

# “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:

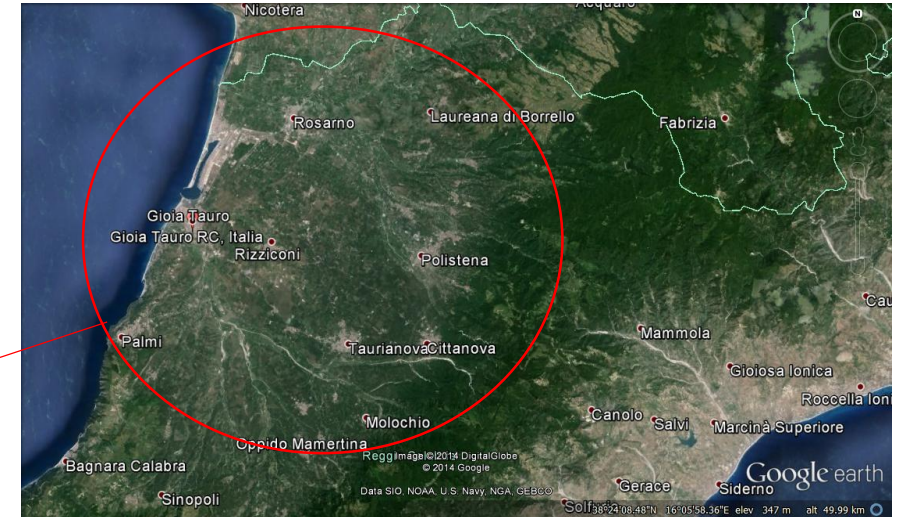
5th September 2014

Where:

Locality: Sovereto

Municipality: Gioia Tauro

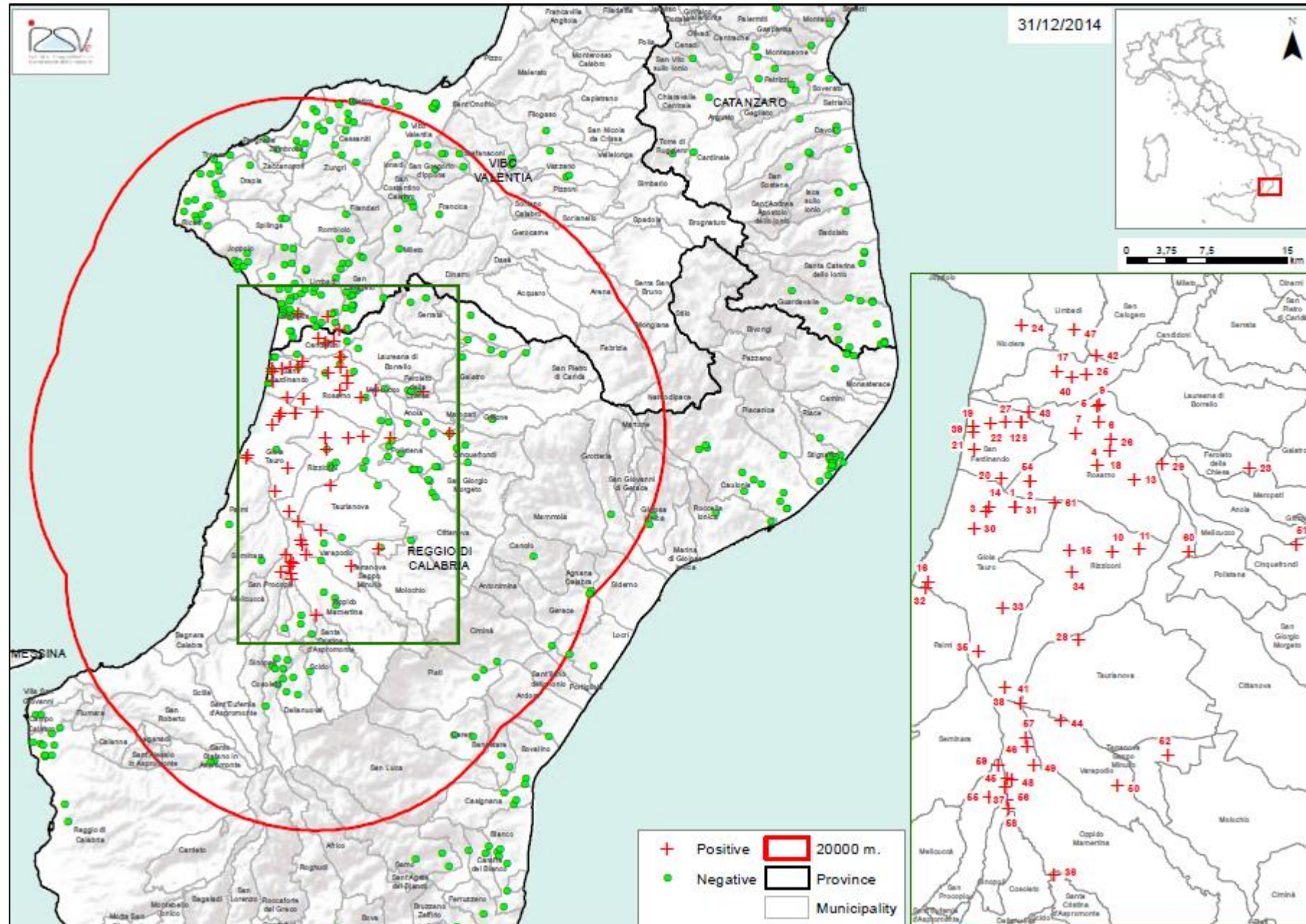
Province: Reggio Calabria



-- Protection zone - 20 km radius

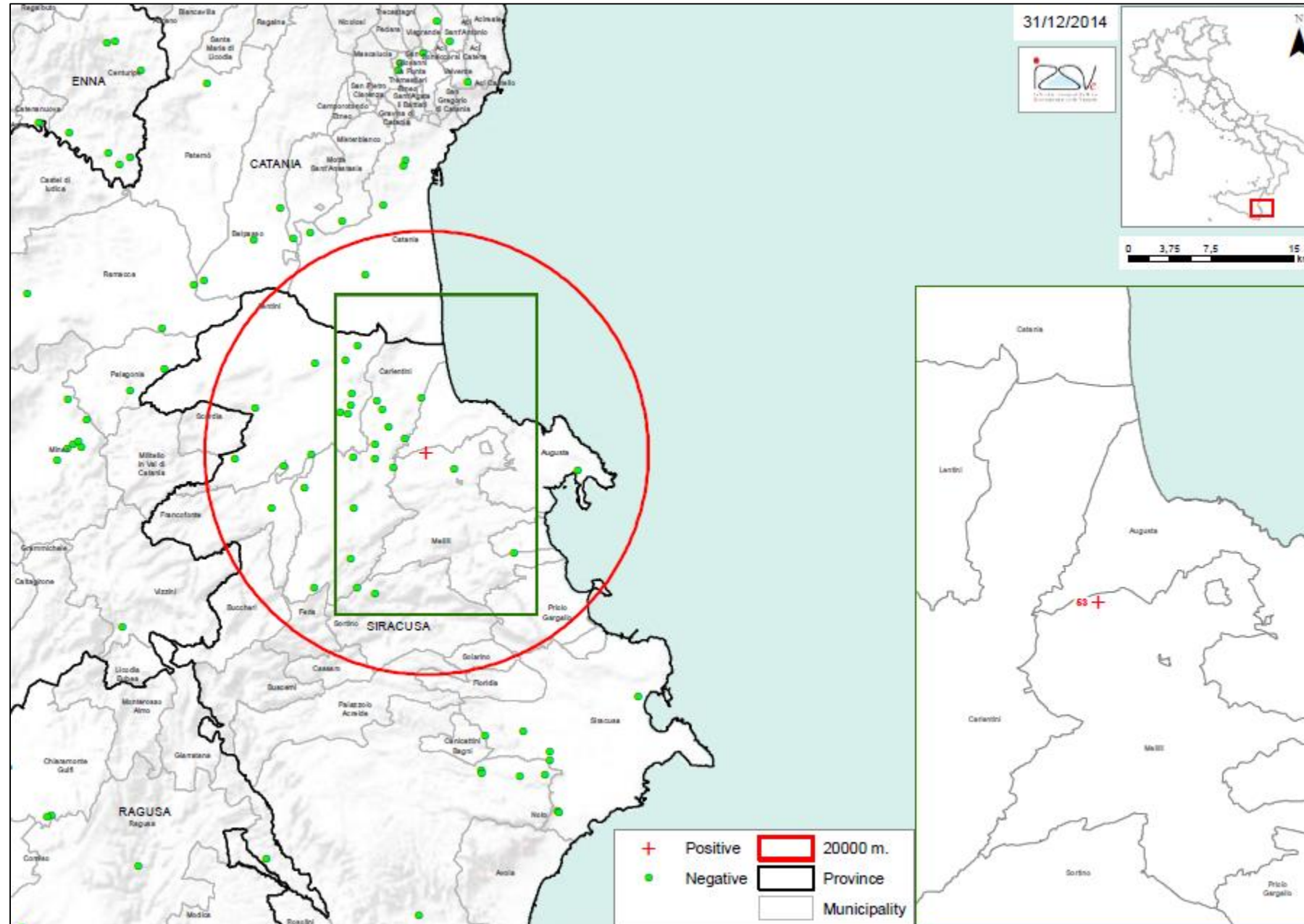
-- Surveillance zone - 100 km radius

# Calabria region: 60 infested apiaries





# Sicily region - 7 November 2014



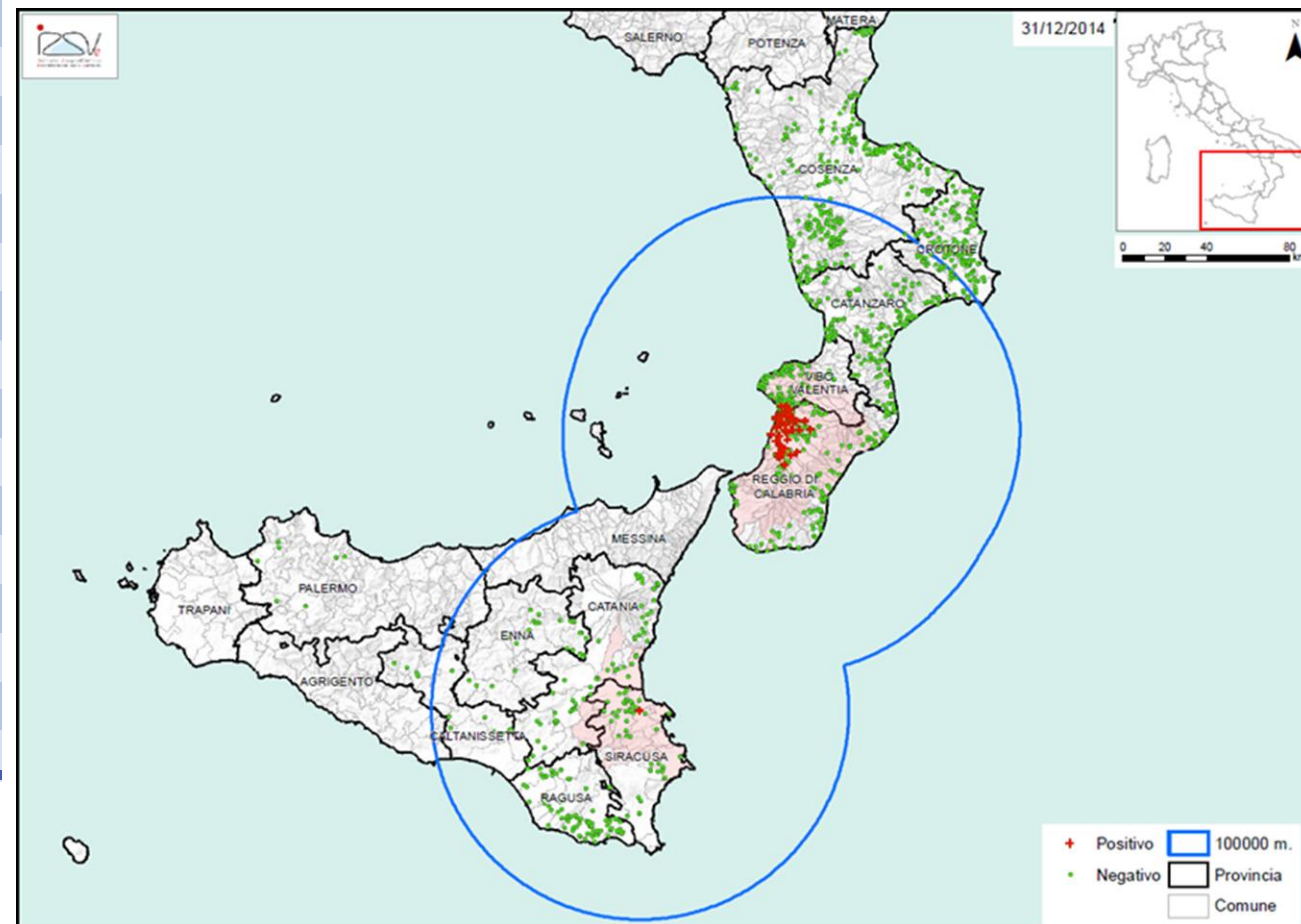
- Melilli (SR) municipality
- migratory apiary with 56 hives
- in the Gioia Tauro area from April to August 2014

