



Valutazione dell'efficacia degli strumenti e delle procedure di indagine

ALESSANDRO BIANCHI



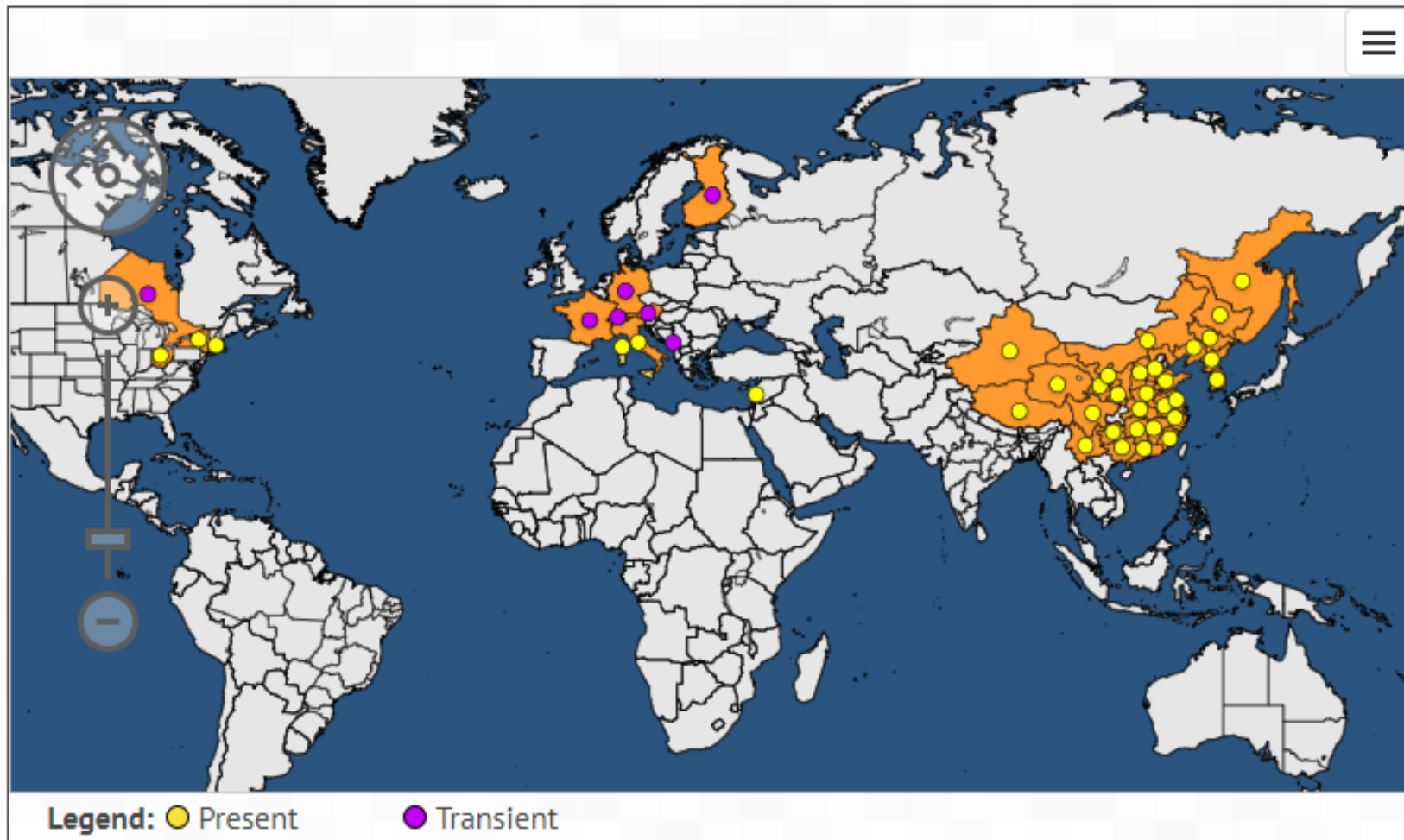
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Anoplophora glabripennis

Distribution

Last updated: 2019-10-14



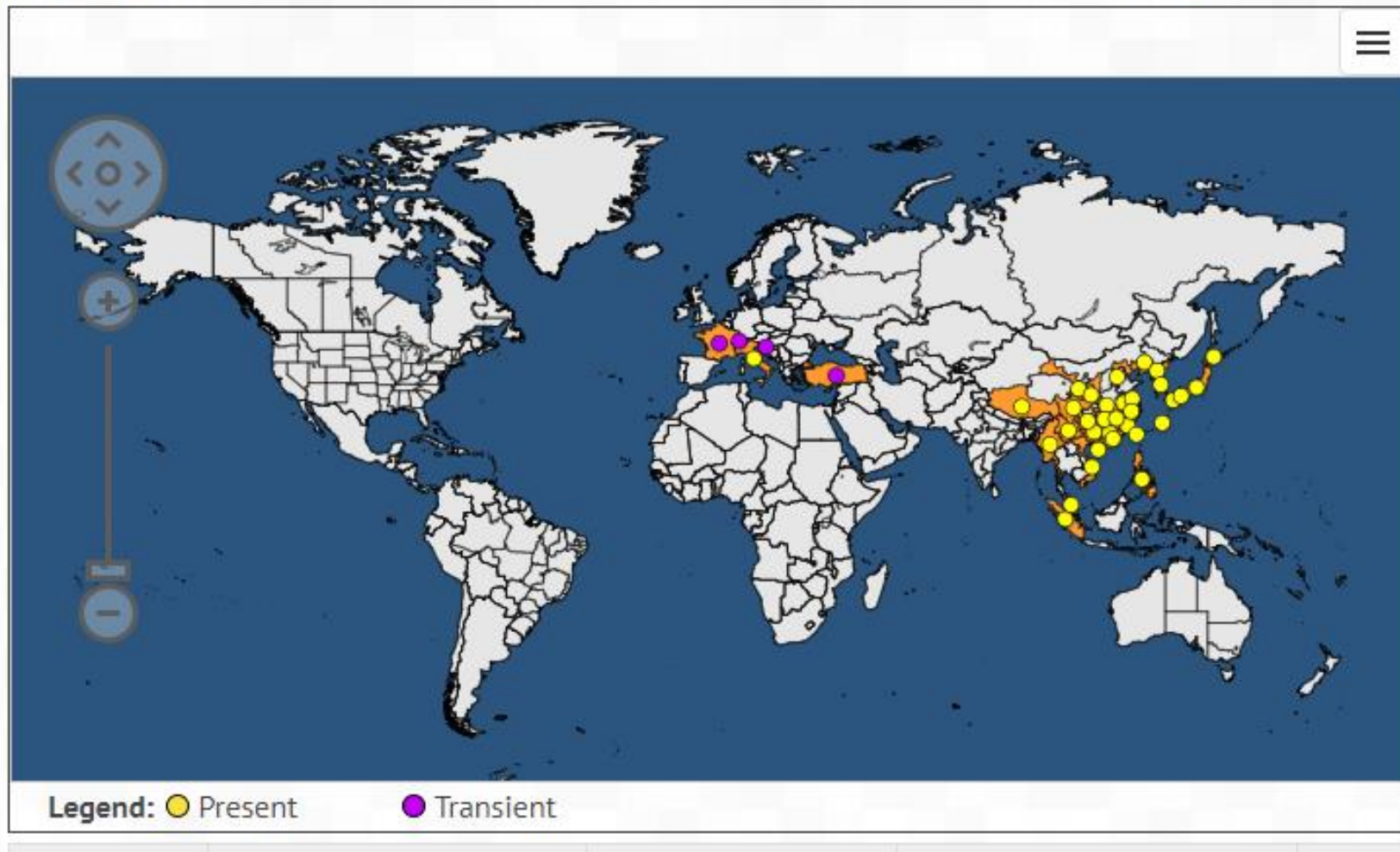
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Anoplophora chinensis

Distribution

Last updated: 2019-09-19



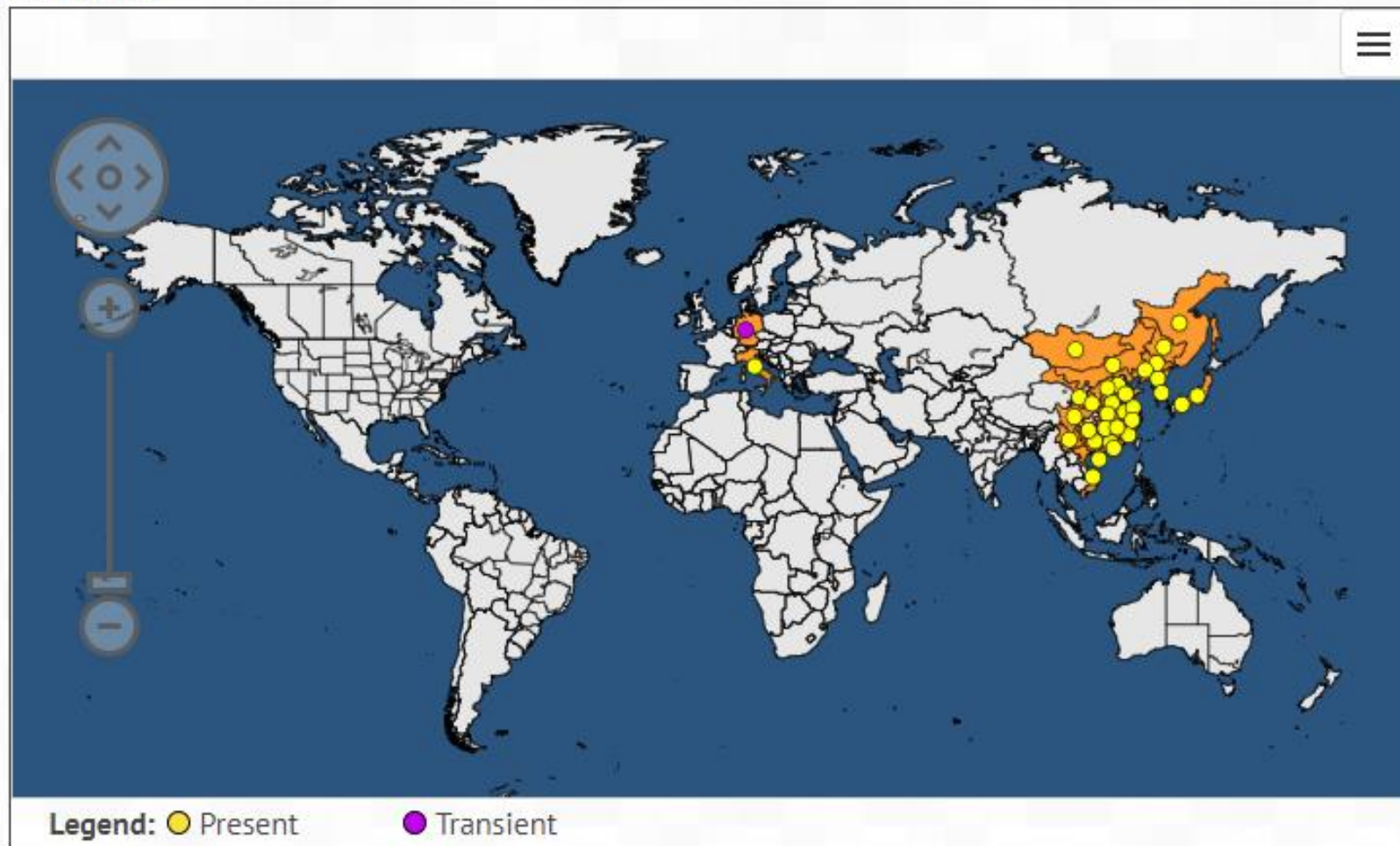
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Aromia bungii

