

"The outbreaks of small hive beetle in Italy"

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PAFF Standing Committee, Brussels, 6 May 2015

First identification of both larvae and adults

When:

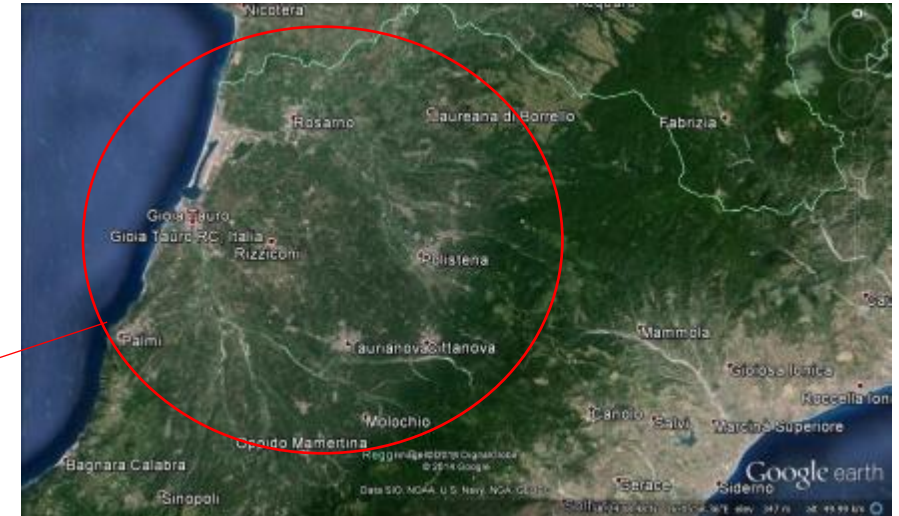
5th September 2014

Where:

Locality: Sovereto

Municipality: Gioia Tauro

Province: Reggio Calabria



- Protection zone - 20 km radius
- Surveillance zone - 100 km radius

Confirmed cases as of December 31, 2014

N.	LOCALITY	MUNICIPALITY	PROVINCE	REGION	EGGS	LARVAE	PUPAE	ADULTS	Note	CONFIRMATION DATE
01_2014	SOVERETO	GIOIA TAURO	RC	CALABRIA		X		X		September 12, 2014
02_2014	C.DA COLLINA	ROSARNO	RC	CALABRIA				X		September 18, 2014
03_2014	C.DA CICERNA	GIOIA TAURO	RC	CALABRIA				X		September 25, 2014
04_2014	C.DA ALIMASTRO	ROSARNO	RC	CALABRIA				X		September 25, 2014
05_2014	C.DA ALIMASTRO	ROSARNO	RC	CALABRIA				X		September 29, 2014
06_2014	C.DA TESTA DELL'ACQUA	ROSARNO	RC	CALABRIA				X		September 29, 2014
07_2014	C.DA TESTA DELL'ACQUA	ROSARNO	RC	CALABRIA				X		September 29, 2014
08_2014	C.DA LUDICELLO	SAN FERDINANDO	RC	CALABRIA				X		September 29, 2014
09_2014	C.DA ALIMASTRO	ROSARNO	RC	CALABRIA				X		September 29, 2014
10_2014	C.DA PRAIA	SAN FERDINANDO	RC	CALABRIA				X		September 30, 2014
11_2014	C.DA BETTINA	RIZZICONI	RC	CALABRIA				X		September 30, 2014
12_2014	C.DA BOSCO SELVAGGIO	RIZZICONI	RC	CALABRIA		X		X		September 30, 2014
13_2014	C.DA ACQUE BIANCHE	ROSARNO	RC	CALABRIA				X		September 30, 2014
14_2014	C.DA CICERNA	GIOIA TAURO	RC	CALABRIA		X	X	X		October 1, 2014
15_2014	C.DA MAROTTA	RIZZICONI	RC	CALABRIA				X		October 1, 2014
16_2014	C.DA PADRIPODI	GIOIA TAURO	RC	CALABRIA				X		October 1, 2014
17_2014	C.DA SOVERETO	CANDIDONI	RC	CALABRIA				X		October 3, 2014
18_2014	VIA MONGIARI	ROSARNO	RC	CALABRIA				X		October 3, 2014
19_2014	C.DA PRAIA - CORSO GARIBALDI	SAN FERDINANDO	RC	CALABRIA				X		October 10, 2014
20_2014	C.DA BOSCO DOMITINI	SAN FERDINANDO	RC	CALABRIA				X		October 10, 2014
21_2014	C.DA PRAIA	SAN FERDINANDO	RC	CALABRIA				X		October 10, 2014
22_2014	C.DA SCEBBA	SAN FERDINANDO	RC	CALABRIA				X		October 10, 2014
23_2014	C.DA SAN BASILE	FEROLETO DELLA CHIESA	RC	CALABRIA				X		October 10, 2014
24_2014	SERSALE	NICOTERA	VV	CALABRIA				X		October 10, 2014
25_2014	C.DA SOVERETO	CANDIDONI	RC	CALABRIA				X		October 13, 2014
26_2014	C.DA PIAN DELLE VIGNE	ROSARNO	RC	CALABRIA				X		October 13, 2014
27_2014	C.DA BADIA	SAN FERDINANDO	RC	CALABRIA				X		October 13, 2014
28_2014	C.DA CAFILIS	TAURIANOVA	RC	CALABRIA				X		October 13, 2014
29_2014	C.DA POLLA	MELICUCCO	RC	CALABRIA				X		October 13, 2014
30_2014	C.DA GUARDIOLA	GIOIA TAURO	RC	CALABRIA				X	Natural colony	October 13, 2014
31_2014	SOVERETO	GIOIA TAURO	RC	CALABRIA				X	Sentinel honey bee nuclei	October 13, 2014
32_2014	C.DA GIAMBRA	GIOIA TAURO	RC	CALABRIA				X		October 14, 2014
33_2014	C.DA CORDOPATRI	GIOIA TAURO	RC	CALABRIA				X		October 14, 2014
34_2014	C.DA SPINA	RIZZICONI	RC	CALABRIA				X		October 14, 2014
35_2014	C.DA PONTE VECCHIO	GIOIA TAURO	RC	CALABRIA				X		October 14, 2014
36_2014	CARUSO	SANTA CRISTINA D'ASPRMONTE	RC	CALABRIA				X		October 15, 2014