# 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%

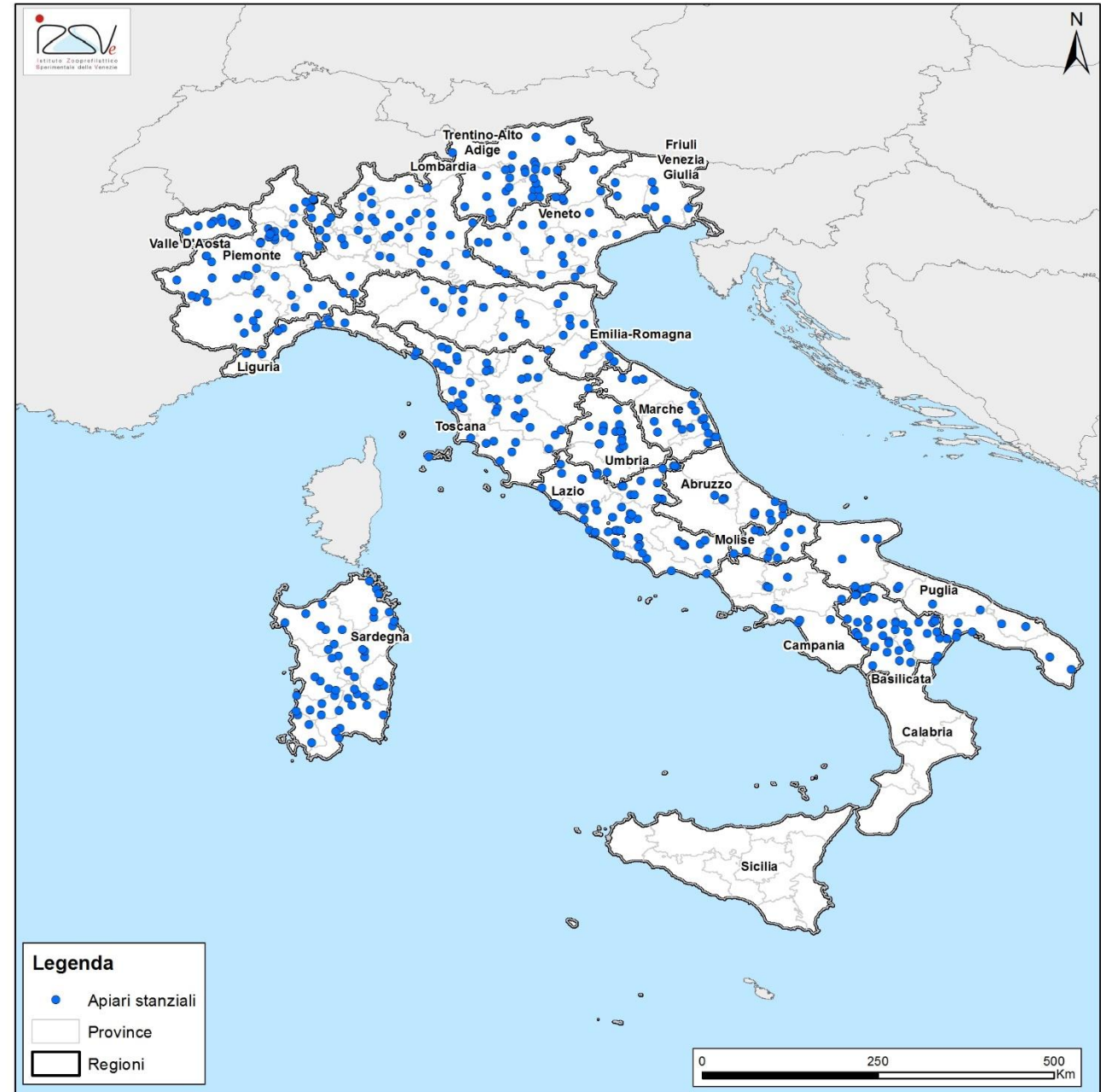
In addition, a clinical inspection of the apiaries once back from migratory period based on risk evaluation + traps application

# National surveillance plan 2015

## non migratory apiaries

MACRO REGION	REGION/ AUTONOMOUS PROVINCE	N. NON MIGRATORY APIARIES TO BE INSPECTED	N. NON MIGRATORY APIARIES INSPECTED	N. NON MIGRATORY BEEHIVES	N. NON MIGRATORY BEEHIVES INSPECTED	N. APPLIED TRAPS
	VALLE D'AOSTA	10	9	164	138	98
	PIEMONTE	33	45	712	460	124
	LOMBARDIA	42	43	394	394	0
<b>NORTH</b>	LIGURIA	10	11	438	321	146
	FRIULI VENEZIA GIULIA	10	9	194	94	70
	BOLZANO	12	14	306	306	0
	TRENTO	10	10	96	96	0
	VENETO	17	29	825	495	0
	EMILIA ROMAGNA	33	24	413	413	0
	MARCHE	21	19	474	474	159
	TOSCANA	52	45	1,417	1,030	20
<b>CENTRE</b>	UMBRIA	18	22	498	334	0
	LAZIO	44	63	2,121	1,513	458
	ABRUZZO	25	13	126	126	0
	MOLISE	10	10	30	30	0
	CAMPANIA	49	10	676	534	234
<b>SOUTH</b>	BASILICATA	48	46	4,226	1,506	0
	PUGLIA	14	14	727	498	139
	SARDEGNA	52	52	1,703	1,520	0
		510	<b>488</b>	15,540	<b>10,282</b>	1,448