Distribution

Last updated: 2019-09-02



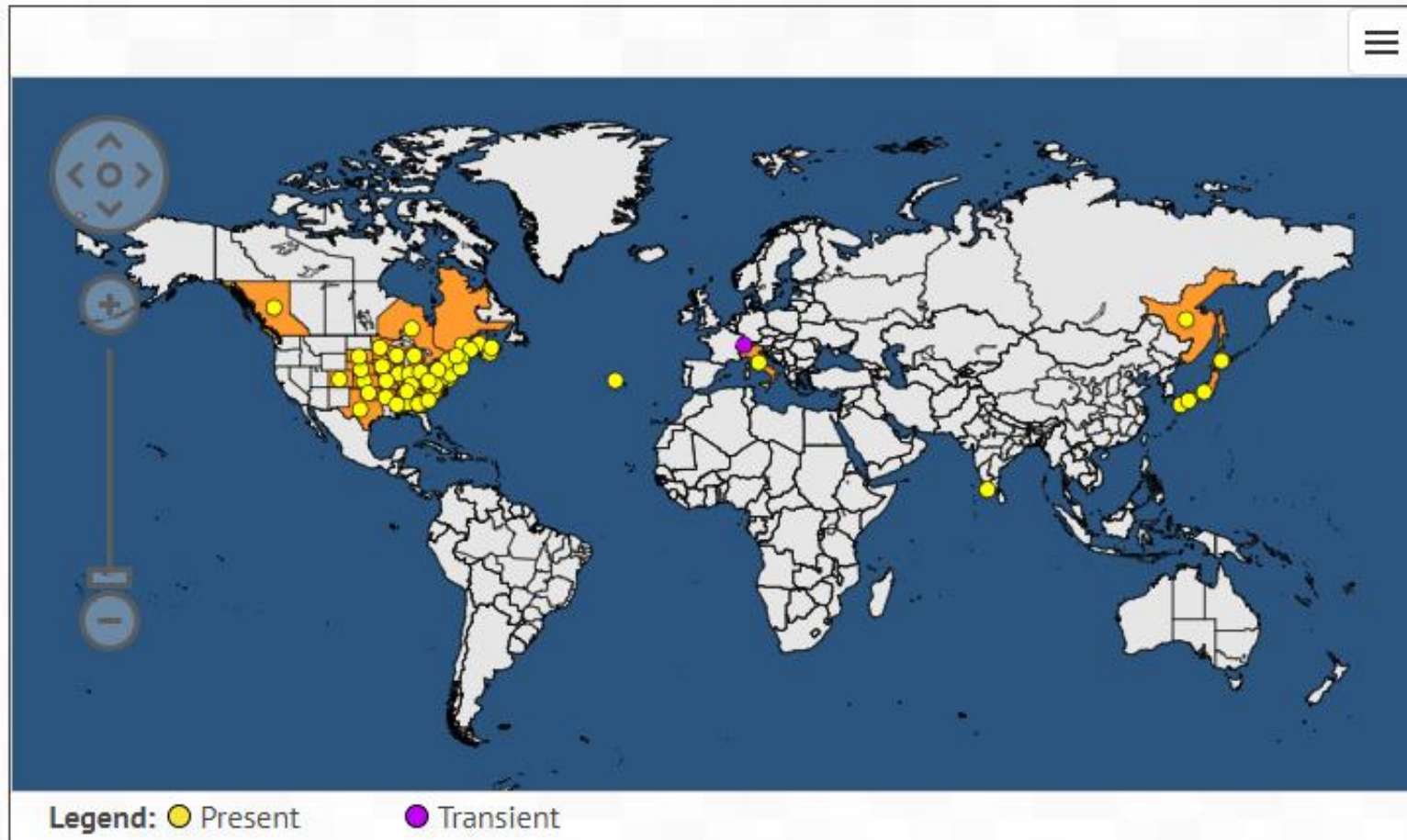
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Popillia japonica

Distribution

Last updated: 2019-11-09



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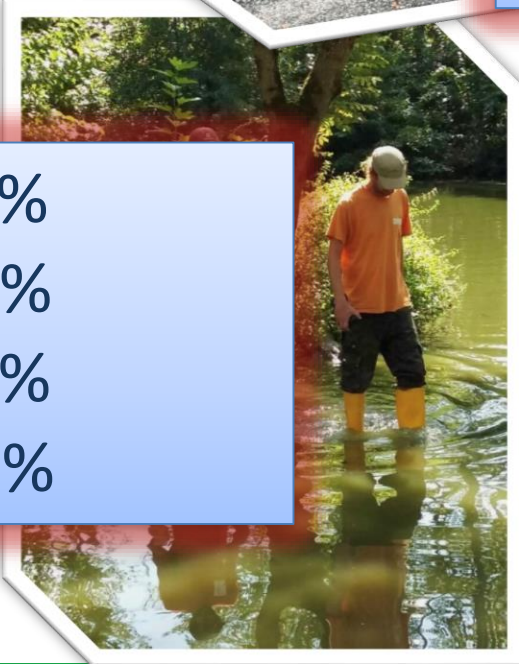
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4500 giornate/ tecnico



100 giornate a
supporto nei vivai



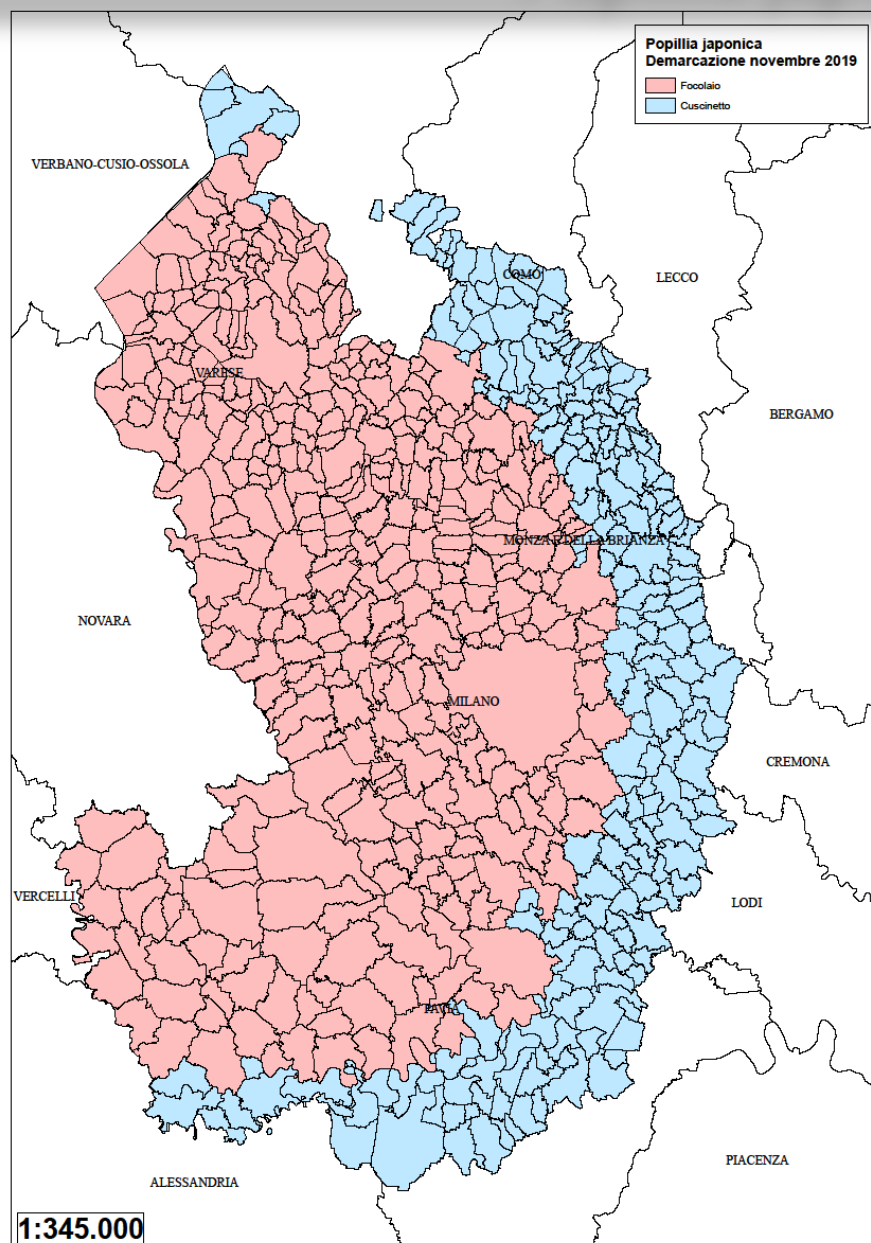
CLB	63 %
ALB	13 %
Aromia	5 %
Popillia	19 %



