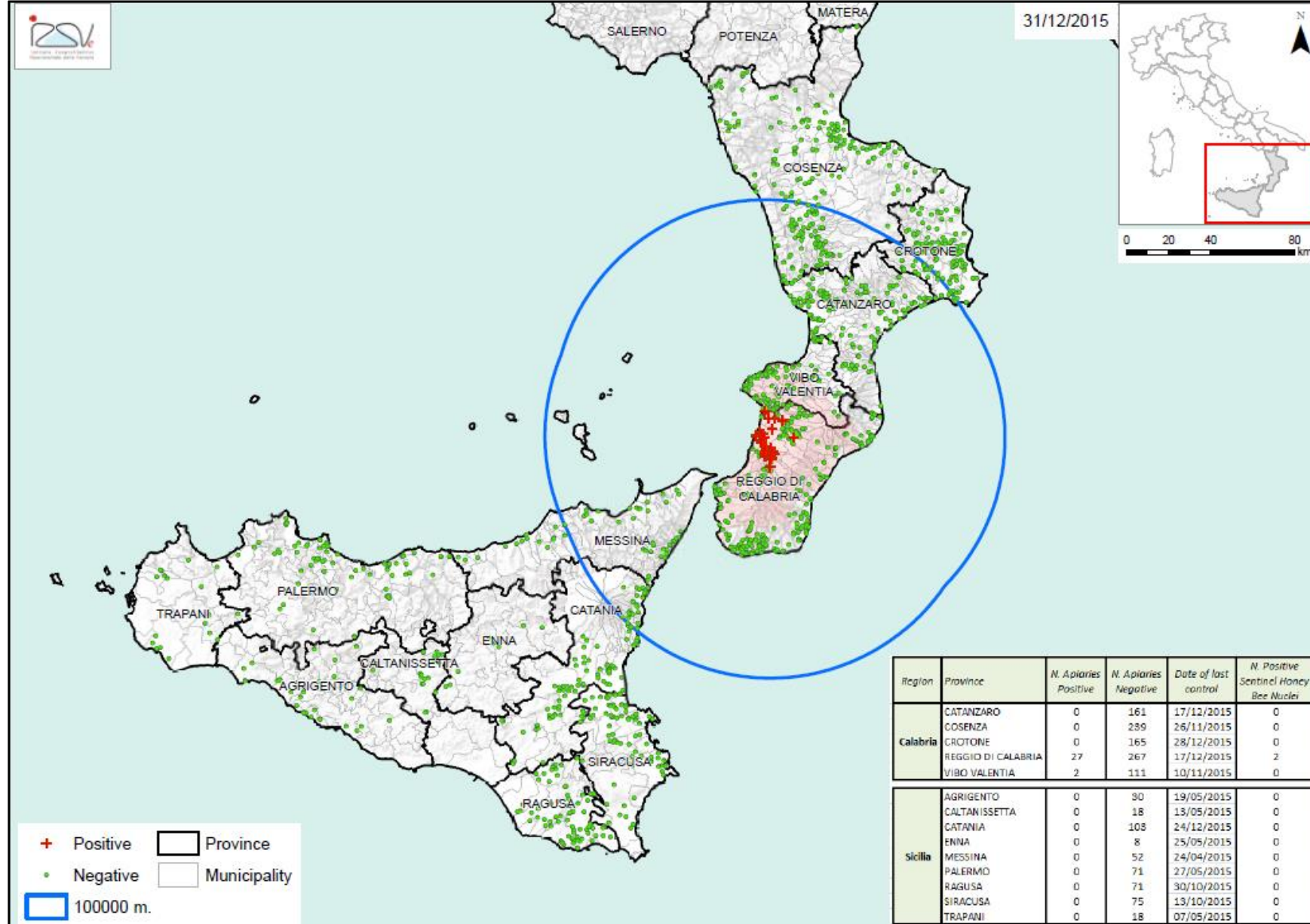


# Comparison between 2014 (red) e 2015 (blu) infested apiaries



15.12.2015

# The situation as of 31 December 2015



**COMMISSION IMPLEMENTING DECISION (EU) 2015/1943****of 27 October 2015****amending Implementing Decision 2014/909/EU by extending the period of application of the protective measures in relation to the small hive beetle in Italy***Article 3*

1. Italy shall ensure that the following protective measures are implemented in the areas listed in the Annex:
  - (a) a ban on the dispatch of consignments of the following commodities from the areas listed in the Annex to other areas of the Union:
    - (i) honey bees;
    - (ii) bumblebees;
    - (iii) unprocessed apiculture by-products;
    - (iv) beekeeping equipment;
    - (v) comb honey intended for human consumption;

## ANNEX

Member State	Areas subject to protective measures
Italy	Region of Calabria: whole Region
	Region of Sicily: whole Region

*'Article 4*

This Decision shall apply until 31 March 2017.'