# National surveillance plan 2015 non migratory apiaries



# National surveillance plan 2015 based on risk

MACRO REGION	REGION /AUTONOLOUS PROVINCE	N. APIARIES INSPECTED BASED ON RISK	N. BEEHIVES PRESENT	N. BEEHIVES INSPECTED BASED ON RISKALVEARI CONTROLLATI IN BASE AL RISCHIO	N. APPLIED TRAPS
	VALLE D'AOSTA	8	57	57	0
	PIEMONTE	19	856	515	552
	LOMBARDIA	43	1,286	1,003	0
NORTH	LIGURIA	4	183	138	60
	FRIULI VENEZIA GIULIA	5	89	70	31
	BOLZANO	0	0	0	0
	TRENTO	38	1,341	1,063	798
	VENETO	17	791	476	0
	EMILIA ROMAGNA	16	474	425	122
	MARCHE	0	0	0	0
	TOSCANA	0	0	0	0
CENTRE	UMBRIA	1	38	38	0
	LAZIO	5	32	32	54
	ABRUZZO	9	672	345	500
	MOLISE	9	0	0	0
	CAMPANIA	10	344	275	227
SOUTH	BASILICATA	0	0	0	0
	PUGLIA	20	2,376	861	1,800
	SARDEGNA	0	0	0	0
		<b>204</b>	<b>8,539</b>	<b>5,298</b>	<b>4,144</b>

# National surveillance plan 2015 based on risk





## 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*

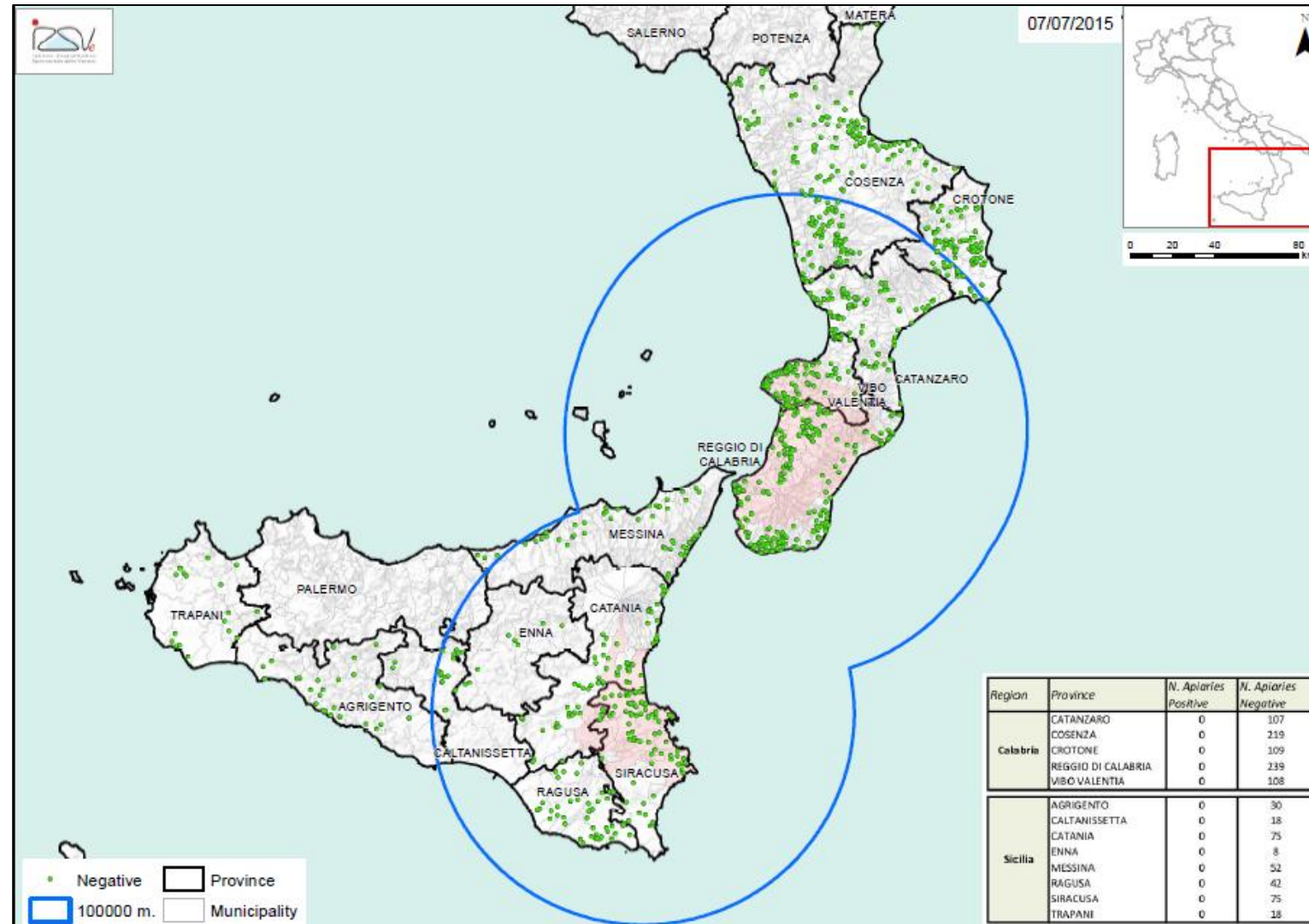
Region	Territory/zones	N. apiaries	N. hives for apiary
Sicily	Catania Siracusa Ragusa	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 5% CI 95%
	rest of territory	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 5% CI 95%

## 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



# SHB re-occurrence – September 2015

September 16, 2015

One apiary in Taurianova municipality  
30 artificial swarms (6.08.15) + 2 natural swarms  
(captured on site, 16 and 22.08.15)