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Popillia japonica



Comuni focolaio ottobre 2018

227

Comuni focolaio luglio 2019

351

Comuni focolaio novembre 2019

382



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Popillia japonica - Trappole



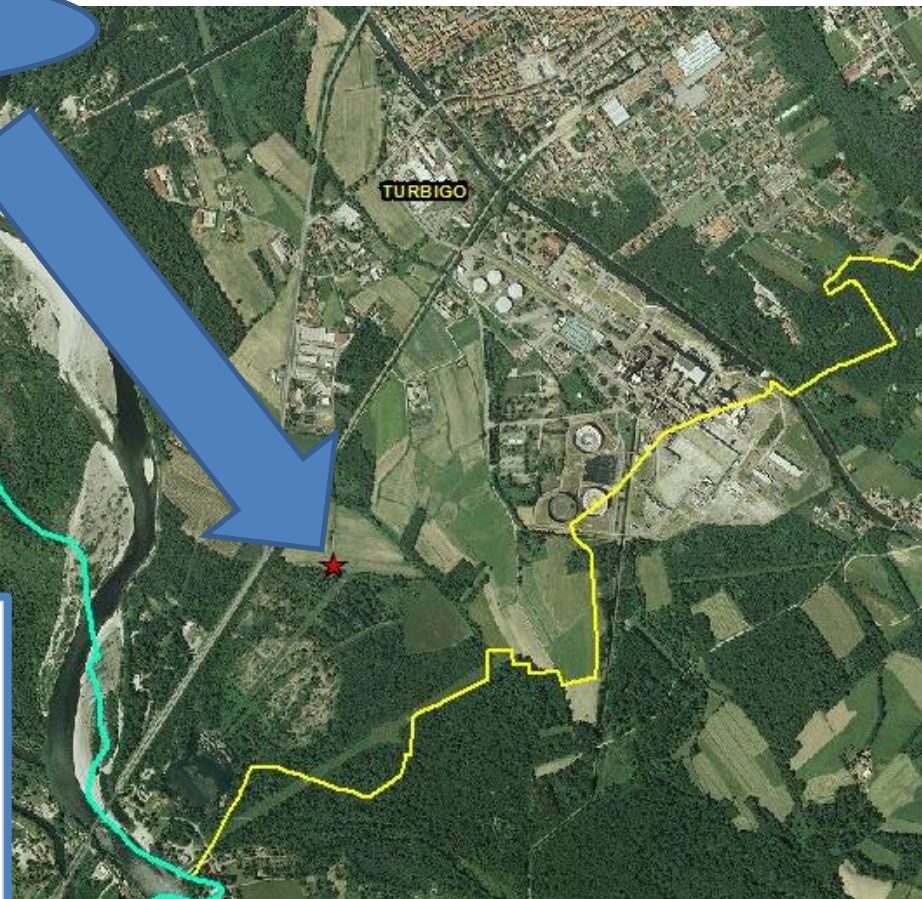
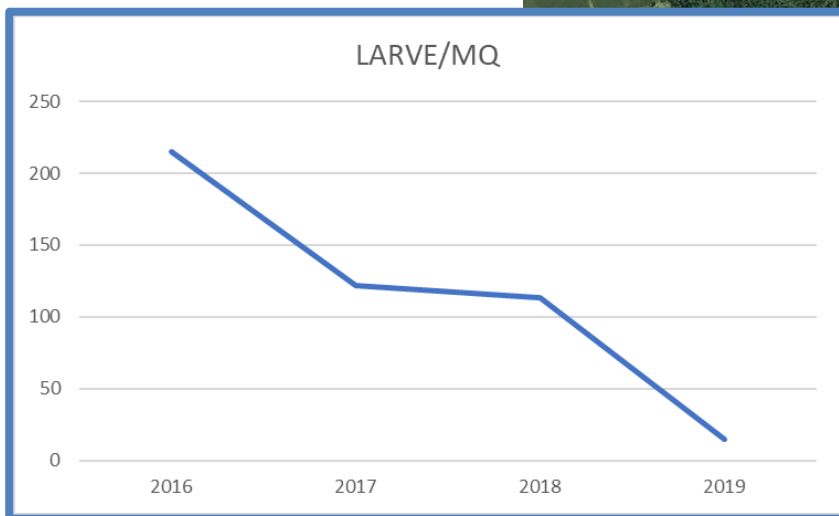
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Popillia japonica

Densità larvale: n. di larve / mq

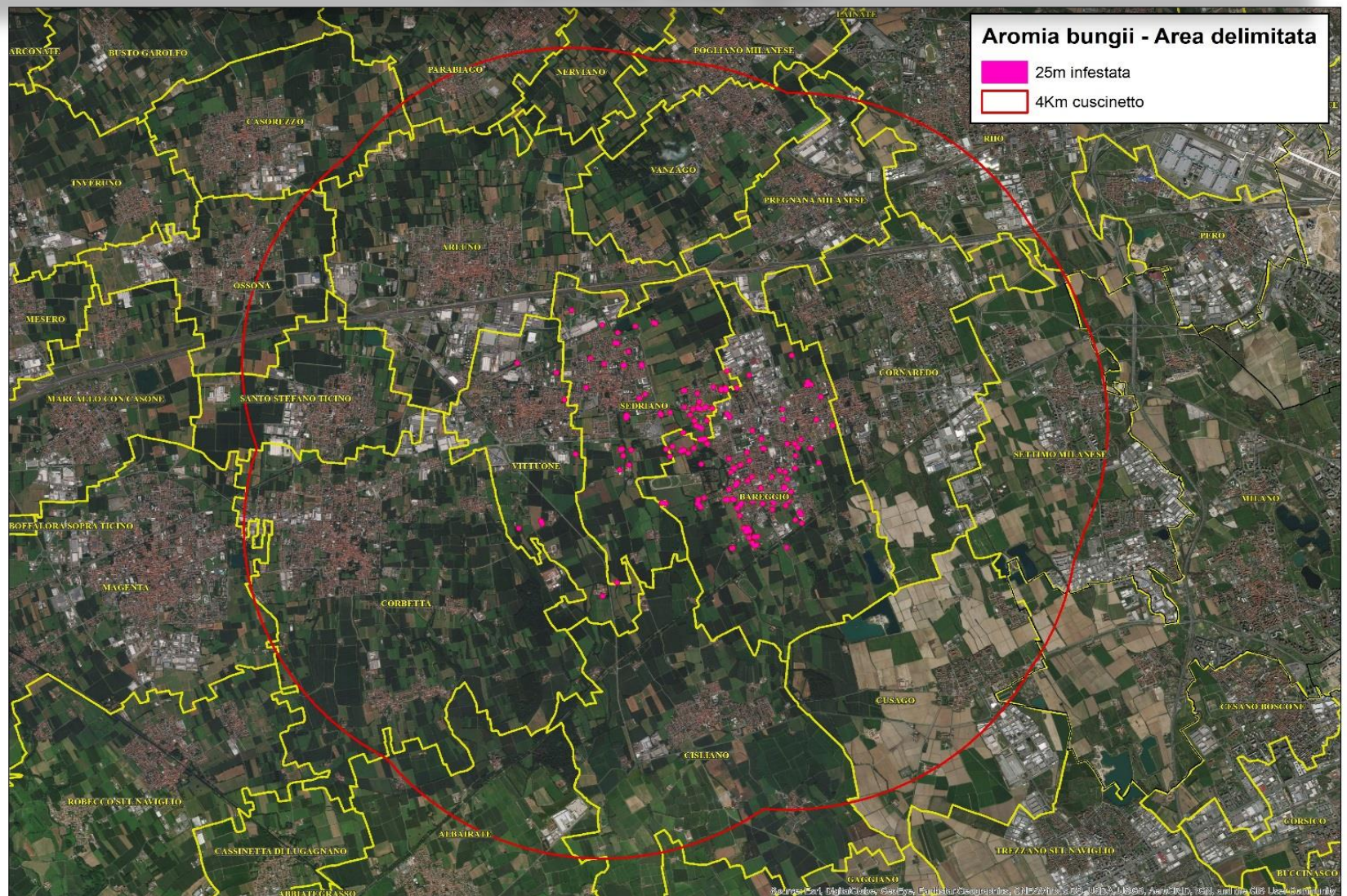
ANNO	LARVE/MQ
2016	215
2017	122
2018	113
2019	15



