



منظمة وقاية
النباتات للشرق
الأدنى

IRAC



EPPO/IOBC/FAO/NEPPO Joint International Symposium
on management of *Tuta absoluta*

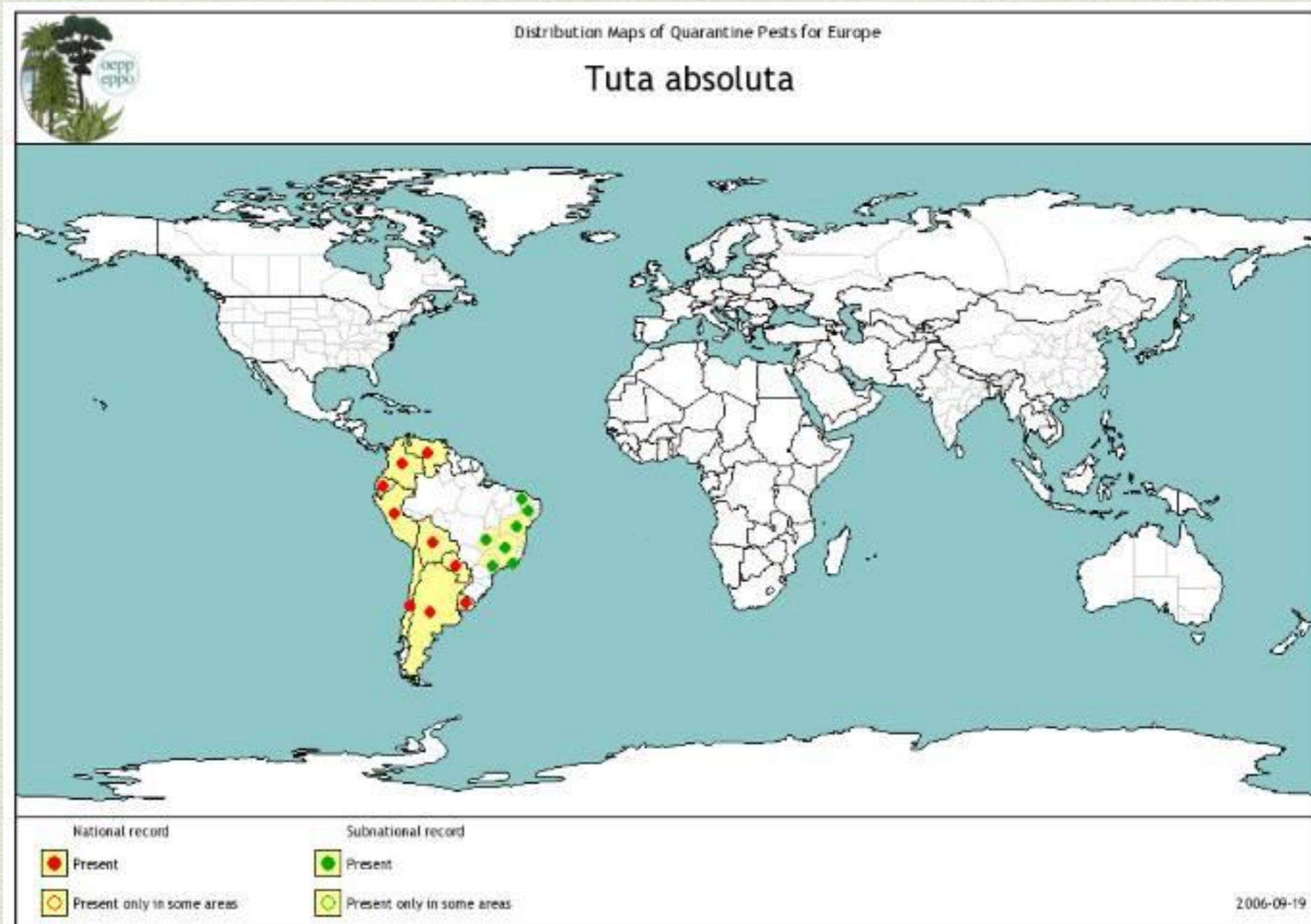
The current status of *Tuta absoluta* in Italy

Per visualizzare quest'immagine sono necessari QuickTime™ e un decompressore H.264.