September 28, 2015

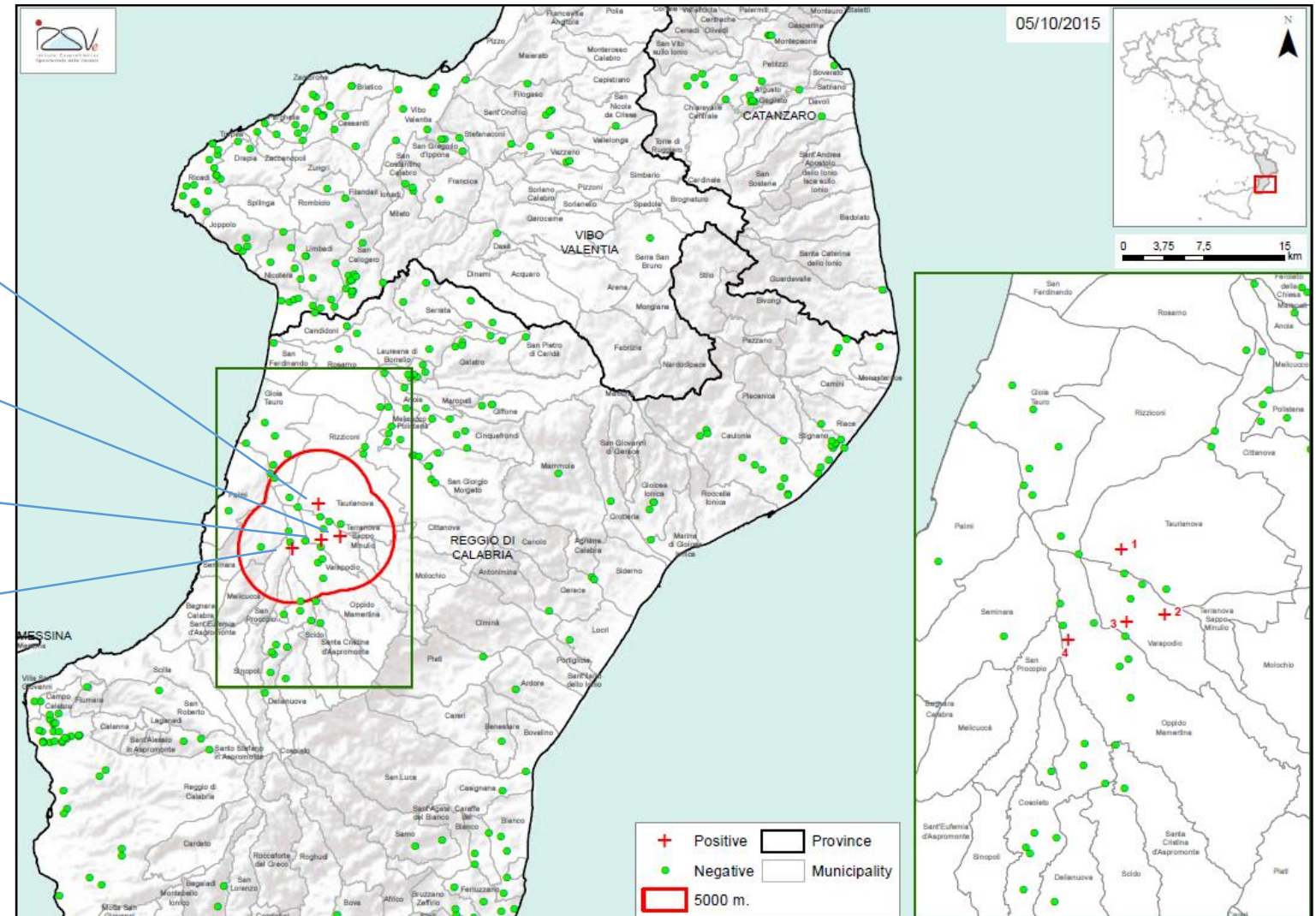
One apiary in Varapodio municipality  
66 beehives

September 28, 2015

One apiary in Varapodio municipality  
92 beehives

September 29, 2015

One apiary in Oppido Mamartina municipality  
60 swarms (27.04.15)