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Aromia bungii



Aromia bungii



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Analisi di Laboratorio



**Longhorn beetles:
identification of juvenile
stages and frass analysis
for the early detection of
infested trees**

**PCR with specific primer pair
CHINf/CHINr
(Strangi et al., 2012)**

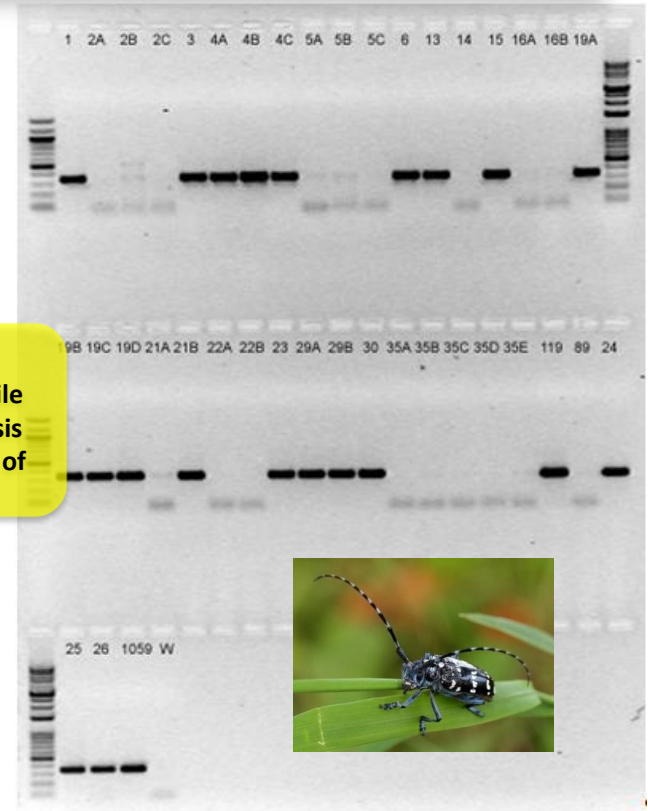


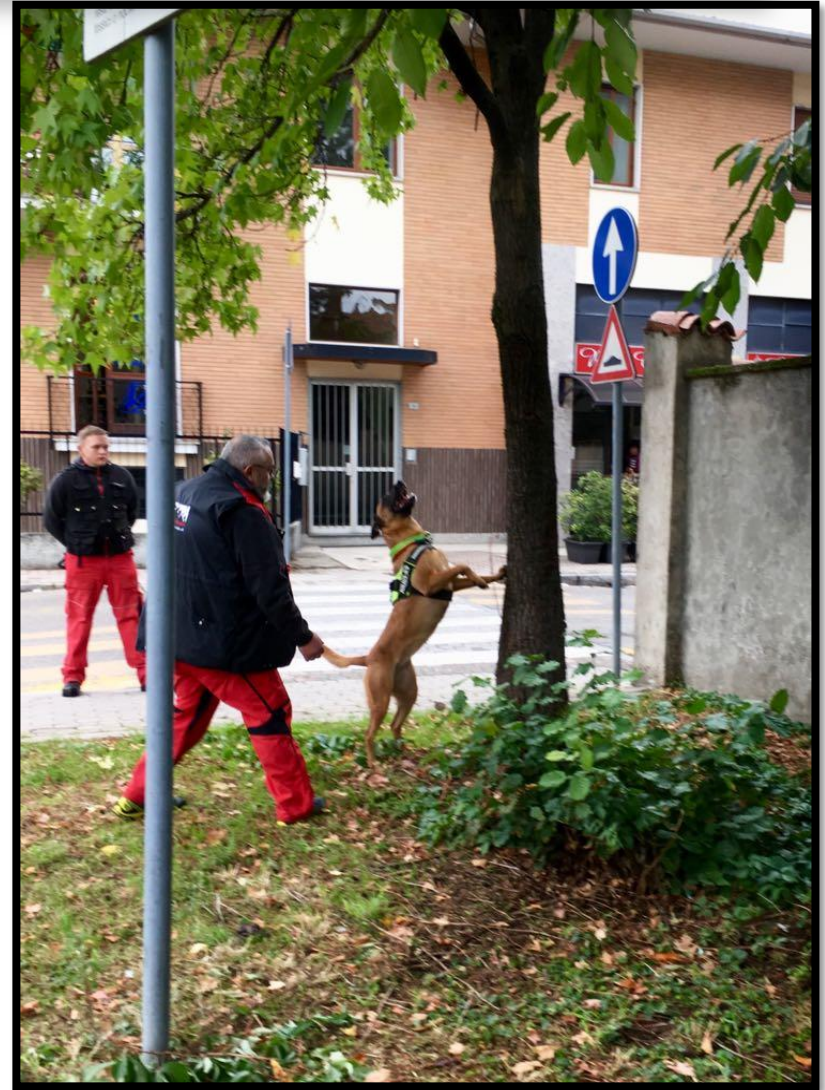
Figure 2 - Electrophoresis gel of amplified DNA fragments (primer ChinensisF/ChinensisR) from larval and pupal specimen, DNA diluted 1:100; *A. bungii* (89), *A. chinensis* adults (24, 25, 26), *A. chinensis* larva (1059), water (W). Molecular weight marker: Promega BenchTop 100bp DNA Ladder and PCR BIO Ladder I.



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Monitoraggio ALB – Sniffer dogs



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Monitoraggio ALB - formazione



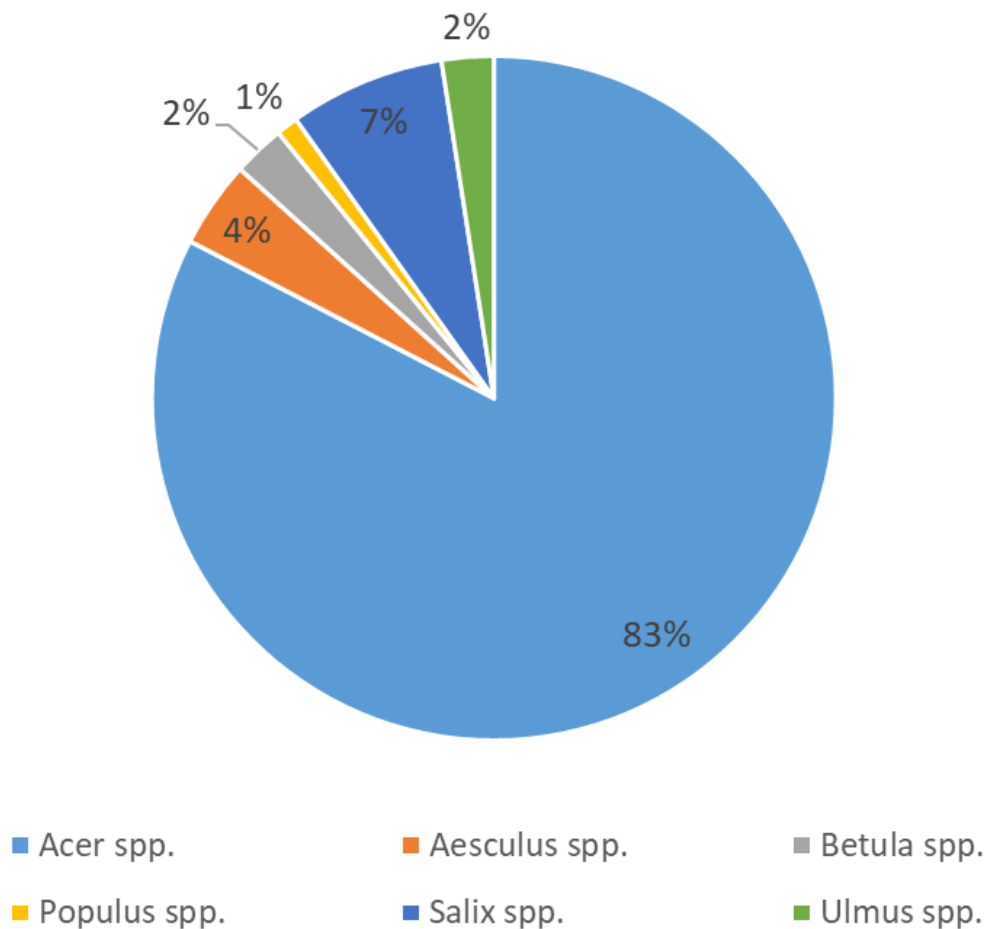
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Monitoraggio ALB

ALB Survey Results (2009-2019)		
Host plants - UE Decision 2015/893	N. Survey	N. Infested
<i>Acer spp.</i>	44.150	403
<i>Aesculus spp.</i>	1.888	20
<i>Albizia spp.</i>	91	0
<i>Alnus spp.</i>	876	0
<i>Betula spp.</i>	6.972	12
<i>Buddleja spp.</i>	4	0
<i>Carpinus spp.</i>	9.009	0
<i>Celtis spp.</i>	1.358	0
<i>Cercidiphyllum spp.</i>	1	0
<i>Corylus spp.</i>	5.092	0
<i>Eleagnus spp.</i>	0	0
<i>Fagus spp.</i>	1.856	0
<i>Fraxinus spp.</i>	2.729	0
<i>Hibiscus spp.</i>	594	0
<i>Koelreuteria spp.</i>	25	0
<i>Malus spp.</i>	1.680	0
<i>Melia spp.</i>	0	0
<i>Morus spp.</i>	667	0
<i>Platanus spp.</i>	2.709	0
<i>Populus spp.</i>	19.068	5
<i>Prunus spp.</i>	34.754	0
<i>Pyrus spp.</i>	1.674	0
<i>Quercus rubra</i>	908	0
<i>Robinia spp.</i>	8.444	0
<i>Salix spp.</i>	5.325	36
<i>Sophora spp.</i>	145	0
<i>Sorbus spp.</i>	33	0
<i>Tilia spp.</i>	5.320	0
<i>Ulmus spp.</i>	11.918	12
Other no host species	4.492	0
Total	171.782	488

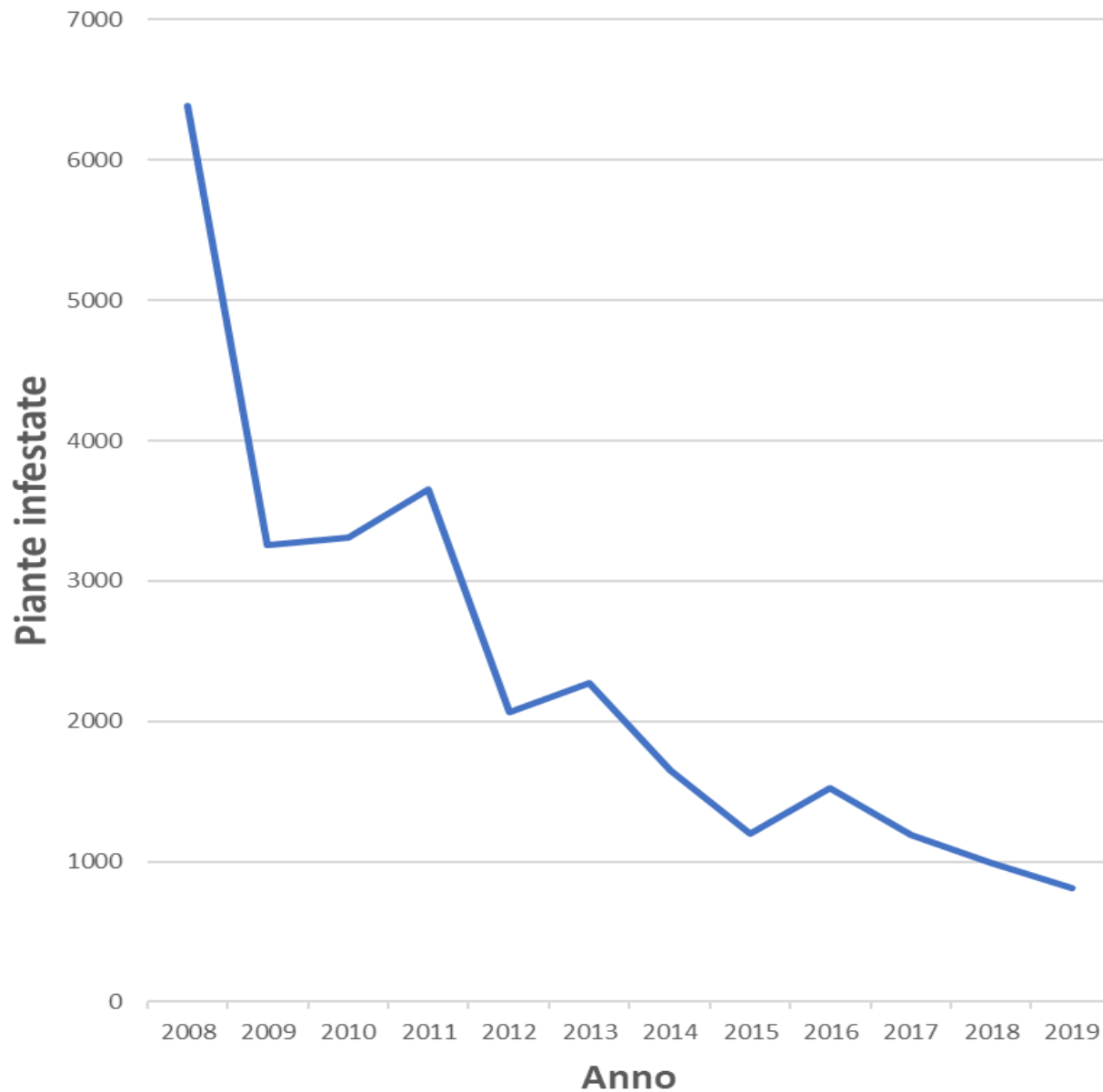
% ALB infested trees (2009-2019)