2016

Surveillance activity

## SHB surveillance program - Italy - 2016

According to the “Guidelines for the surveillance of the small hive beetle (*Aethina tumida*) infestation” released by the EU RL for honey bee health in March 2015

A surveillance program for the whole territory of Italy has been prepared based on:

- ✓ Clinical inspection,
- ✓ to be carried out in Spring 2016,

Territory	Epidemiological units	N. apiaries	N. hives for apiary
Italy (excluded Calabria and Sicily)	Northern	177 non migratory random selected (2% expected prevalence CI 95%)	2% expected prevalence CI 95%
	Central	170 non migratory random selected (2% expected prevalence CI 95%)	2% expected prevalence CI 95%
	Southern	163 non migratory random selected (2% expected prevalence CI 95%)	2% expected prevalence CI 95%

In addition, a clinical inspection of the apiaries once back from migratory period in Autumn based on risk evaluation + **traps application** (N. hives for apiary, 2% expected prevalence CI 95%)

## SHB surveillance program - Sicily - 2016

According to the “Guidelines for the surveillance of the small hive beetle (*Aethina tumida*) infestation” released by the EU RL for honey bee health in March 2015

A surveillance program for the territory of Sicily has been prepared based on:

- ✓ clinical inspection to be carried out in Spring 2016
- ✓ Data should be provided by May 2016.

Region	Territory/zones	N. apiaries	N. hives for apiary
Sicily	Catania Siracusa Ragusa	134 non migratory random selected (2% expected prevalence CI 95%)	5% expected prevalence CI 95%
	rest of territory	198 non migratory random selected (2% expected prevalence CI 95%)	5% expected prevalence CI 95%

0002413-01/02/2016-DGSAF-COD\_UO-P: *Aethina tumida* surveillance - sentinel honey bee nuclei and instructions for *A. tumida* surveillance in Sicily in 2016