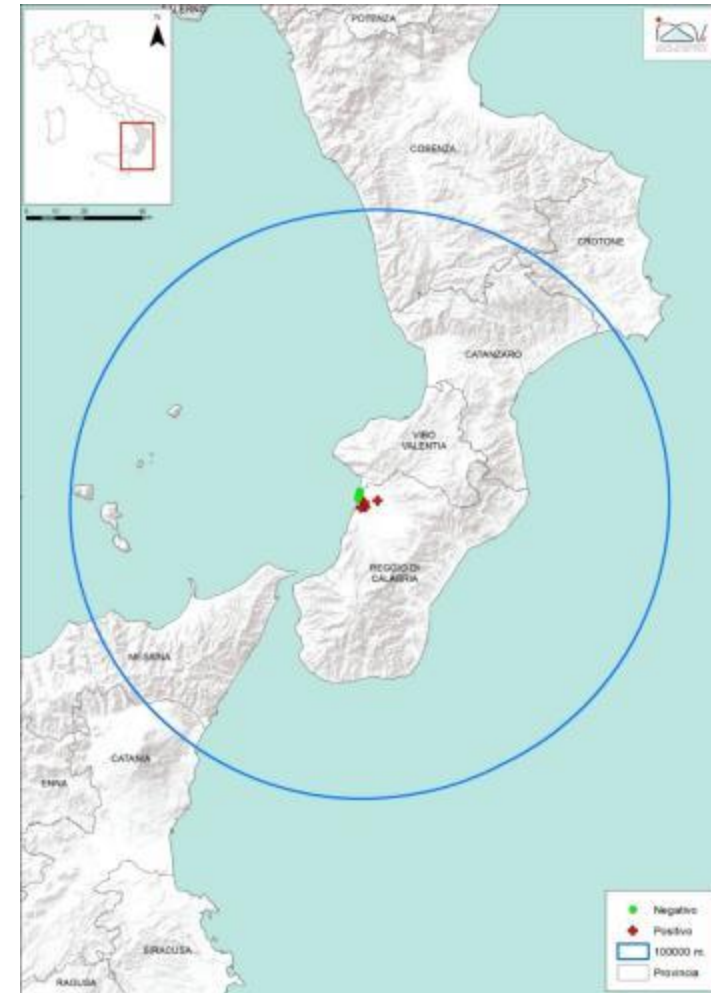
Confirmed cases as of December 31, 2014

N.	LOCALITY	MUNICIPALITY	PROVINCE	REGION	EGGS	LARVAE	PUPAE	ADULTS	Note	CONFIRMATION DATE
37_2014	C.DA FERRARO	OPPIDO MAMERTINA	RC	CALABRIA				X		October 15, 2014
38_2014	C.DA FORESTA	RIZZICONI	RC	CALABRIA				X		October 15, 2014
39_2014	C.DA GARIBALDI	SAN FERDINANDO	RC	CALABRIA				X		October 15, 2014
40_2014	C.DA BARONIA	CANDIDONI	RC	CALABRIA		X		X		October 16, 2014
41_2014	PONTE QUARANTANA	RIZZICONI	RC	CALABRIA				X		October 16, 2014
42_2014	C.DA BARONIA MANNELLA	SAN CALOGERO	VV	CALABRIA				X		October 17, 2014
43_2014	C .DA CARAO	ROSARNO	RC	CALABRIA				X		October 20, 2014
44_2014	C.DA PETROSA	TAURIANOVA	RC	CALABRIA				X		October 20, 2014
45_2014	C.DA BUFALO	OPPIDO MAMERTINA	RC	CALABRIA				X		October 20, 2014
46_2014	C.DA PATINANSERI	OPPIDO MAMERTINA	RC	CALABRIA				X		October 20, 2014
47_2014	FEUDO	LIMBADI	VV	CALABRIA				X		October 20, 2014
48_2014	C.DA CAVALIERE	OPPIDO MAMERTINA	RC	CALABRIA				X		October 22, 2014
49_2014	C.DA FERRANDINA	OPPIDO MAMERTINA	RC	CALABRIA				X		October 24, 2014
50_2014	C.DA PAPIAZZO	VAROPODIO	RC	CALABRIA				X		October 31, 2014
51_2014	C.DA BUSALE	CINQUEFRONDI	RC	CALABRIA				X		October 31, 2014
52_2014	C.DA SCROFORIO	TERRANOVA SAPPO MINULIO	RC	CALABRIA				X		November 04, 2014
53_2014	C.DA SPARTO	MELILLI	SR	SICILIA				X		November 07, 2014
54_2014	C.DA COLLINA	ROSARNO	RC	CALABRIA				X	Sentinel honey bee nuclei	November 14, 2014
55_2014	C.DA FEUDO	SAN PROCOPIO	RC	CALABRIA				X		November 18, 2014
56_2014	C.DA DUVERSO	OPPIDO MAMERTINA	RC	CALABRIA				X		November 21, 2014
57_2014	C.DA QUARANTANO	OPPIDO MAMERTINA	RC	CALABRIA				X		November 25, 2014
58_2014	C.DA BUZZANO	OPPIDO MAMERTINA	RC	CALABRIA				X		November 25, 2014
59_2014	PONTE BUGGE	SAN PROCOPIO	RC	CALABRIA				X		November 27, 2014
60_2014	C.DA PETRULLI	CITTANOVA	RC	CALABRIA		X		X		December 10/2014
61_2014	C.DA SOVERETO	GIOIA TAURO	RC	CALABRIA		X		X		December 29/2014