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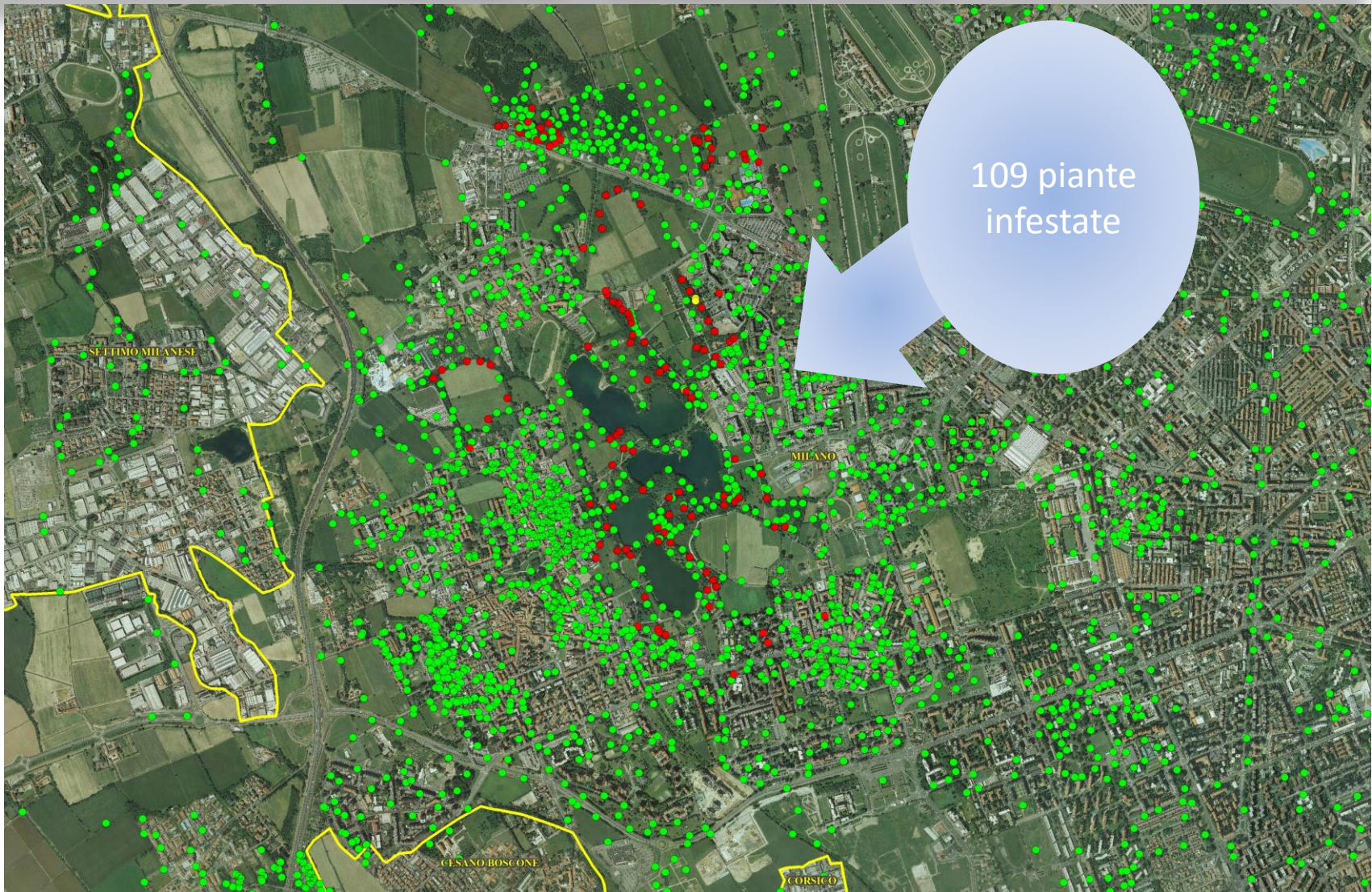
Anoplophora chinensis



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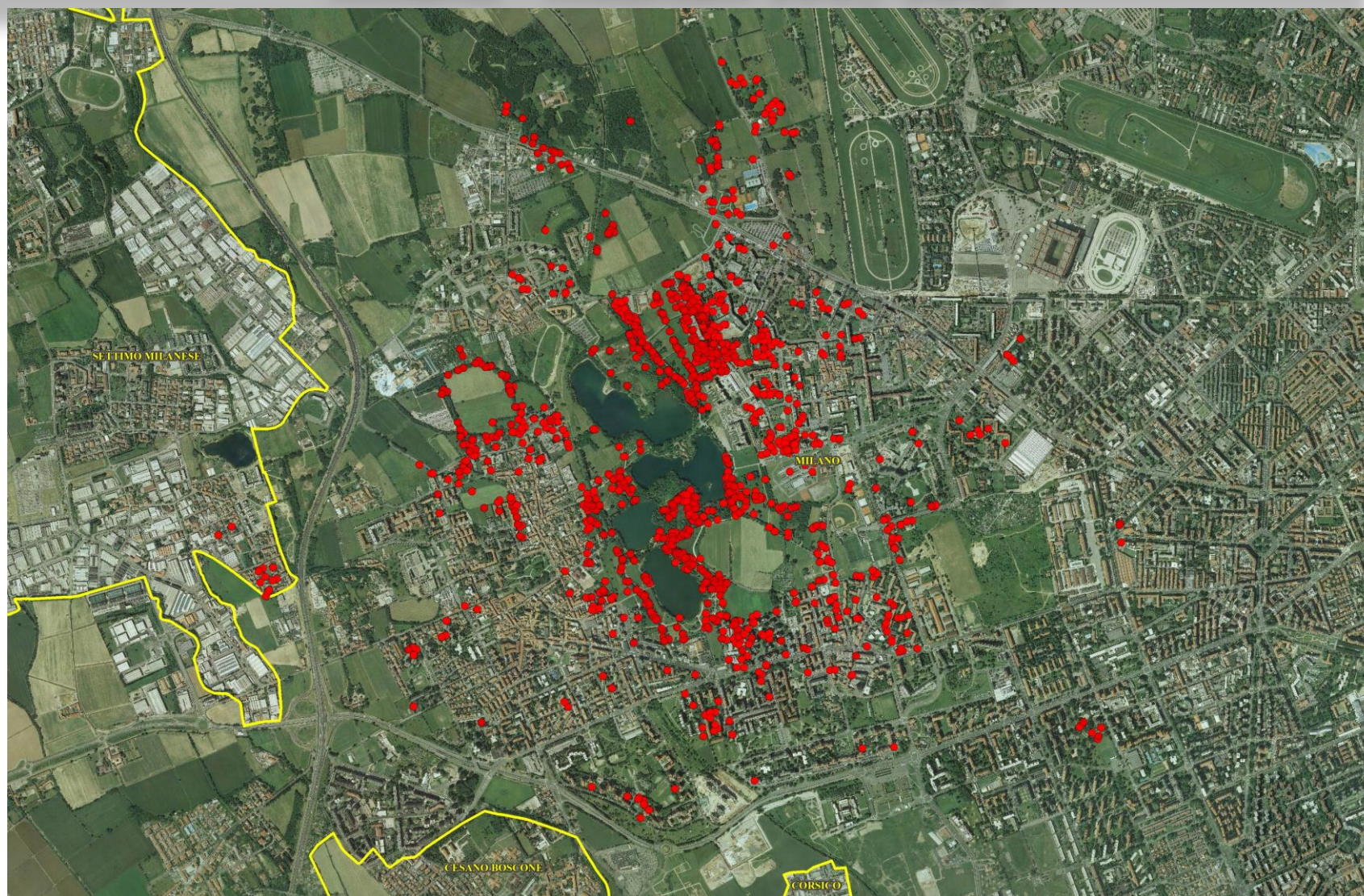
Milano - Risultati 2019