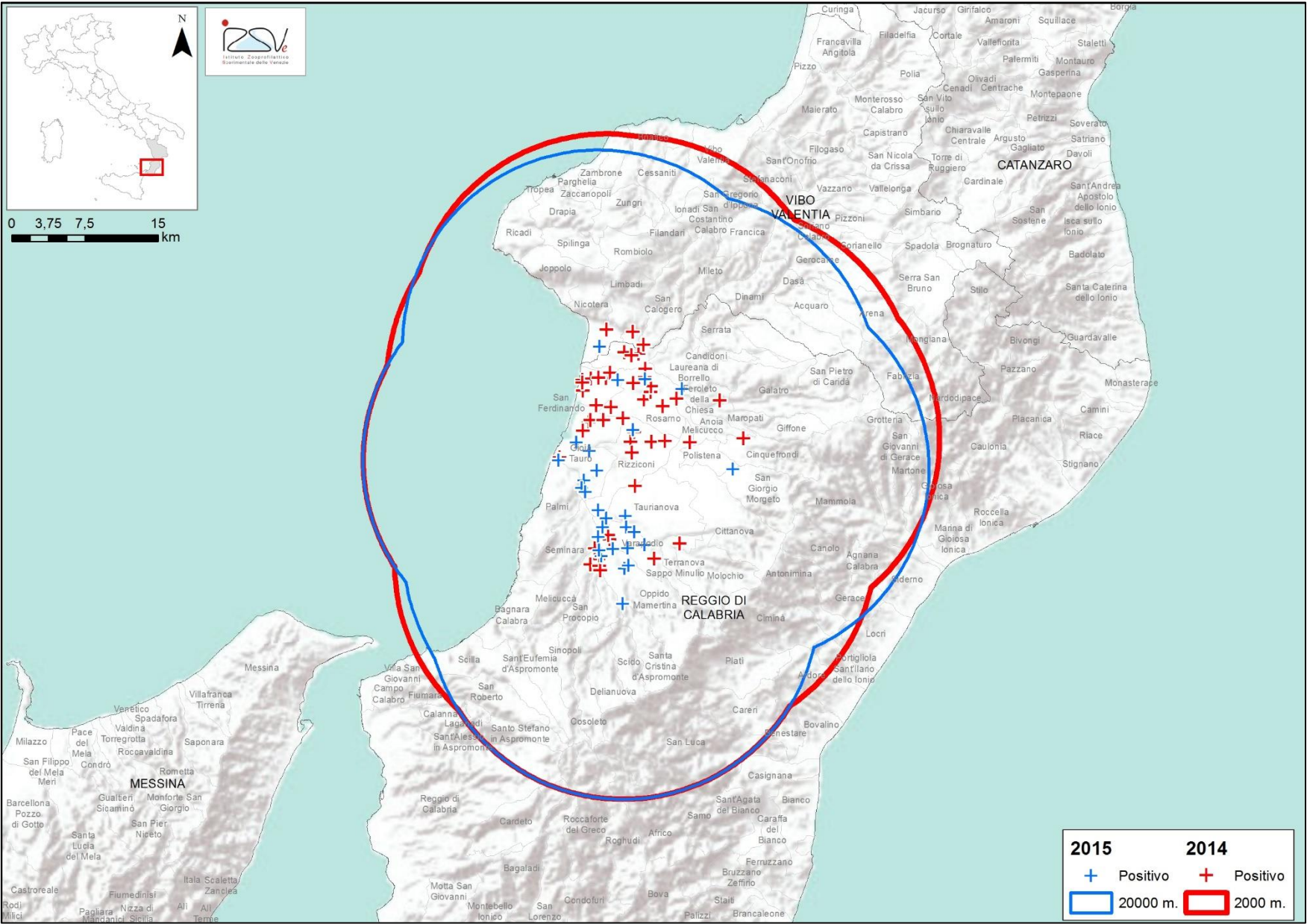






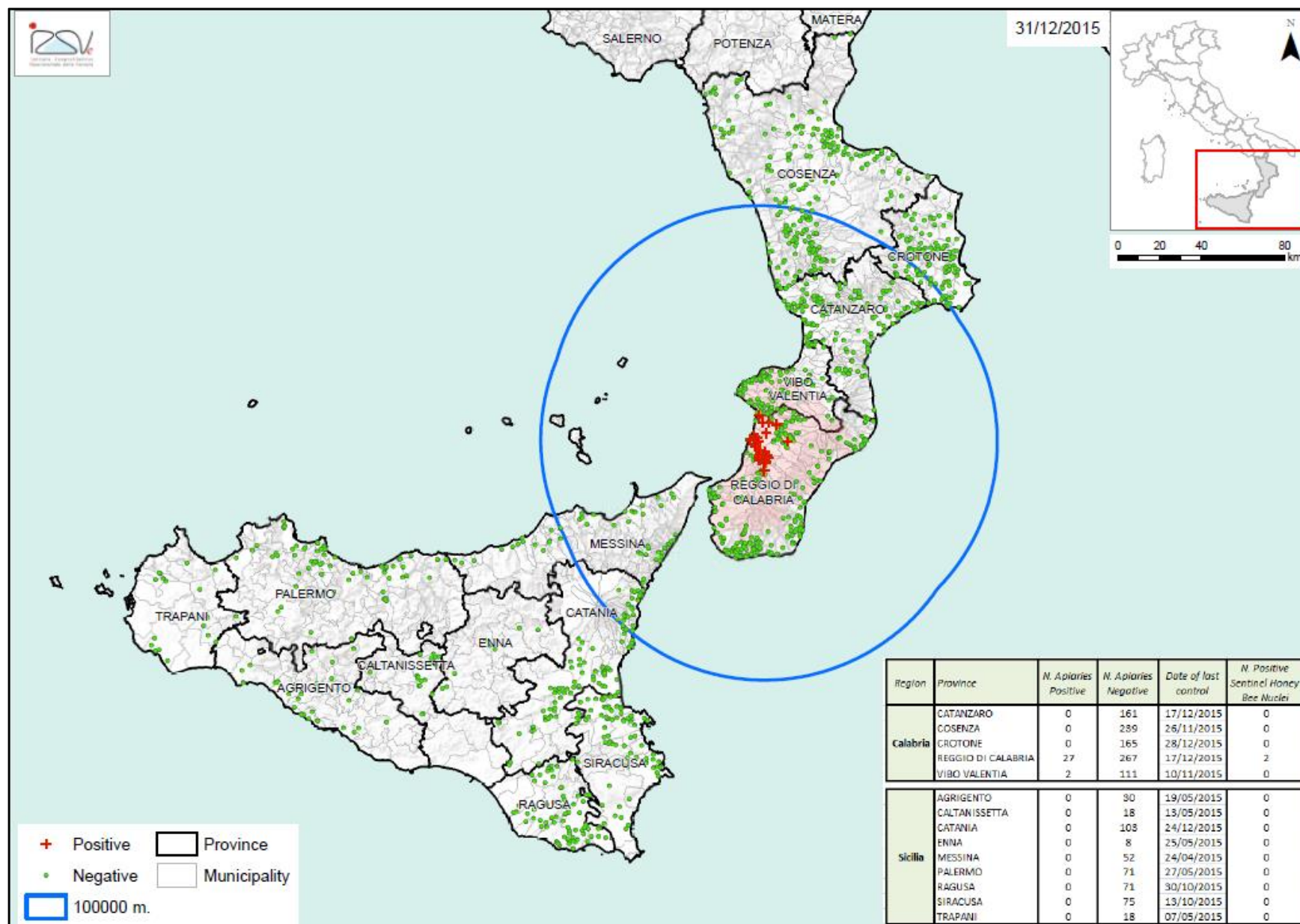


# Comparison between 2014 (red) e 2015 (blue) infested apiaries



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