Development of the outbreaks

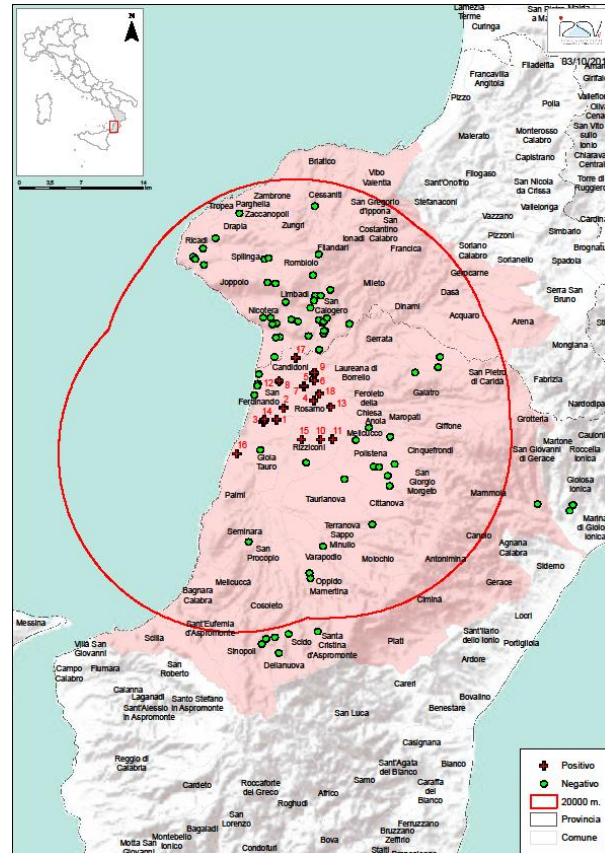
Protection zone = 20 km

Surveillance zone = 100 km

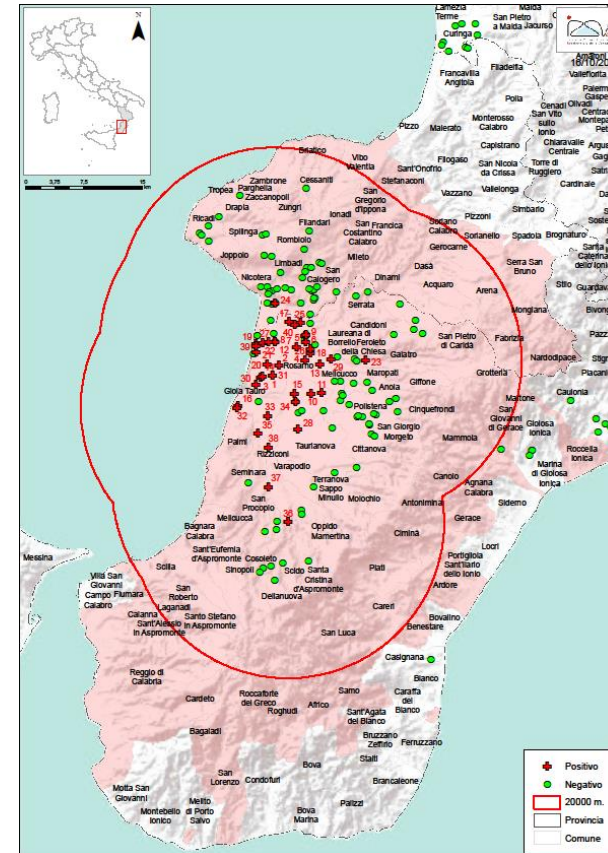


24 September 2014

Protection zone = 20 km