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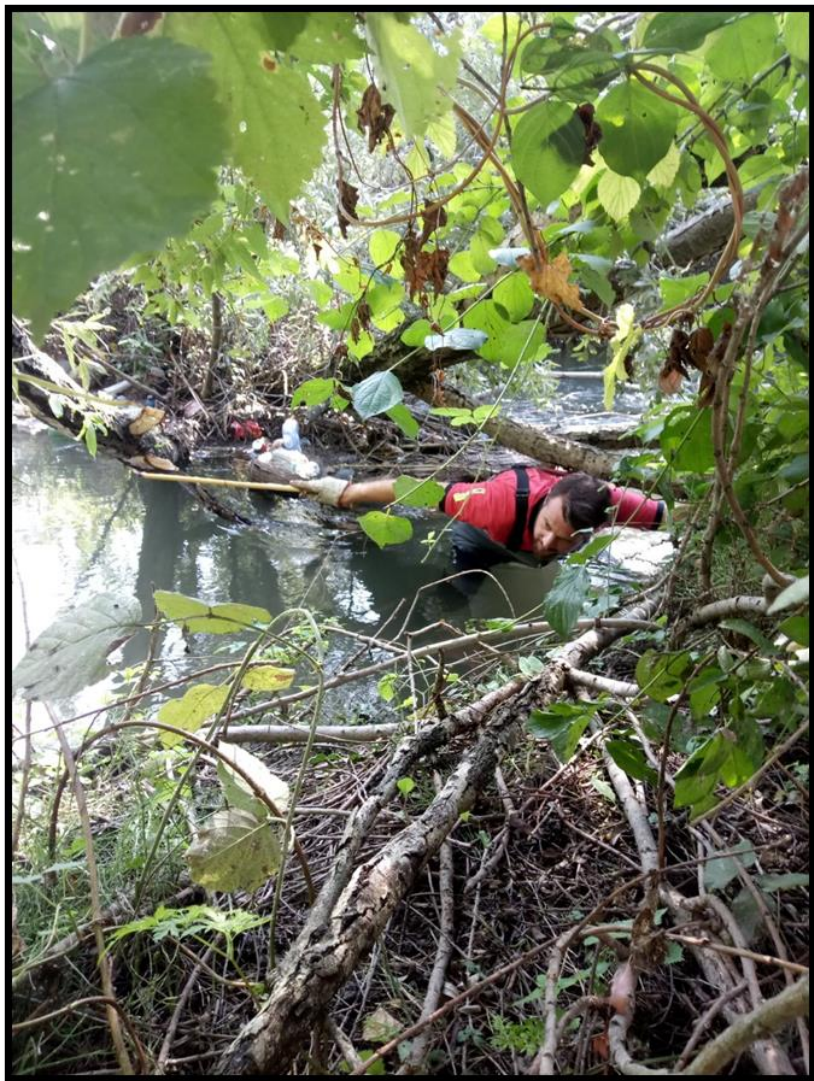
Milano - Risultati 2007-2017



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Anoplophora chinensis



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Anoplophora chinensis



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Anoplophora chinensis



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Trappole



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Trappole

CLB Trapping					
Year	♀	♂	Total adults	N. Traps	adults/Trap
2015	102	119	221	503	0,44
2016	60	106	166	510	0,33
2017	122	144	266	500	0,53
2018	82	151	233	241	0,97
2019	20	14	34	64	0,53
Total	386	534	920	1818	0,51

Milano 2018 – 14 trappole

♀	♂
12	30



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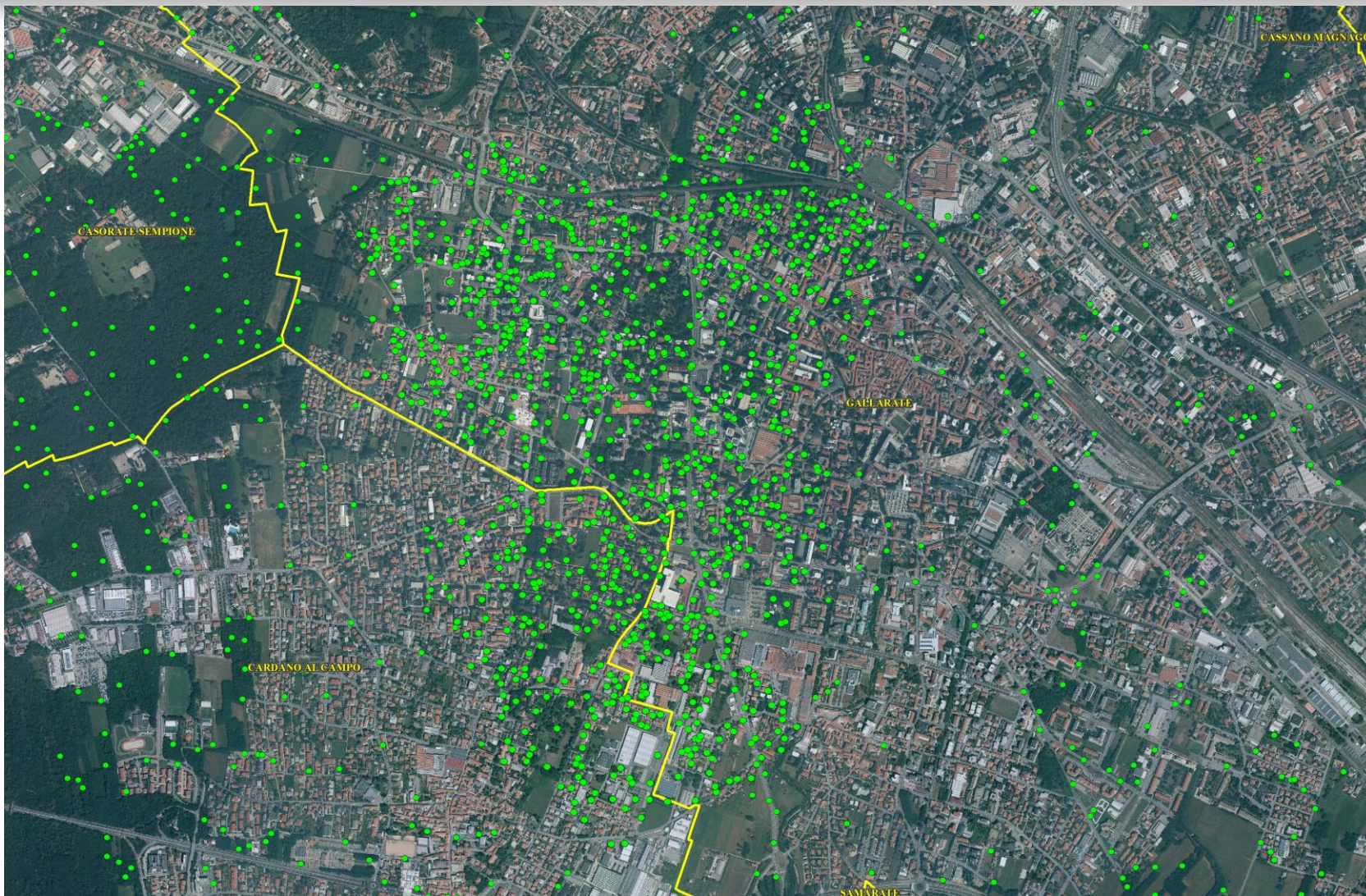
Gallarate - Risultati 2007-2014



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Gallarate - Risultati 2018



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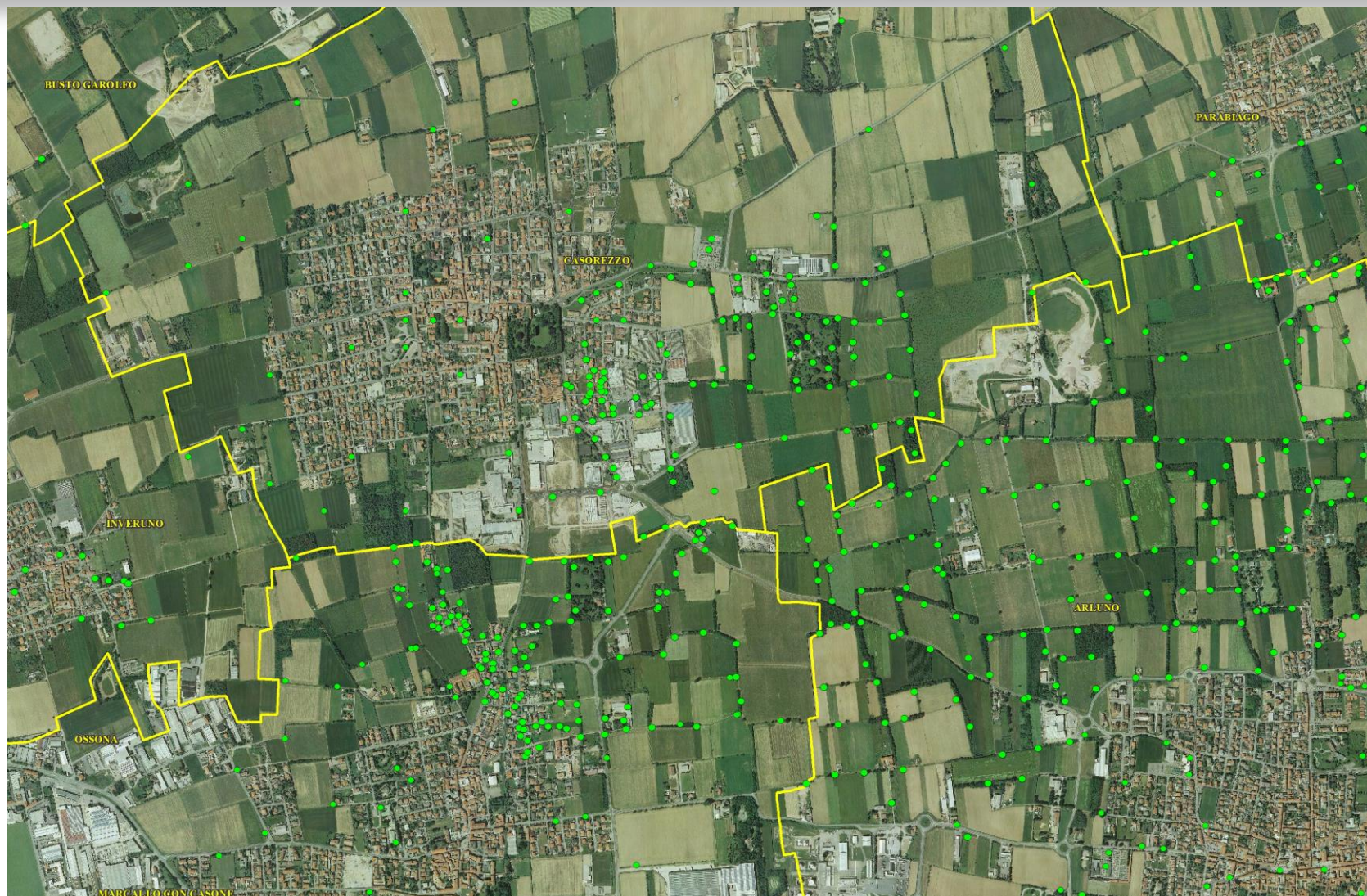
Casorezzo - Risultati 2007-2017