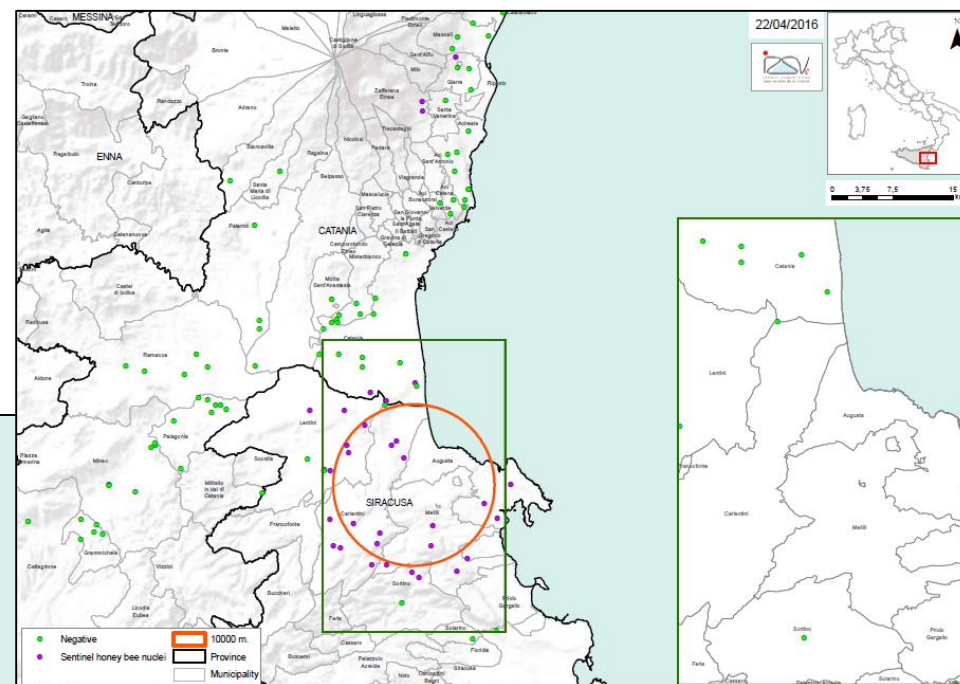
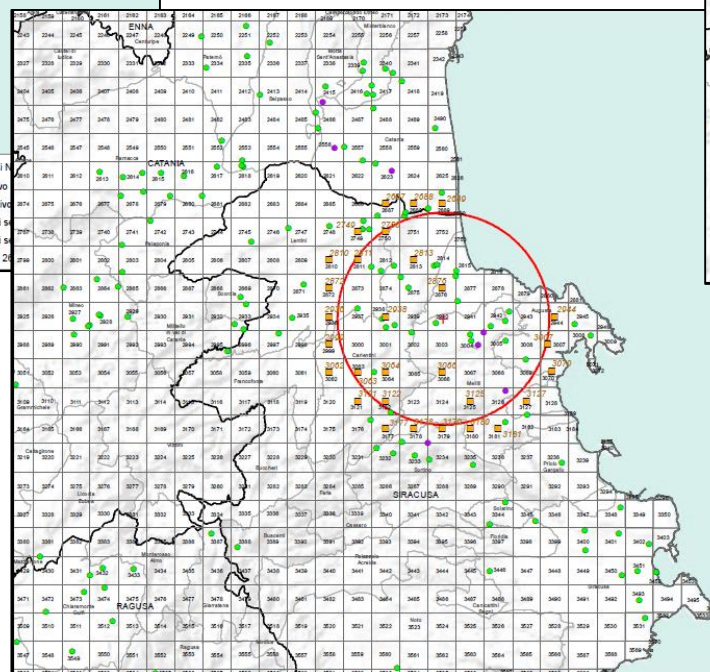
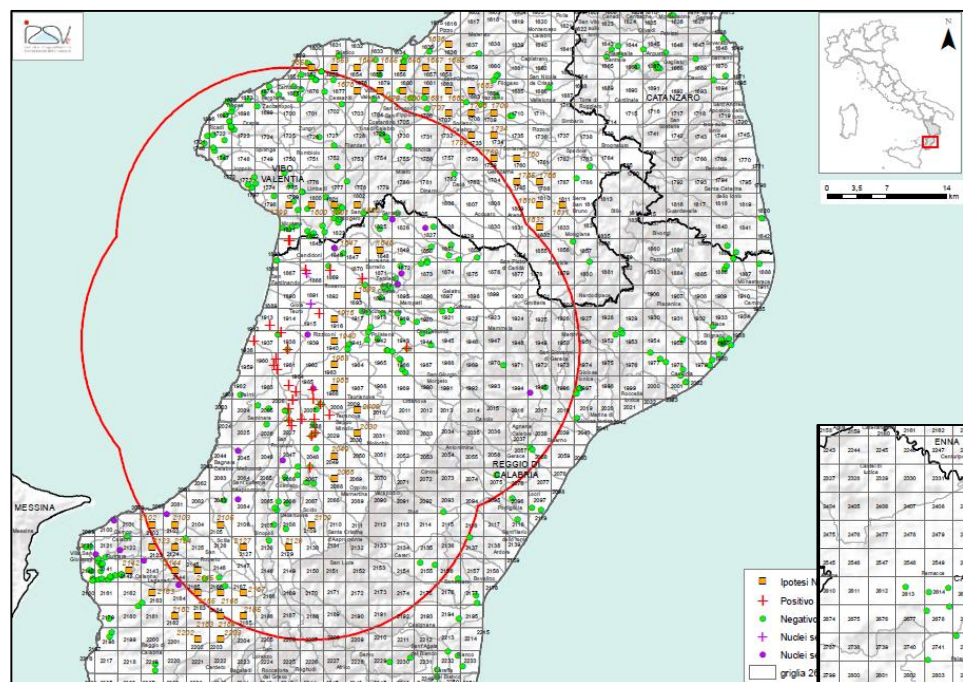
Surveillance activity will continue in the whole territory of Calabria as previously established:

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

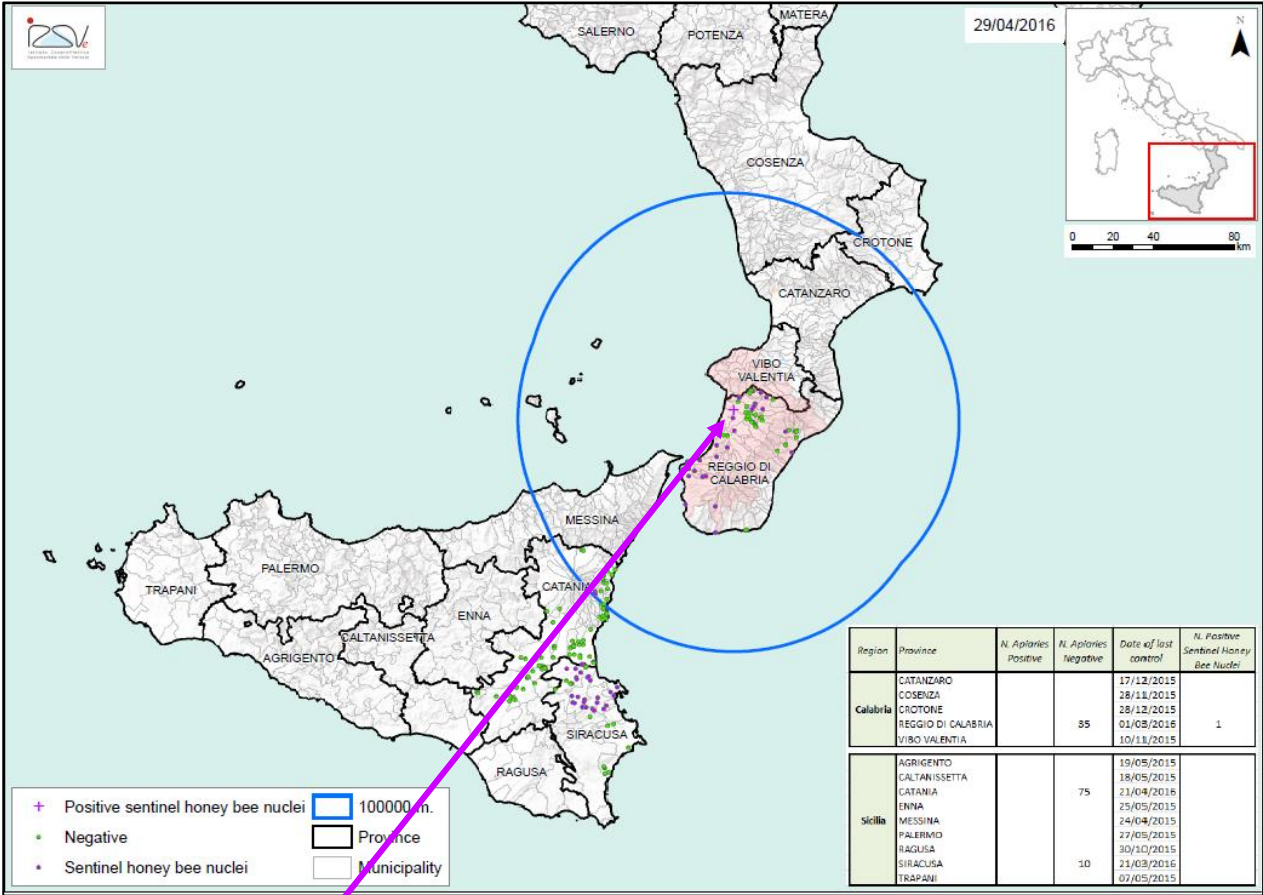
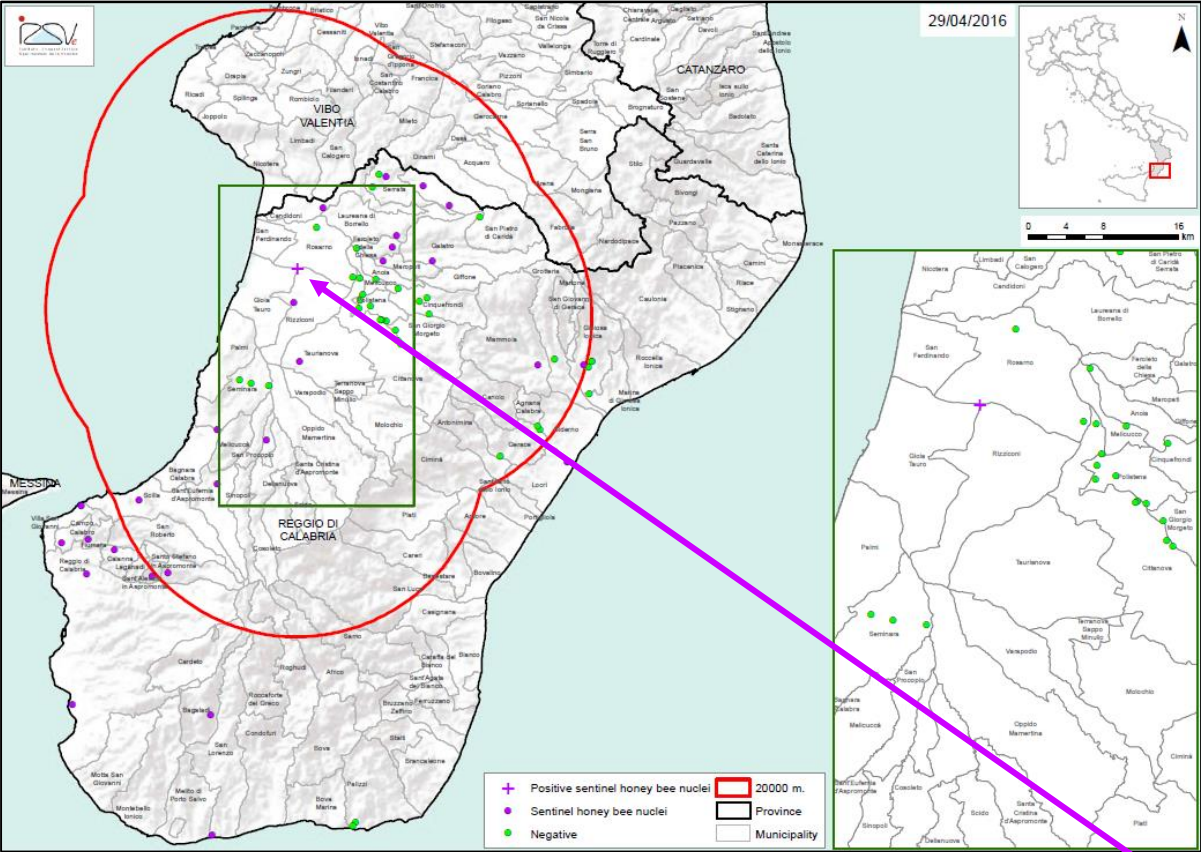
# SHB surveillance program - 2016

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





On 21 April 2016



A honey bee sentinel nuclei found infested by adult SHBs



Thank you for your attention