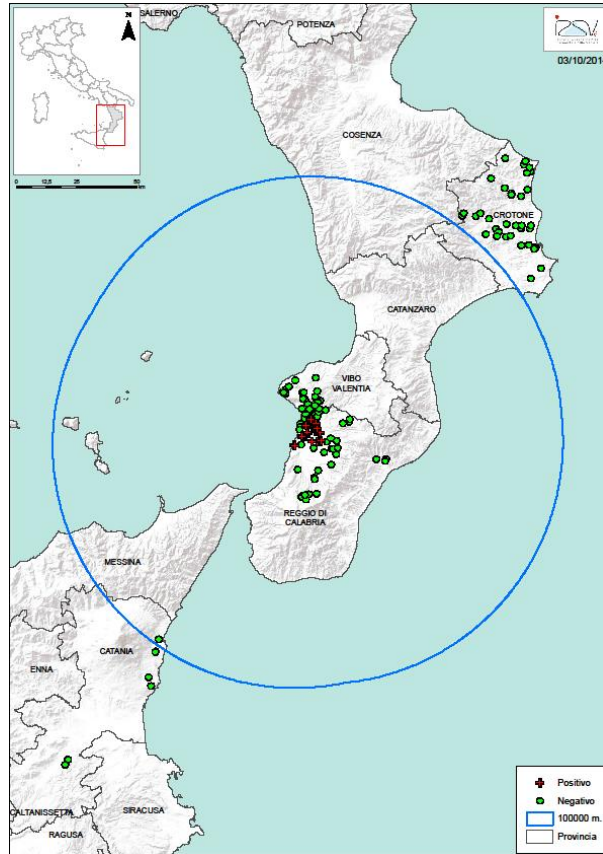


3 October 2014

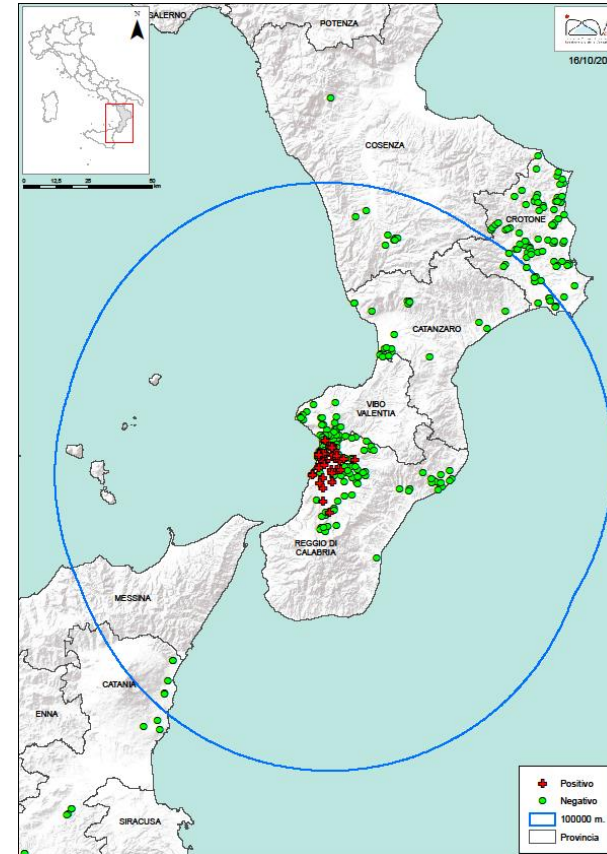


16 October 2014

Surveillance zone = 100 km

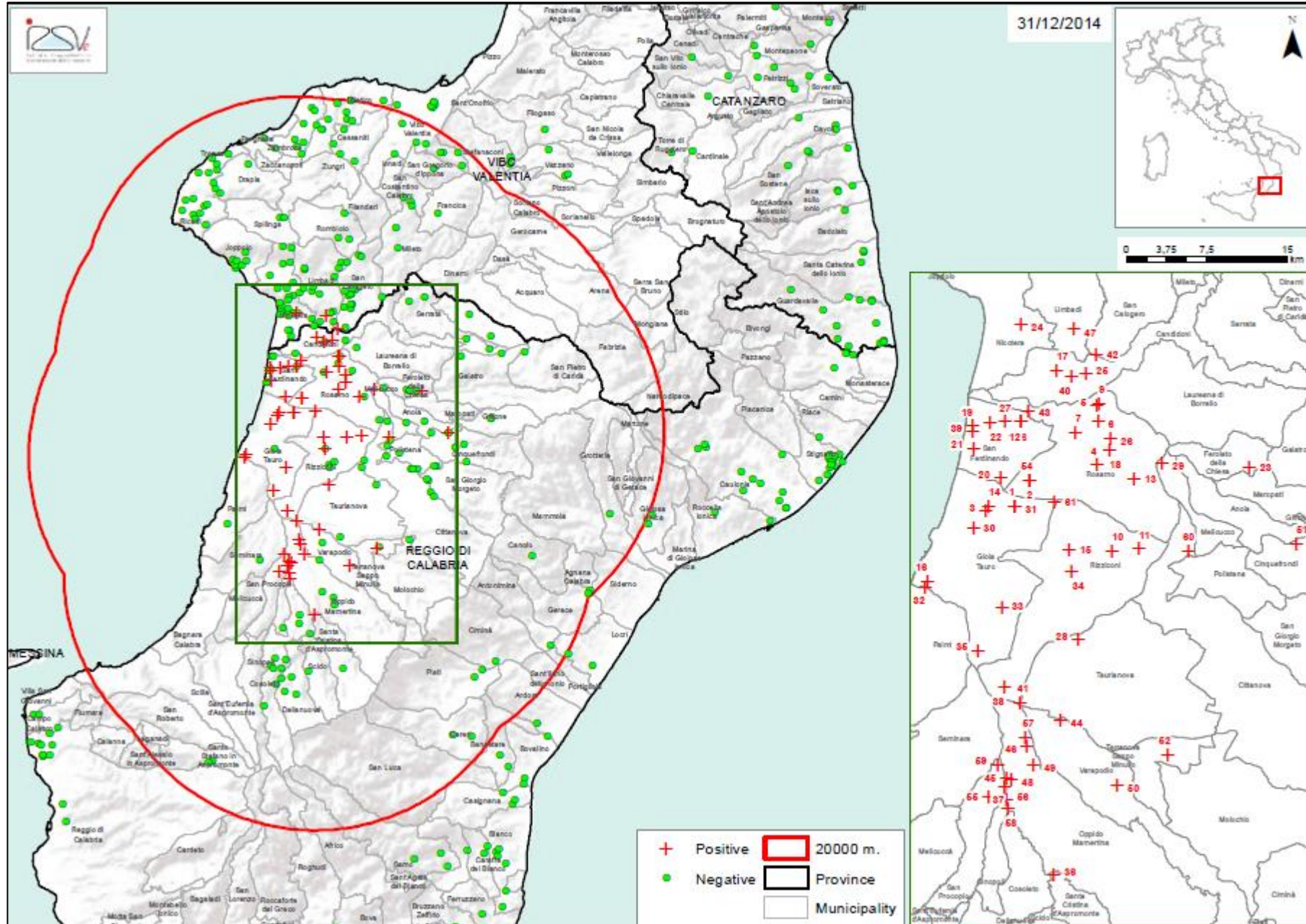