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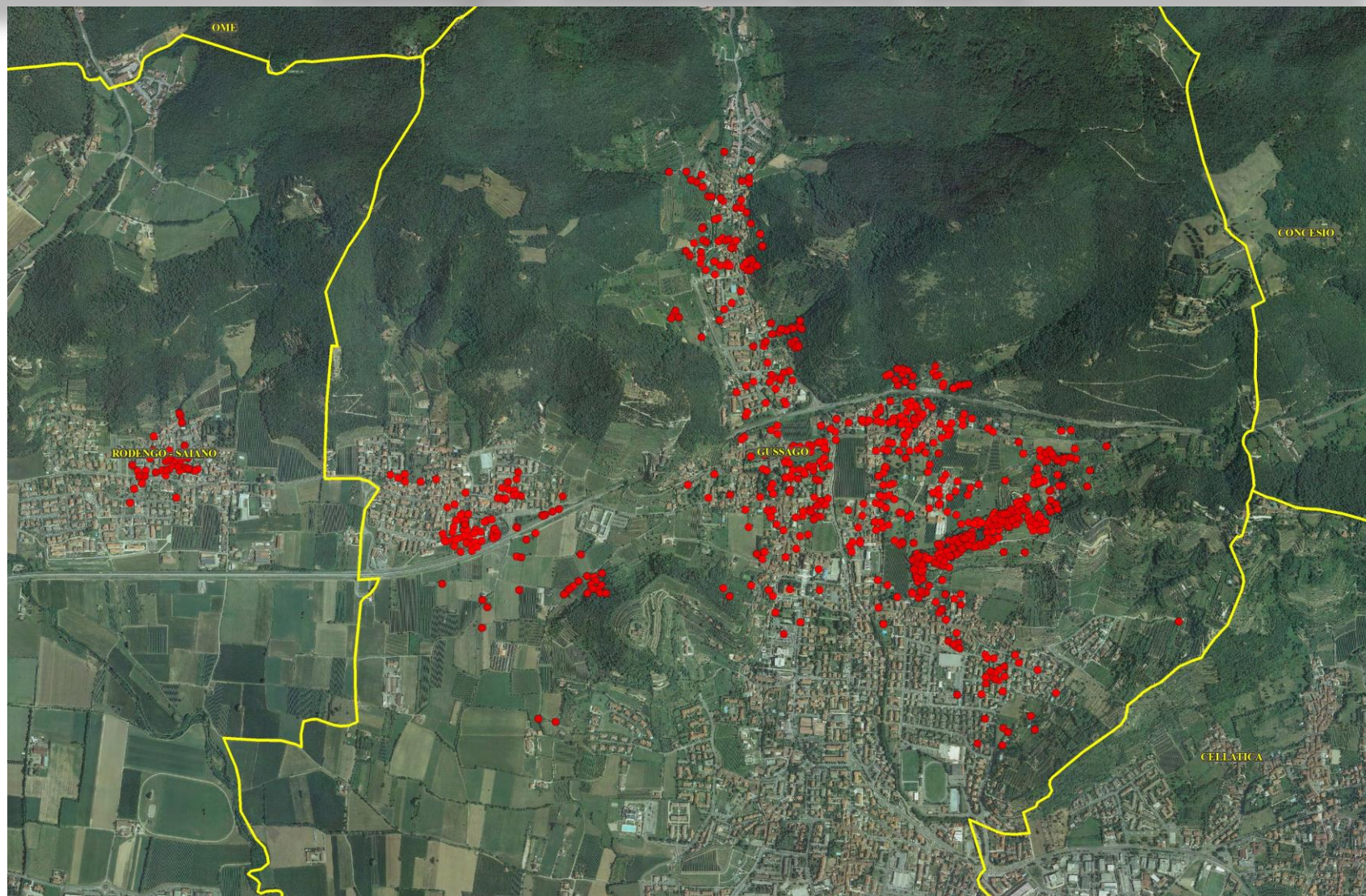
Casorezzo - Risultati 2018



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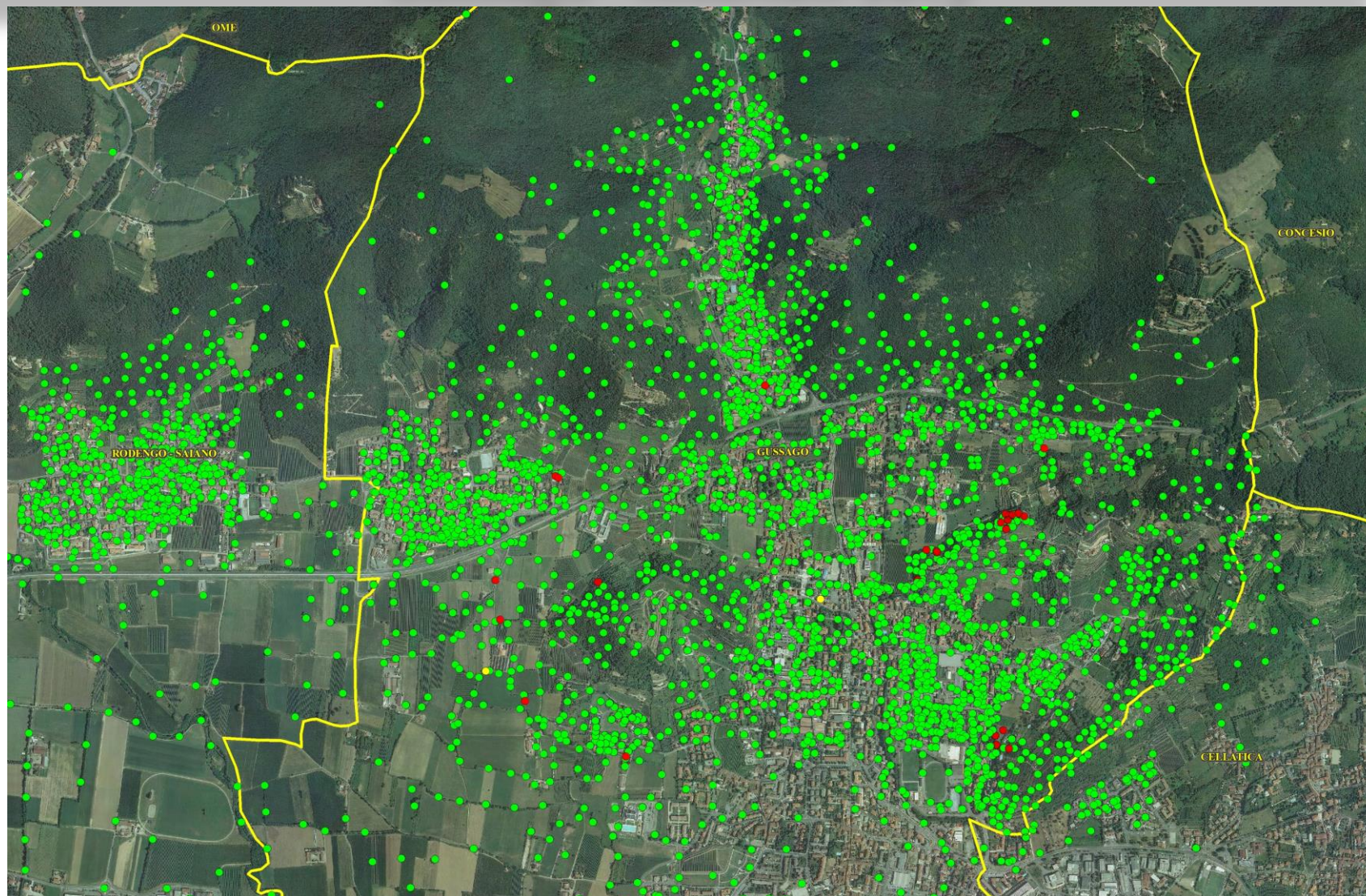
Gussago - Risultati 2007-2017