## SHB surveillance program - Calabria- 2016

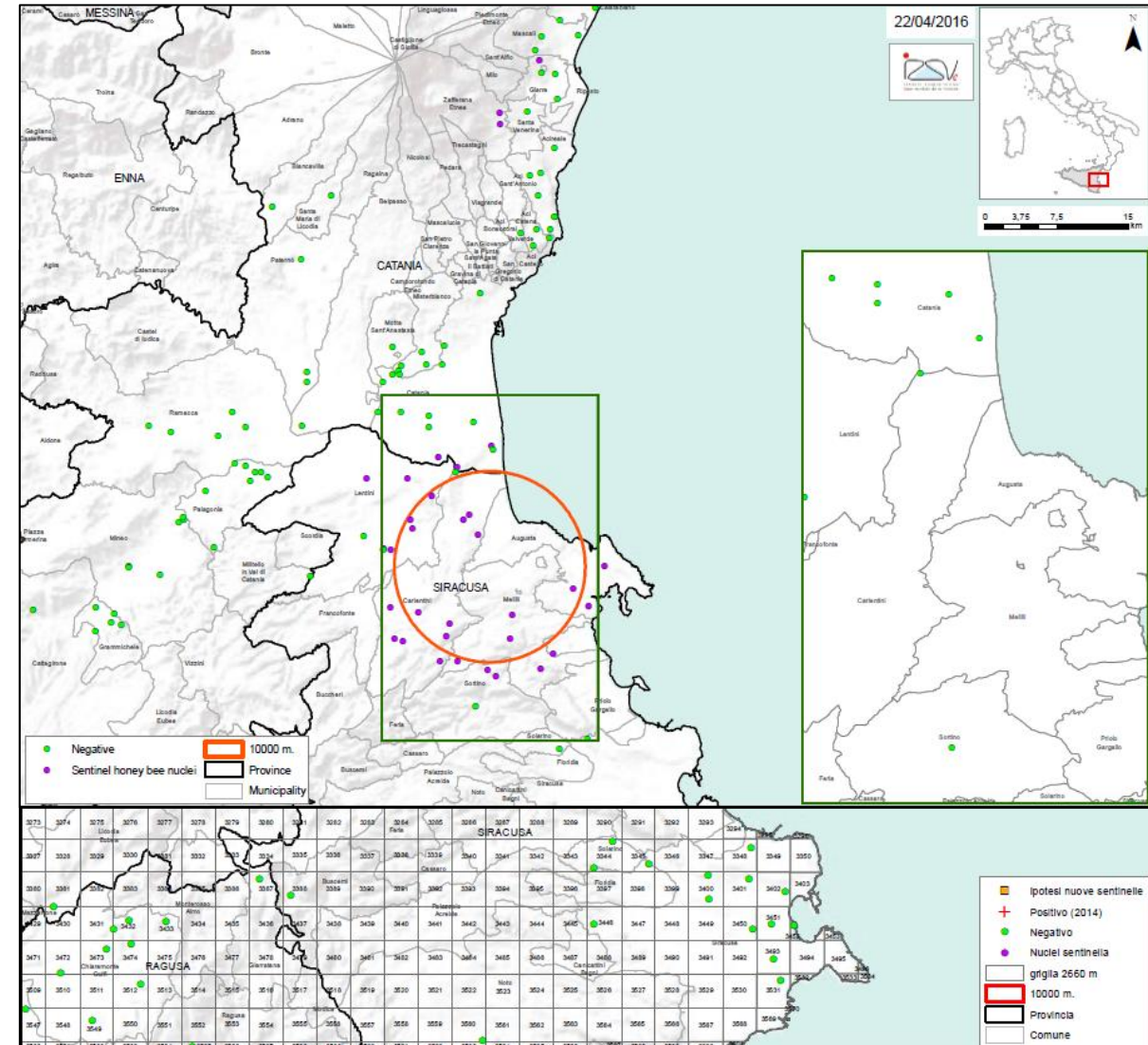
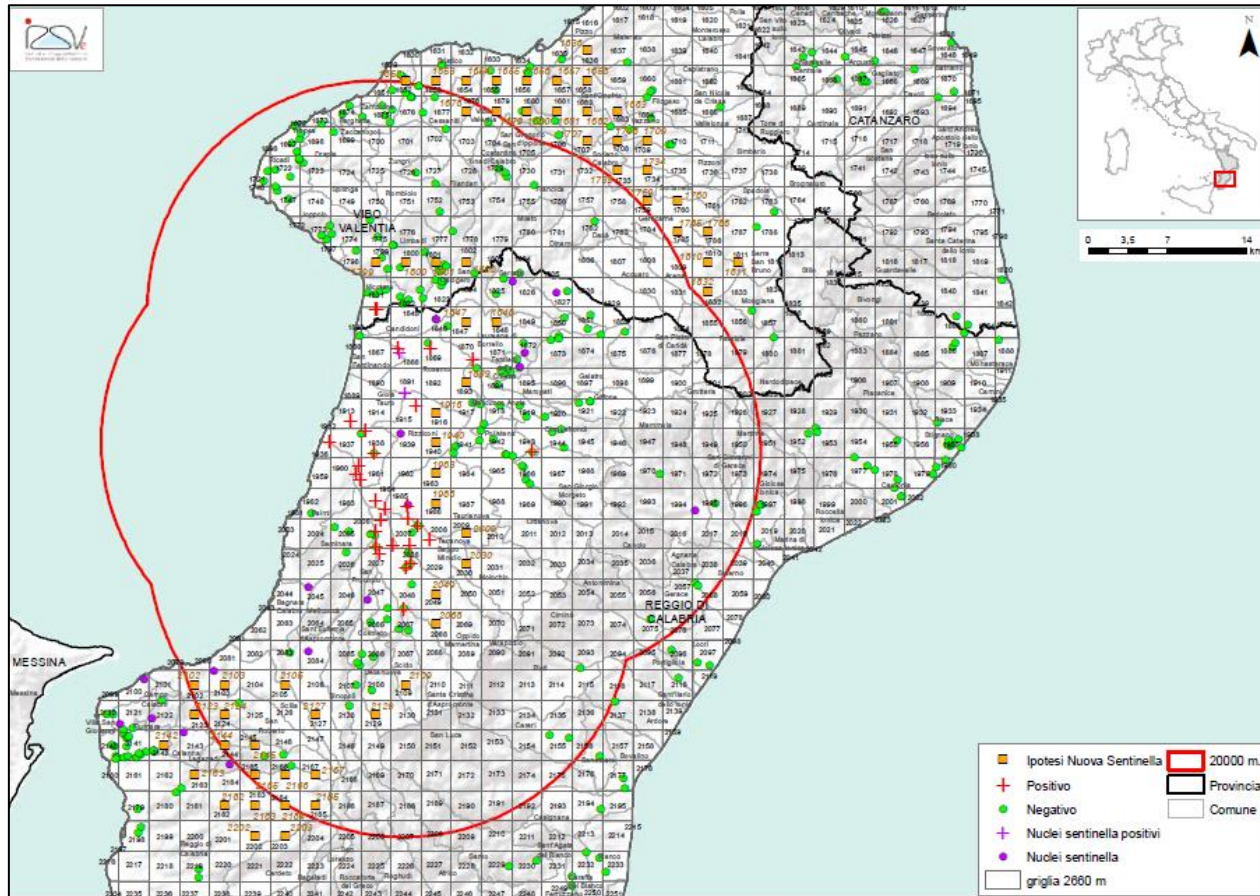
Surveillance activity will continue in the whole territory of Calabria as previously established:

Region	Territory/zones	N.apiaries	N. hives for apiary
Calabria	protection zone	53 apiaries	5% expected prevalence CI 95%
	surveillance zone + the rest of territory	147 random (2% expected prevalence CI 95%)	5% expected prevalence CI 95%

0003095-08/02/2016-DGSAF-COD\_UO-P: Aethina tumida surveillance based on sentinel honey bee nuclei and instructions for A. tumida surveillance in Calabria in 2016

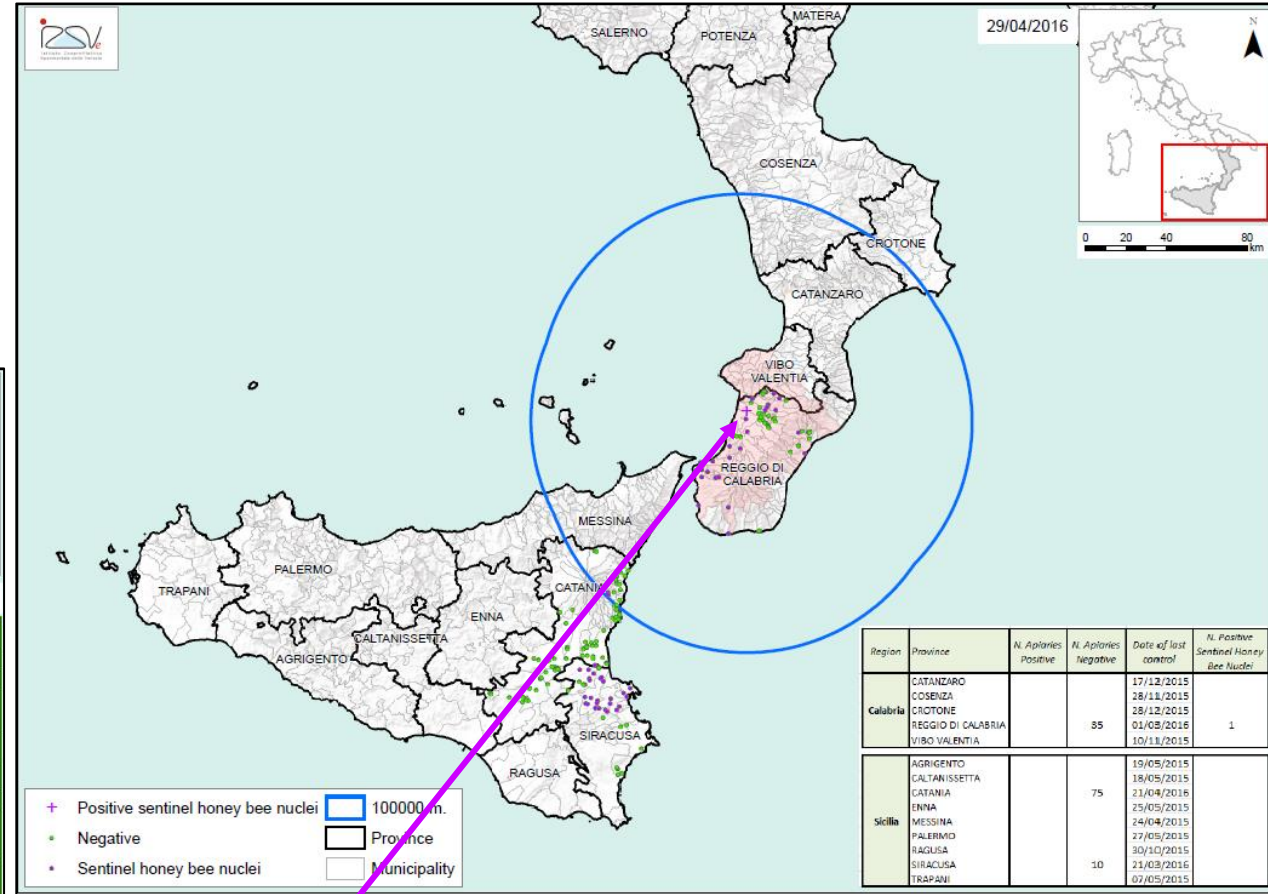
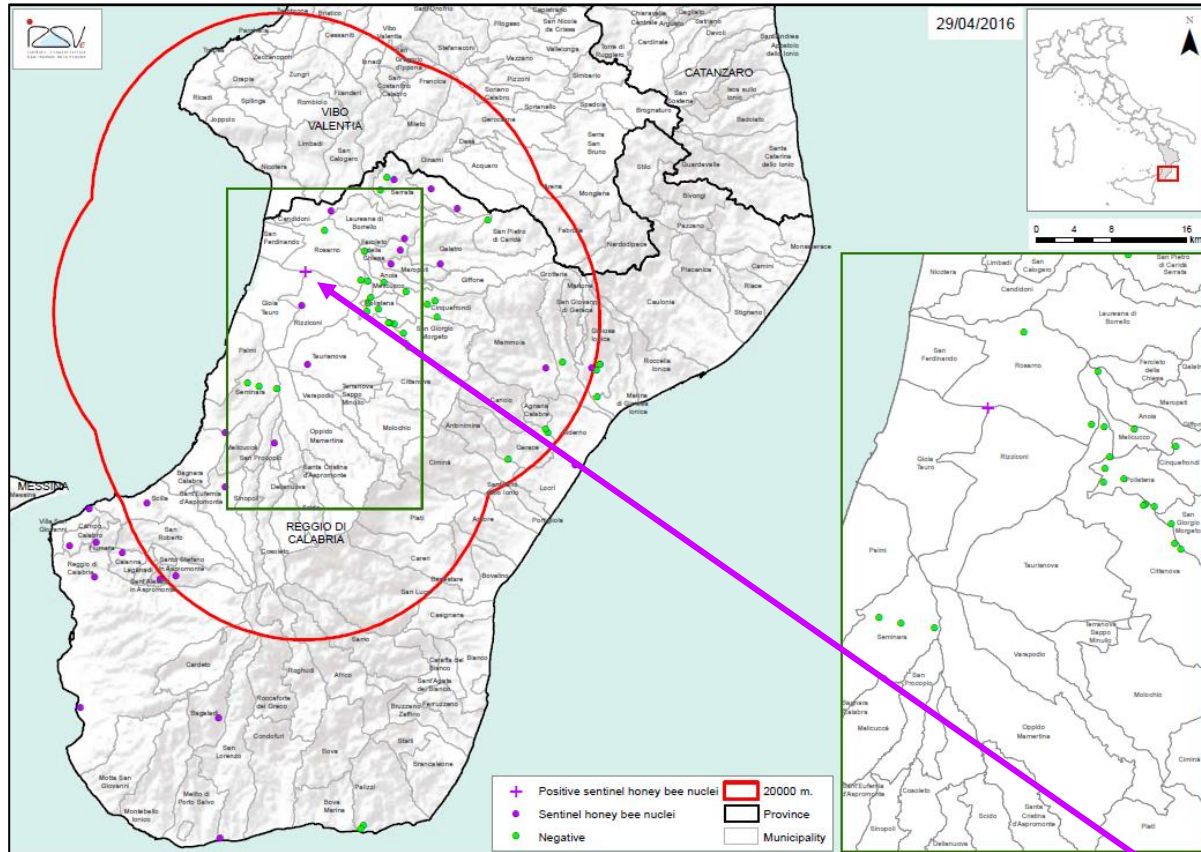
# SHB surveillance program - 2016

## Adjunctive measure: Honey bee sentinel nuclei in Calabria and Sicily





# On 21 April 2016



Region	Province	N. Apiaries Positive	N. Apiaries Negative	Date of last control	N. Positive Sentinel Honey Bee Nuclei
Calabria	CATANZARO			17/12/2015	
	COSENZA			28/11/2015	
	CROTONE			28/12/2015	
	REGGIO DI CALABRIA		85	01/02/2016	1
Sicilia	VIBO VALENTIA			10/11/2015	
	AGRIGENTO			19/05/2015	
	GALTANISSETTA			18/05/2015	
	CATANIA		75	21/04/2016	
	ENNA			25/05/2015	
	MESSINA			24/04/2015	
	PALERMO			27/05/2015	
RAGUSA			30/10/2015		
SIRACUSA		10		21/02/2016	
TRAPANI				07/05/2015	

A honey bee sentinel nuclei found infested by adult SHBs



Thank you for your attention

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