3 October 2014



16 October 2014

Calabria region

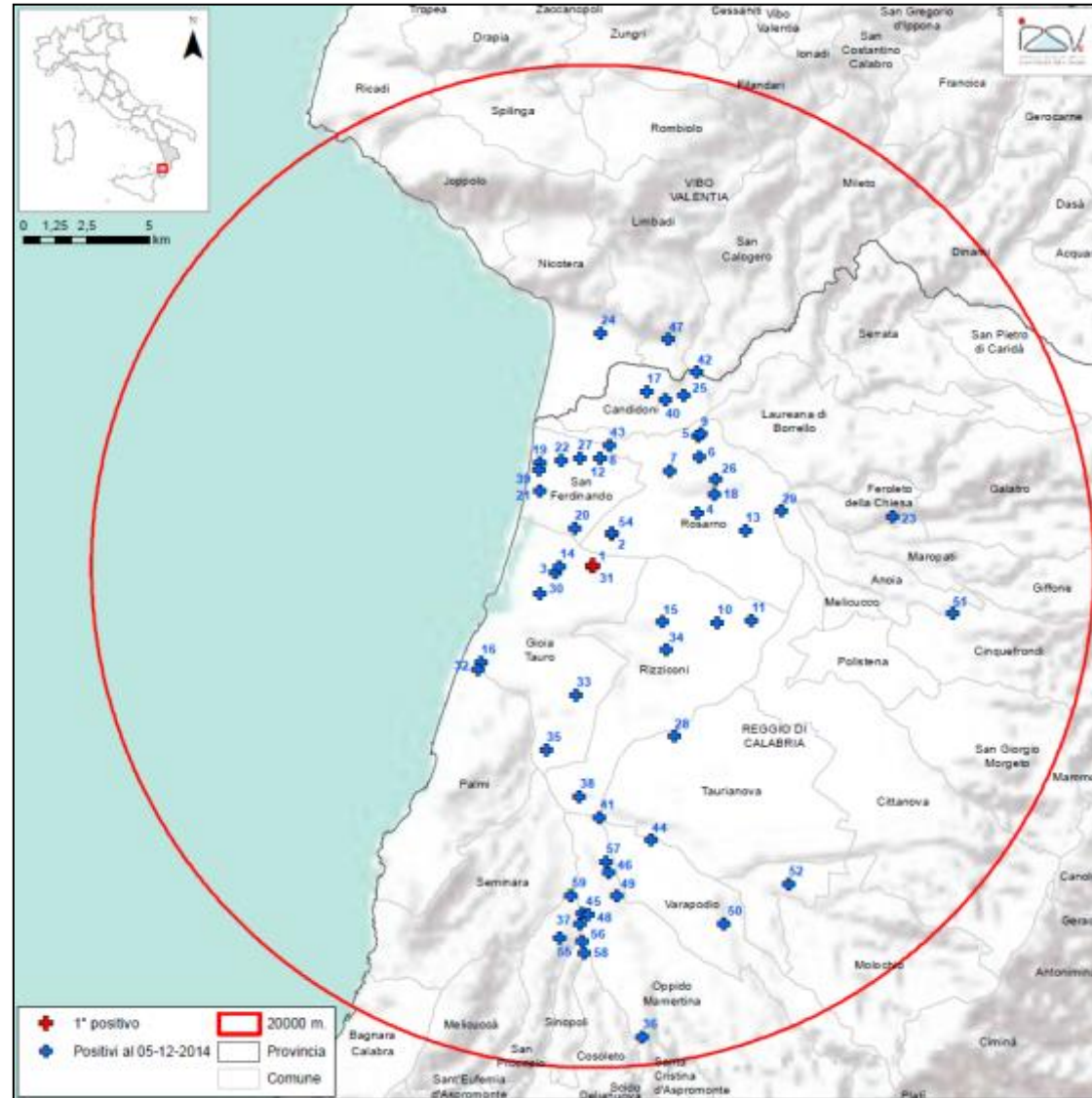


Calabria region - Positive sites

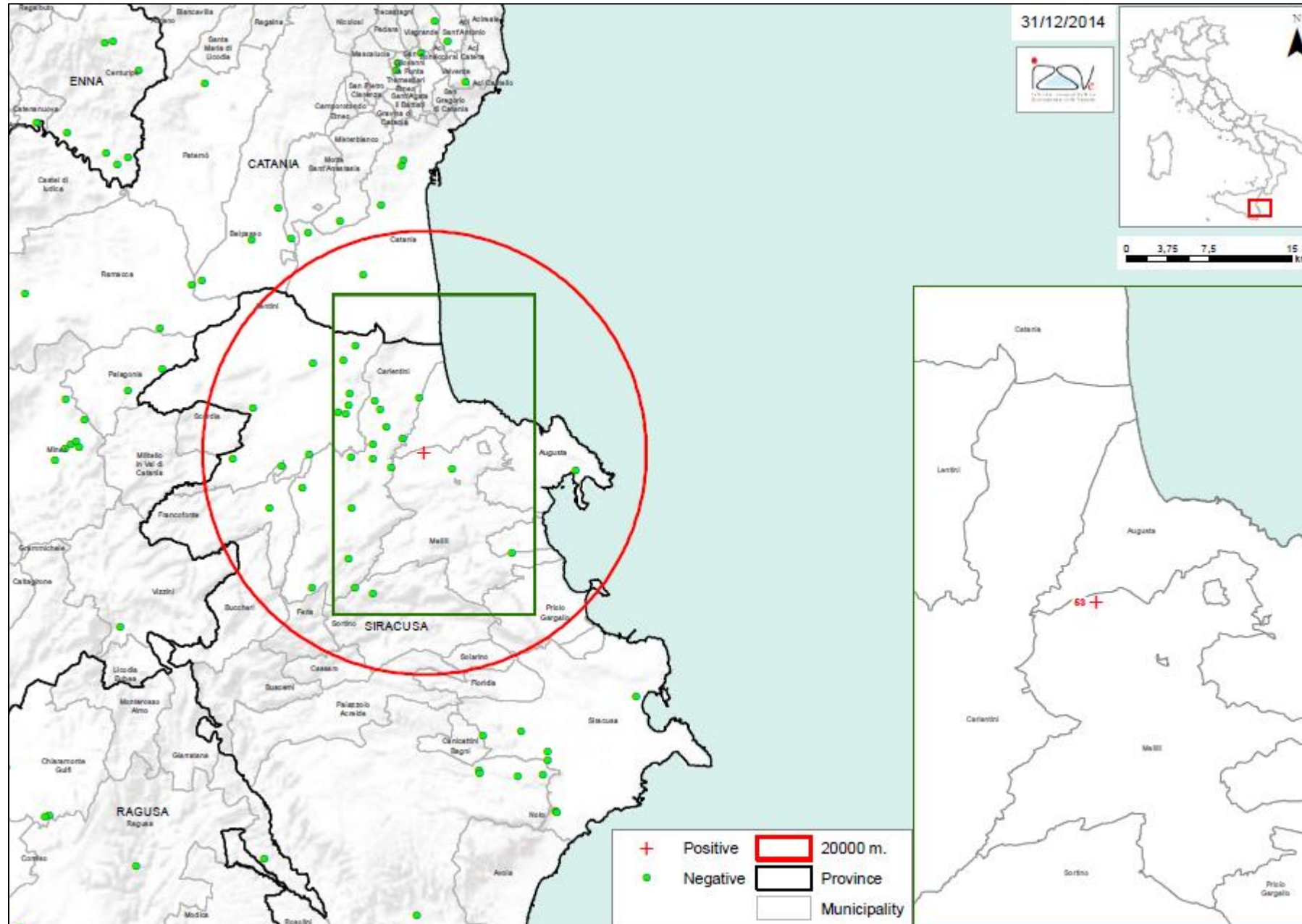
Distance from the first outbreak (red):