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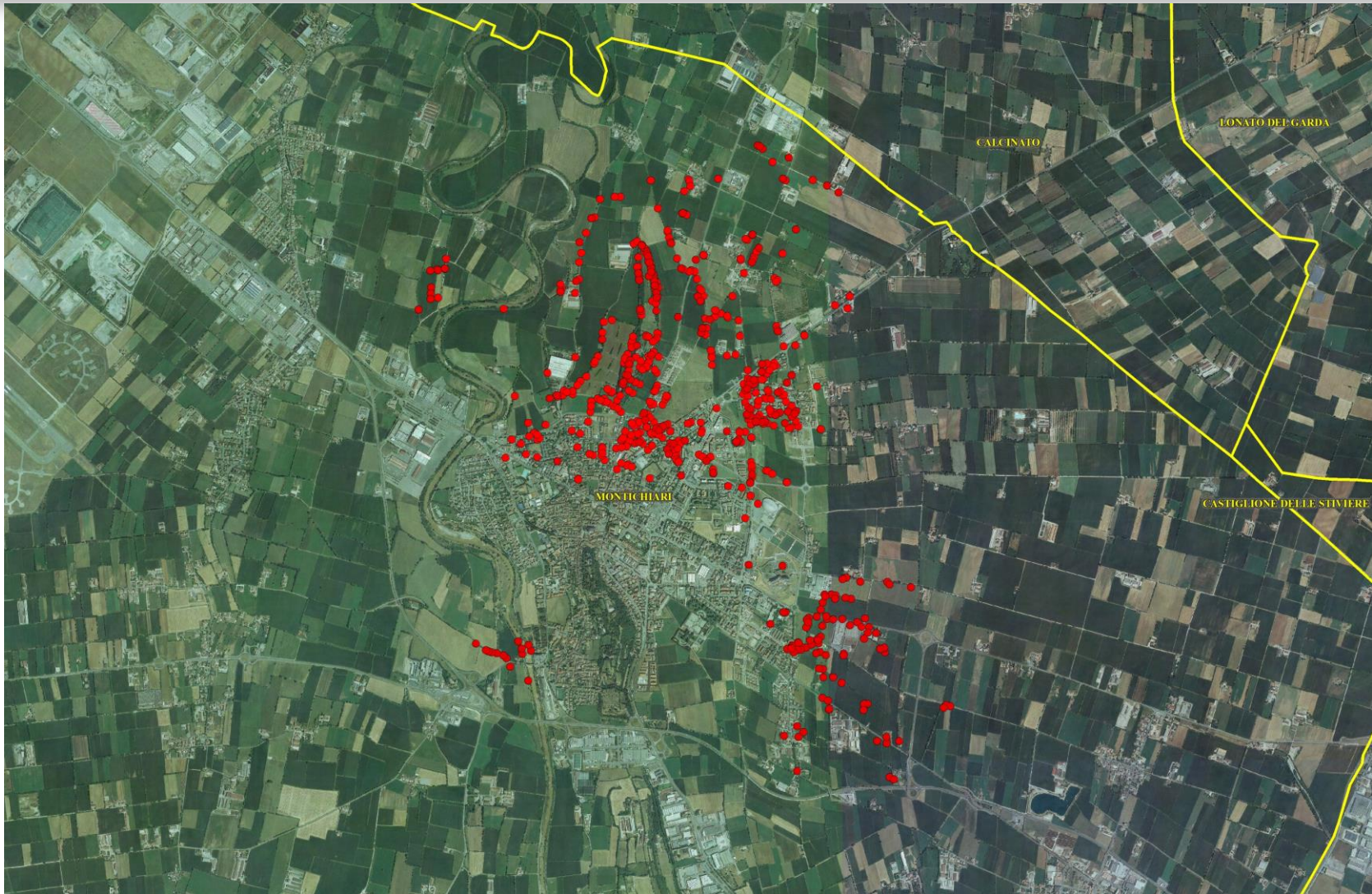
Gussago - Risultati 2019



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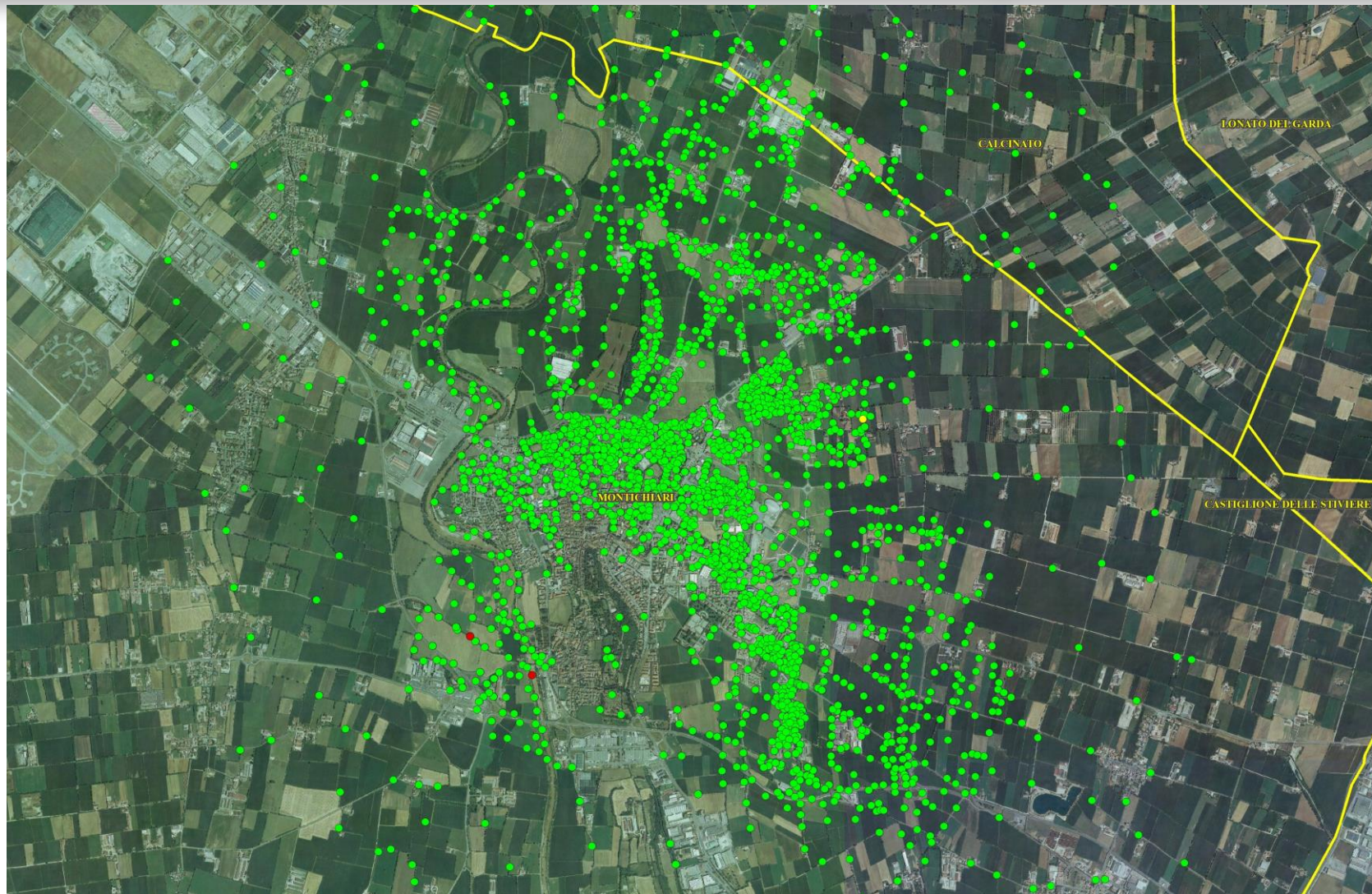
Montichiari - Risultati 2007-2017



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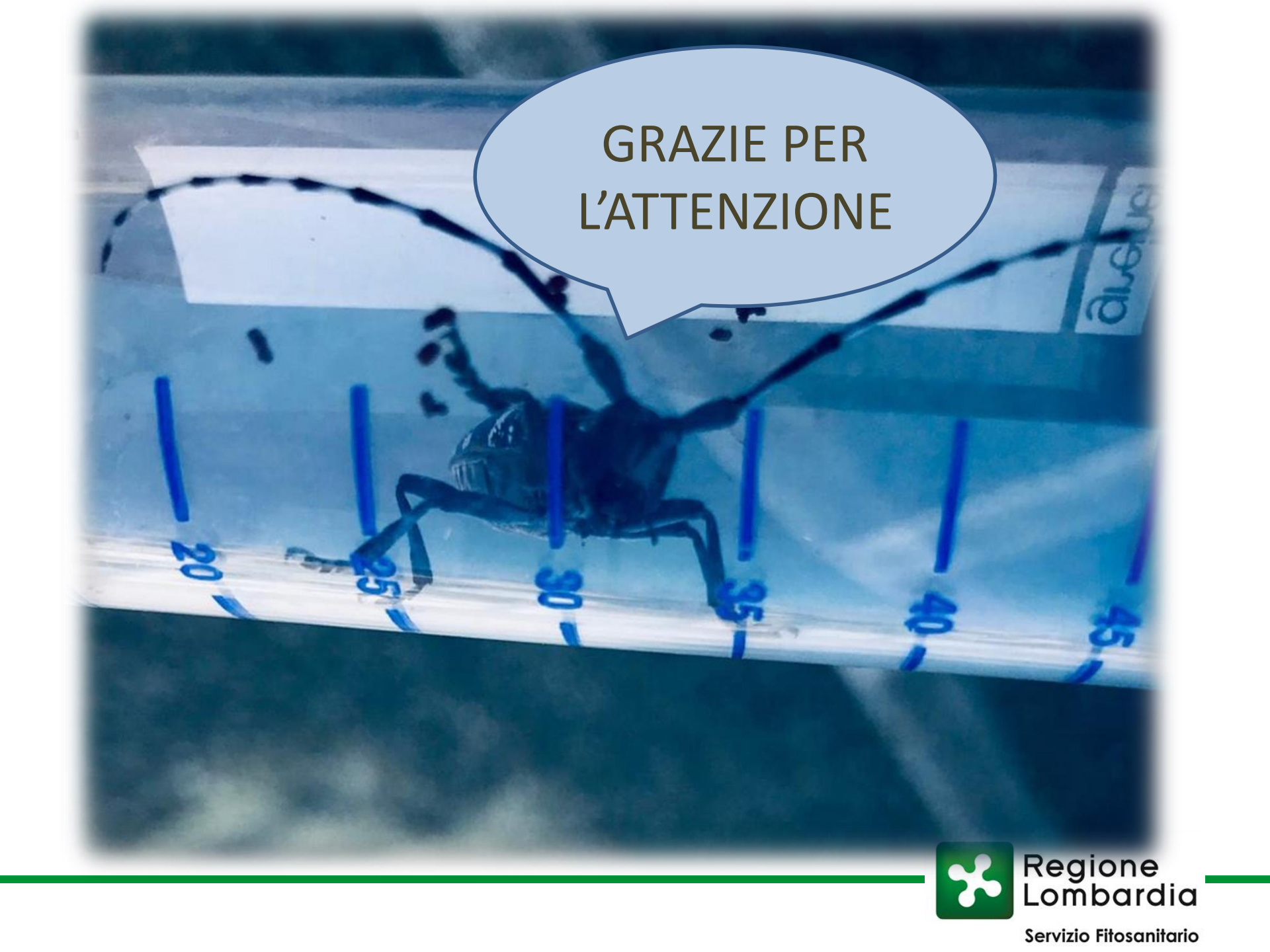
Servizio Fitosanitario

Montichiari - Risultati 2019



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GRAZIE PER
L'ATTENZIONE



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