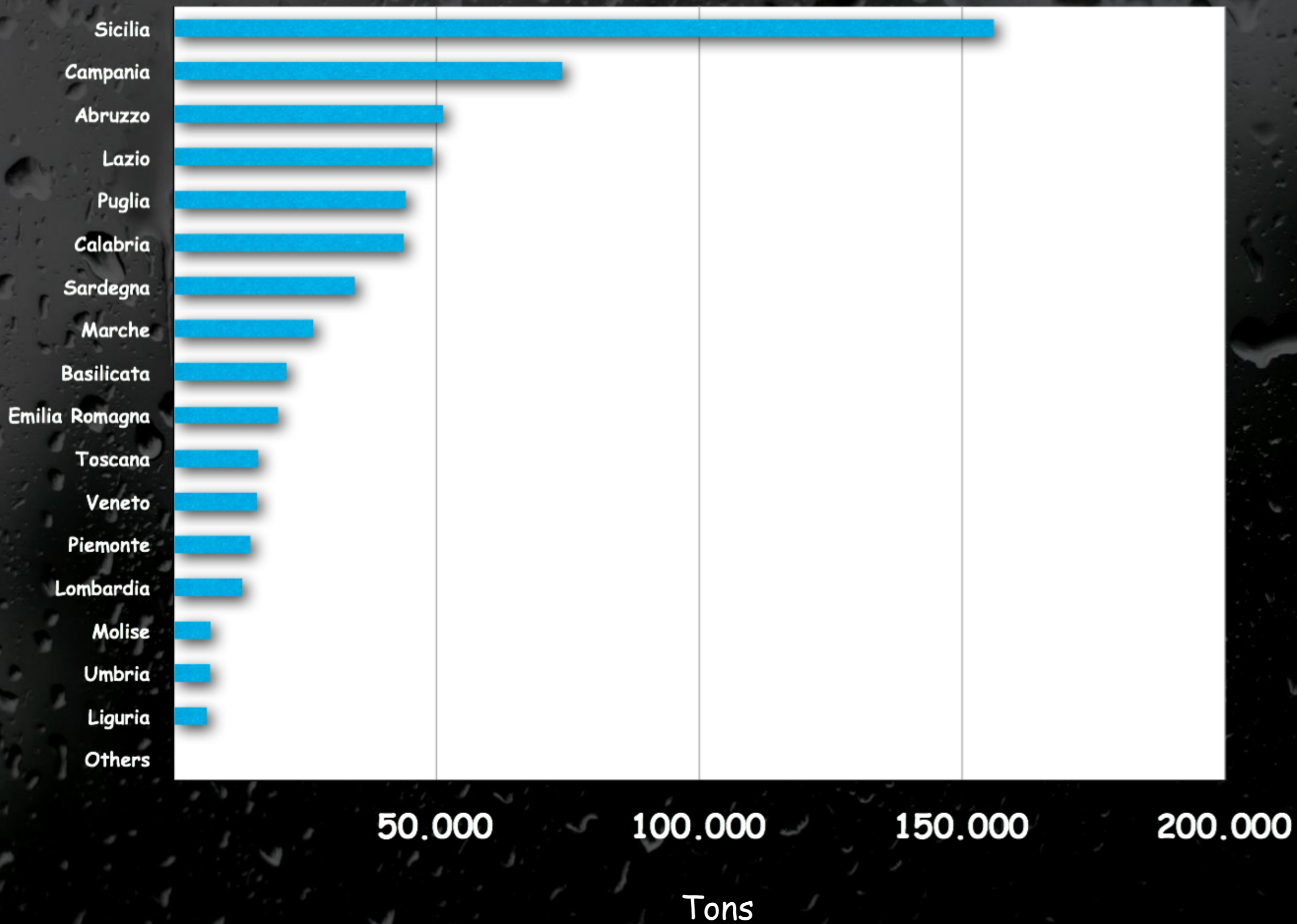
Stefano Speranza and Luigi Sannino
Agadir, 16 November 2011