<10 km = 41 sites

>10 < 20 km = 17 sites

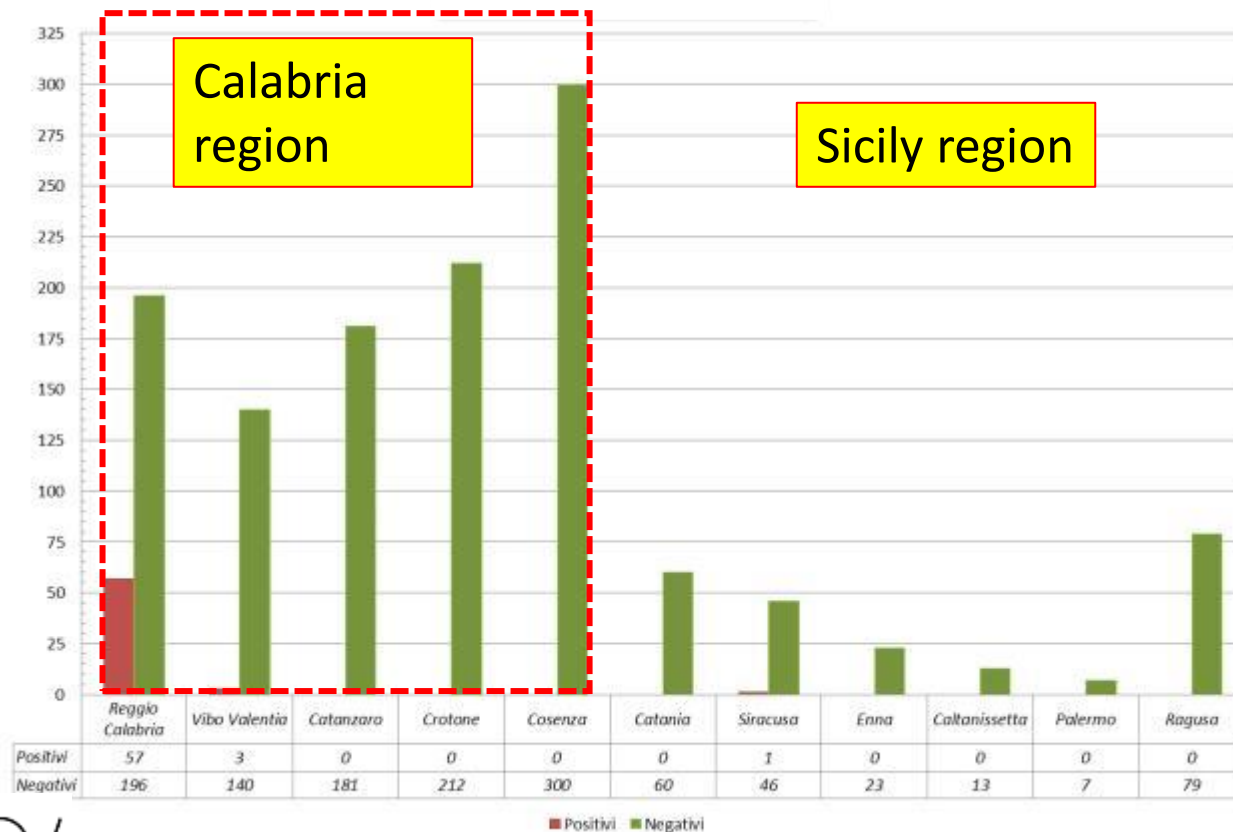


Sicily region - 7 November 2014



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

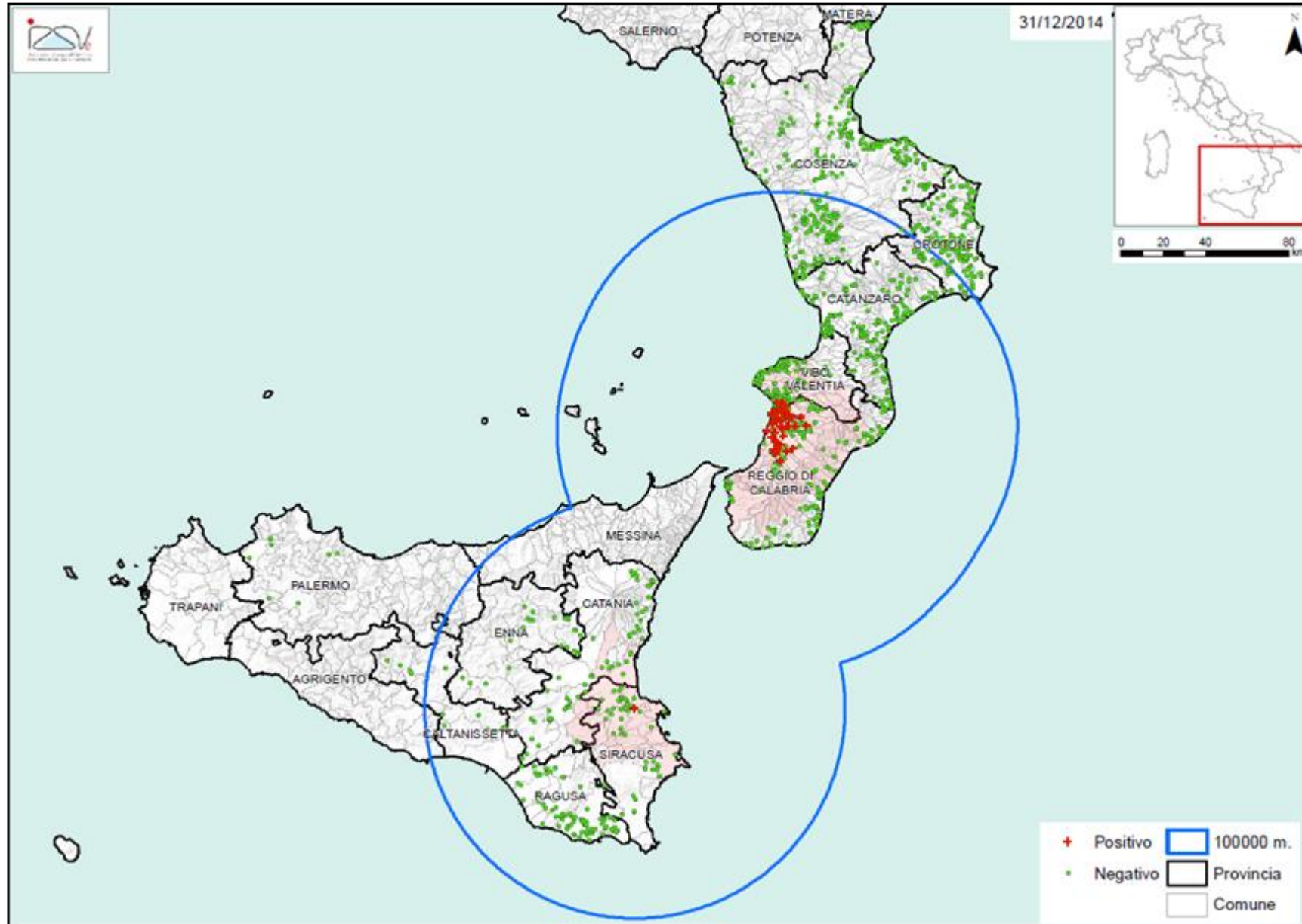
Positive and negative apiaries: September - December 2014



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

31 December 2014

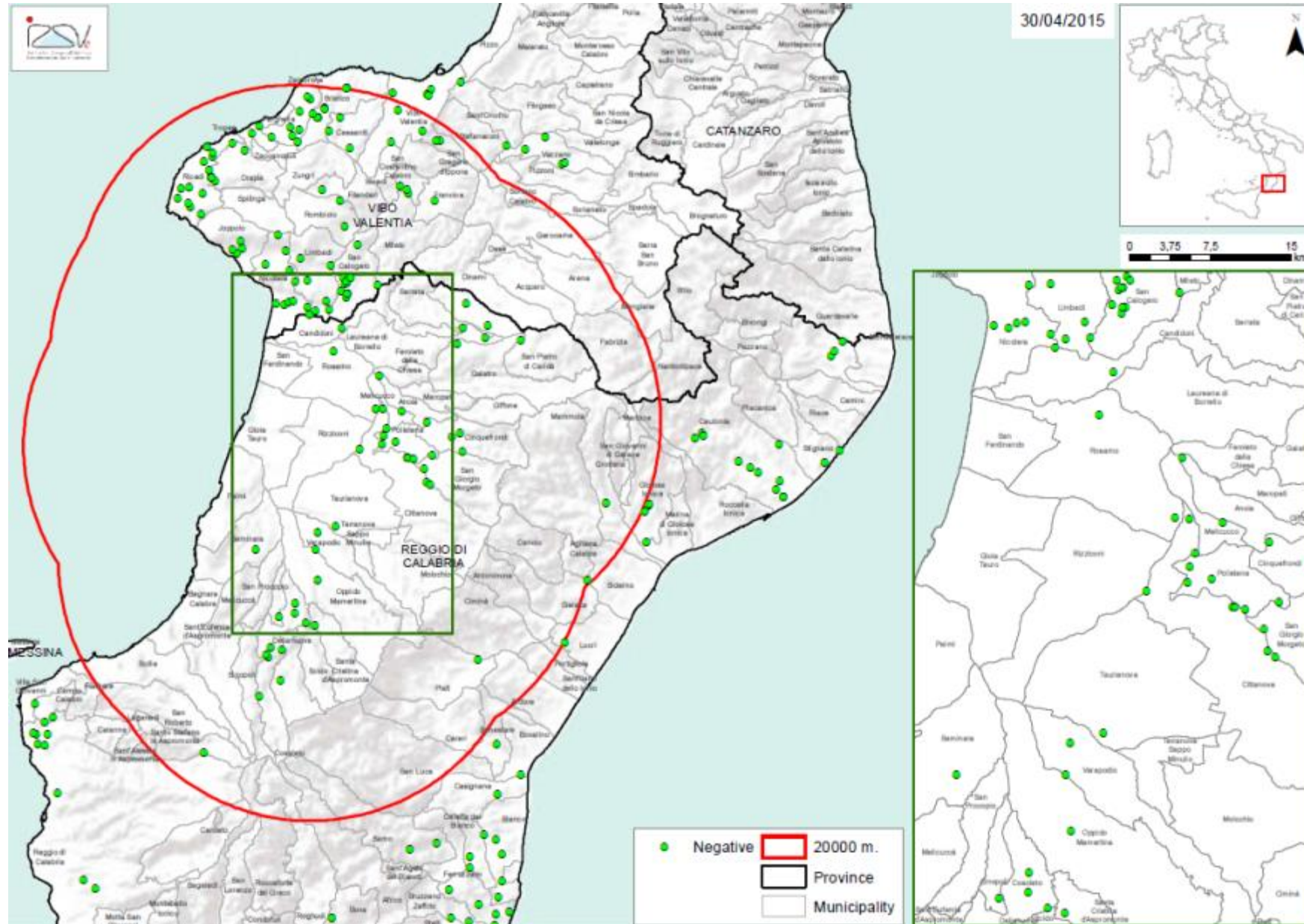
Calabria and Sicily regions - Surveillance zone and results of surveillance activity from September to December 2014