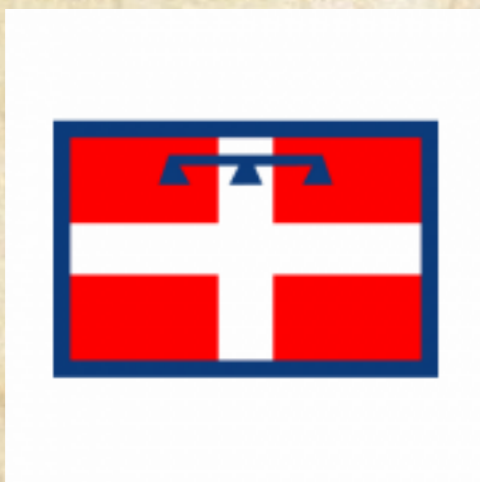
Before the invasion



Until 2007/2008, Italy was an area
Tuta absoluta free







Piemonte



First reports	Where	Monitoring		notes
2009	Provinces of Torino, Cuneo, Alessandria and Asti	2009	Yes	-
		2010	Yes	Flight since the first months of the year to October
Damages	Where	Notes		
2009	in greenhouse	-		
2010				



Lombardia



First reports	Where	Monitoring		notes
2009	Region	2009	Yes	significant number of individuals
		2010	Yes	In several province
Damages	Where	Notes		
2009	in greenhouse	Damages in greenhouse with vegetative materials coming from southern Italy		
2010	No damages			



Trentino Alto Adige



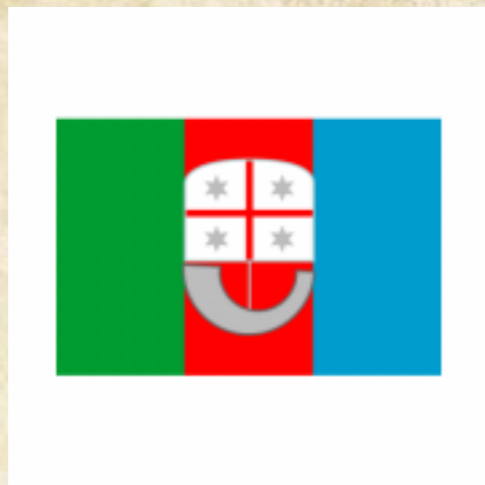
First reports	Where	Monitoring		notes
2010	Autonomous provinces of Trento and Bolzano	2009	-	no data
		2010	Yes	Adults caught in open field and in greenhouse
Damages	Where	Notes		
-	-	-		
2010	No data			



Veneto



First reports	Where	Monitoring		notes
July 2009	in the provinces of Verona, Venezia and Rovigo	2009	Yes	caught on greenhouse
		2010	-	no data
Damages	Where	Notes		
2009	no data	-		
2010	no data			



Liguria



First reports	Where	Monitoring		notes
November 2008	in the provinces of Genova and Imperia	2009	Yes	caught on greenhouse and open field
		2010	Yes	caught on greenhouse and open field
Damages	Where	Notes		
2009	from 10 to 80%	Infestations, mostly, involved the tomato variety "cuore di bue" cultivated both in greenhouse and open field. Increases in the production costs due to monitoring and control of the pest were detected.		
2010	from 1 to 2%			



Emilia Romagna



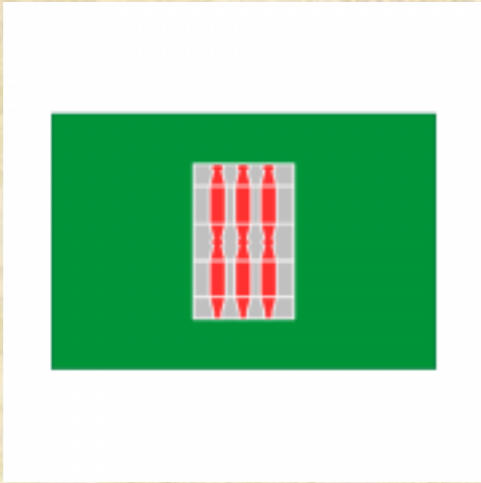
First reports	Where	Monitoring		Notes
May 2009	in fresh tomatoes from Sicily	2009	Yes	First adults, were detected near shopping centers and markets in the provinces of Parma, Piacenza and Forlì-Cesena
		2010	Yes	in all provinces
Damages	Where	Notes		
2009	no data	Particular attention to the adults presences in the areas surrounding fruit and vegetable markets		
2010	on greenhouse			