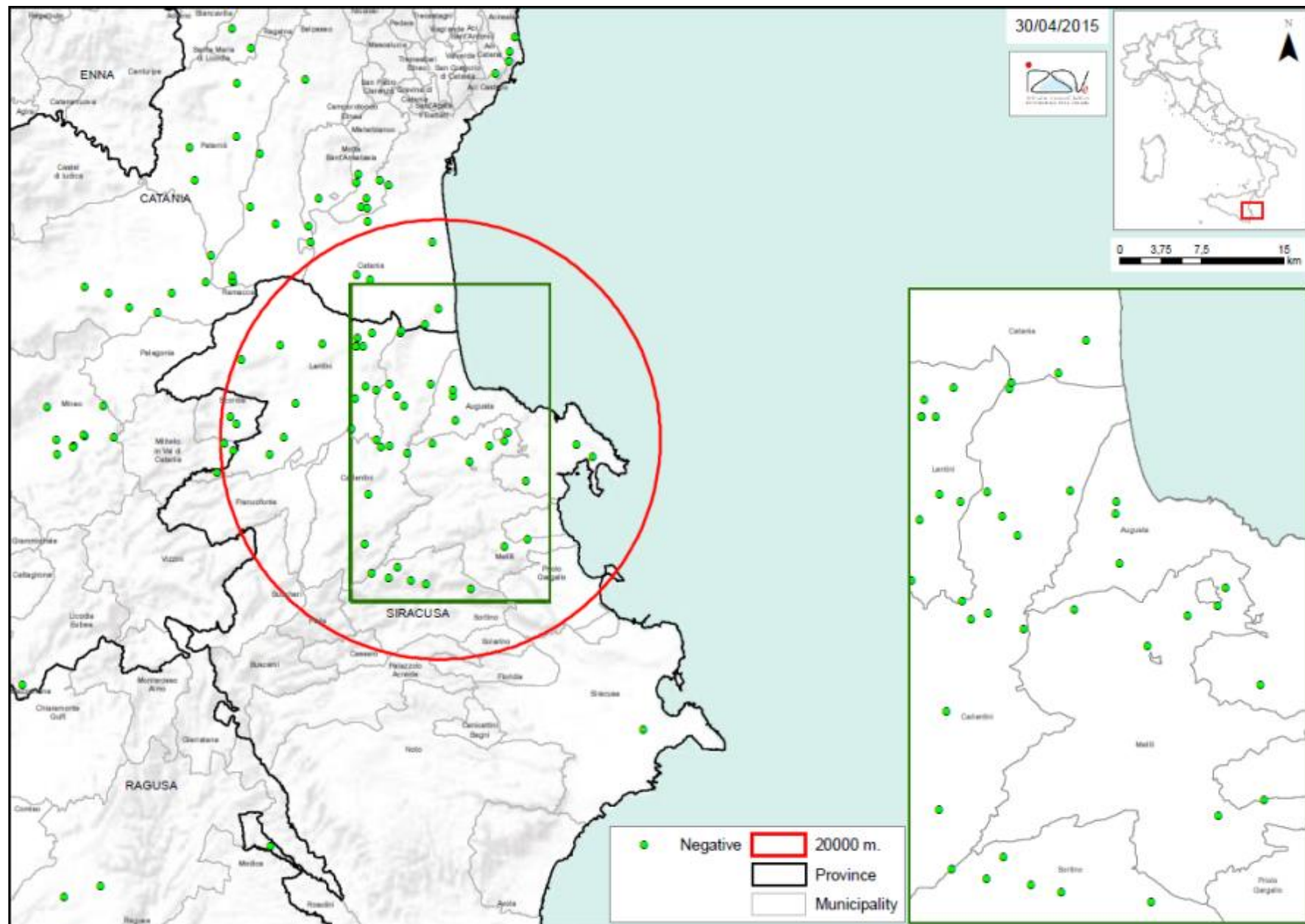
2015

Surveillance activity

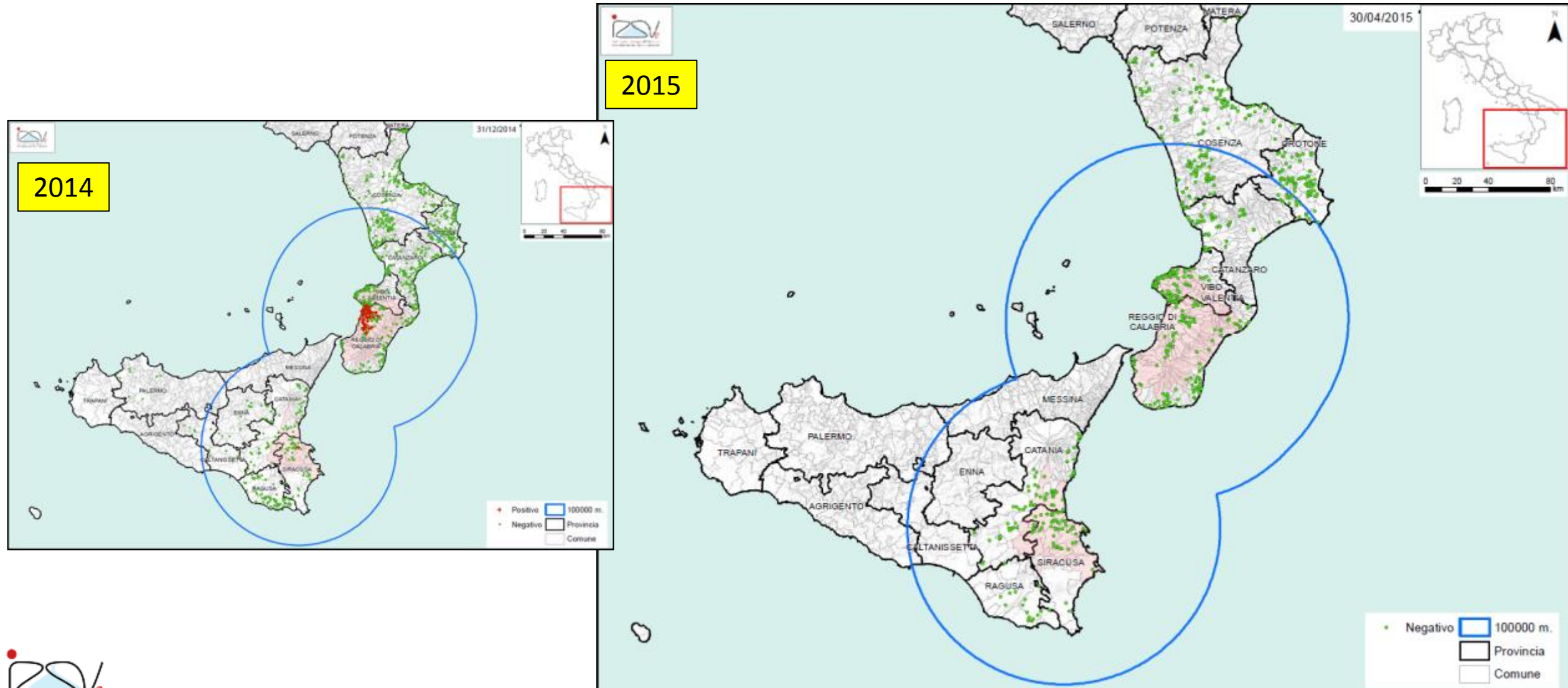
Calabria region – Results of surveillance activity from 1 January to 13 April 2015



Sicily region – Results of surveillance activity from 1 January to 30 April 2015



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



Surveillance 2015 – 30 April

(n. of inspected apiaries = negative/positive)

	Negative	Positive
<i>Calabria region</i>		
Catanzaro	52	0
Cosenza	167	0
Crotone	109	0
Reggio Calabria	125	0
Vibo Valentia	97	0
Total	550	0
<i>Sicilia region</i>		
Catania	75	0
Caltanissetta	0	0
Enna	0	0
Messina	0	0
Agrigento	0	0
Trapani	0	0
Palermo	0	0
Ragusa	14	0
Siracusa	50	0
Total	139	0
Gross total	689	0

Measures adopted by the Ministry of Health

0018842-P-12/09/2014: first detection in Calabria

0019258-19/09/2014-DGSAF-COD_UO-P: second outbreak, EU RL confirmation

0020069-01/10/2014-DGSAF-COD_UO-P: surveillance in not infested regions

0020298-03/10/2014-DGSAF-COD_UO-P: update on outbreaks

0023341-P-07/11/2014-DGSAF: first detection in Sicily

MINISTERO DELLA SALUTE DECRETO 19 November 2014 Extraordinary measures to eradicate and to compensate beekeepers following the infestation due to *Aethina tumida*. (14A09715) (GU n. 294 del 19-12-2014)

0000969-16/01/2015-DGSAF-COD_UO-P: reduction of surveillance activity according to the Winter season

0003810-16/02/2015-DGSAF-COD_UO-P: movement of honey bees in the surveillance and restriction zones

0005637-05/03/2015-DGSAF-COD_UO-P: resume of surveillance activity in the territory of Calabria region according to the new beekeeping season

0007104-19/03/2015-DGSAF-COD_UO-P: national surveillance program according to EU guidelines

0008311-31/03/2015-DGSAF-COD_UO-P: surveillance activity in the territory of Sicily region

0010658-23/04/2015-DGSAF-COD_UO-P: swarm production in the protection zone - Calabria region

Information available at: <http://www.izsvenezie.it/aethina-tumida-in-italia-2014/> (English version under renovation)

Measures adopted

- 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 (@3,500 hives) and compensation
- if negative, traps should be applied
- traceability of commercial and migratory movement in and out of the zone

Measures adopted

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

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.apiares	N. hives for apiary
Italy (excluded Calabria and Sicily)	Nord	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 2% CI 95%
	Centre	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 2% CI 95%
	South	164 non migratory random selected (expected prevalence 2% CI 95%)	expected prevalence 2% CI 95%

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

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 10th.

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%



Thank you for your attention