Toscana



First reports	Where	Monitoring		Notes
March 2009	in provinces of Grosseto and in versilia areas	2009	Yes	In open field from 21 to 251 adults/trap per week
		2010	Yes	In open field from 0 to 952 adults/trap per week
Damages	Where	Notes		
2009	in greenhouse from 30 to 80%			
2010	in greenhouse and on open field (10%)			



Umbria



First reports	Where	Monitoring		Notes
2009	in open field	2009	Yes	presence in several municipalities. With 250-300 adults/trap per week
		2010	Yes	presence in several municipalities. With 250-300 adults/trap per week
Damages	Where	Notes		
2009	in greenhouse from 80 to 90%			
2010	on greenhouse			



Lazio



First reports	Where	Monitoring		Notes
March 2009	in greenhouse of provinces of Latina and Roma	2009	Yes	presence in provinces of Viterbo, Roma and Latina
		2010	Yes	presence in several municipalities. With 250-300 adults/trap per week
Damages	Where	Notes		
2009	in greenhouse until 100%	In the infested greenhouses, the tomato transplants were performed during December 2008; this suggests the entering in the Lazio region with tomato plants at the end of 2008. During September 2009 the pest was detected in two greenhouses on the Lazio coast, due to the gelechide infestation also of beans (<i>Phaseolus vulgaris</i>), with values of 24 and 66% of infested plants respectively.		
2010	reduction in the infestation percentage			



Abruzzo



First reports	Where	Monitoring		Notes
2009	in greenhouse	2009	Yes	in greenhouse 150 adults/trap per week
		2010	Yes	in greenhouse of province of Chieti 700 adults/trap per week. In open field 100 adults/trap per week
Damages	Where	Notes		
2009	in greenhouse			
2010	in greenhouse 85%			



Campania



First reports	Where	Monitoring		Notes
autumn 2008	in Napoli province	2009	Yes	in all provinces
		2010	Yes	almost always over 100 adults/trap per week
Damages	Where	Notes		
2009	in greenhouse and in open field	The field surveys have revealed significant damages to crops both in greenhouse and open field with particular implications for some local varieties, like "San Marzano". Again in 2010 occasional damage to bean crops were reported.		
2010	in greenhouse			



Molise



First reports	Where	Monitoring		Notes
November 2009	Region	2009	Yes	
		2010		no data
Damages	Where	Notes		
2009	not detectable infestation			
2010	no data			



Basilicata



First reports	Where	Monitoring		Notes
2009	in greenhouse	2009	Yes	in Metaponto, Mercure and Lavallese areas.
		2010	Yes	no data
Damages	Where	Notes		
2009	in greenhouse (until 100%) and in open field	The monitoring showed different incidence of the pest in tomato growing areas of the region as a function of their altitude. In Lavallese area, the presence of the pest on the production of industrial tomato has impaired an economy already heavily mined with low profitability.		
2010	no data			



Calabria



First reports	Where	Monitoring		Notes
spring 2008	in Cosenza province	2009	Yes	in Metaponto, Mercure and Lavallese areas.
		2010	Yes	in nurseries, greenhouse and in open field.
Damages	Where	Notes		
2009	no data	The monitoring showed different incidence of the pest in tomato growing areas of the region as a function of their altitude. In Lavallese area, the presence of the pest on the production of industrial tomato has impaired an economy already heavily mined with low profitability.		
2010	in greenhouse 10-60%, in open field 10-90%			



Puglia



First reports	Where	Monitoring		Notes
June 2009	in greenhouse in provinces of Lecce, Foggia, Bari and Taranto	2009	Yes	Presence in greenhouse and in open field
		2010	Yes	in greenhouse and in open field.
Damages	Where	Notes		
2009	high level in greenhouse	The analysis revealed a feasible presence of the pest since 2008. In the fields of organic tomato damage were detected up to 100% of production.		
2010	in greenhouse 10-60%, in open field 10-90%			



Sicilia



First reports	Where	Monitoring		Notes
November 2008	in provinces of Ragusa, Siracusa and Caltanissetta	2009	Yes	More than 100 adults/trap per week
		2010	Yes	in greenhouse and in open field.
Damages	Where	Notes		
2009	from 10 to 80%	Occasional damage to bean crops were reported.		
2010				



Sardegna

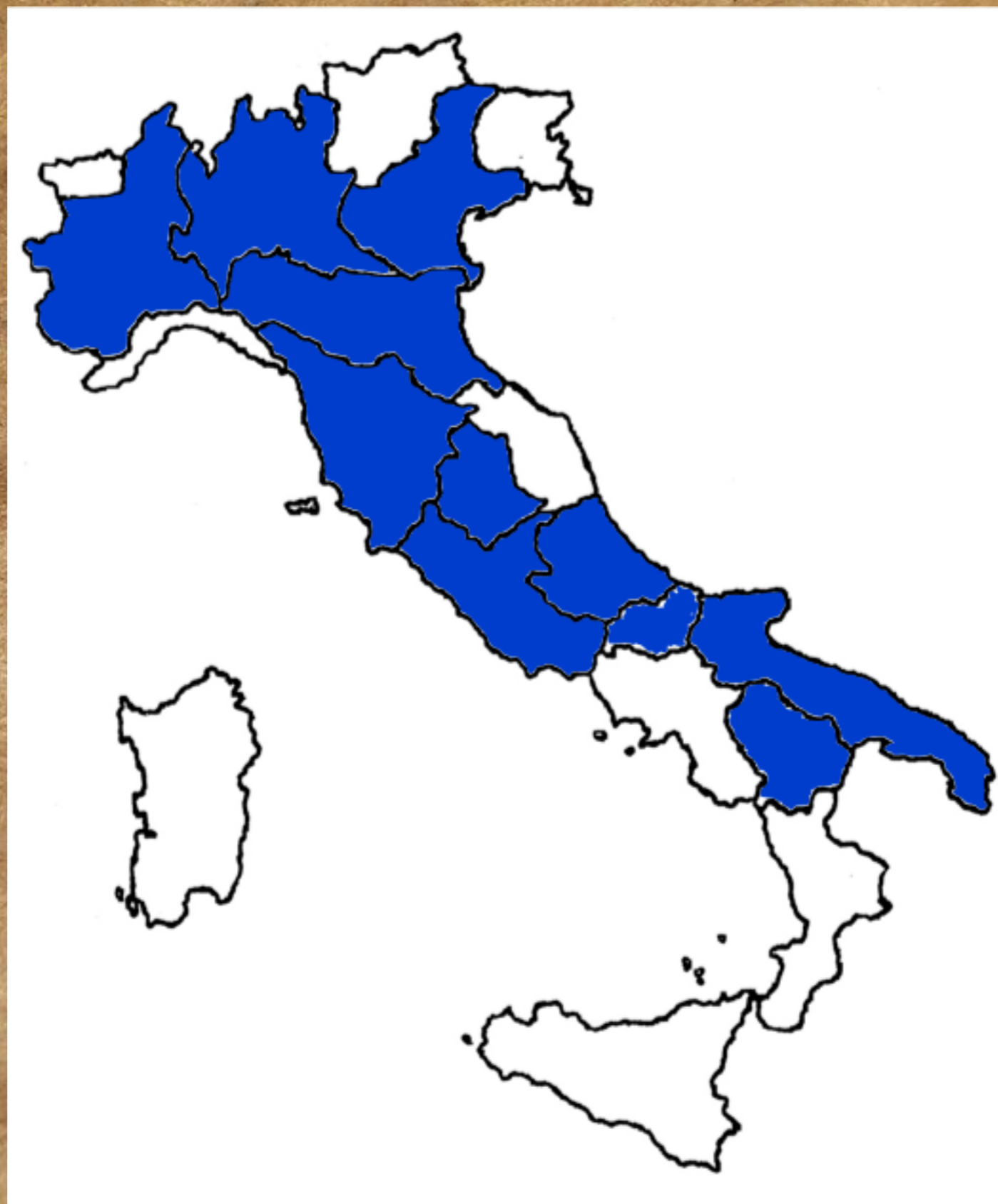


First reports	Where	Monitoring		Notes
Autumn 2008	in provinces of Oristano	2009	Yes	Presence in all area of tomato cultivations.
		2010	Yes	in greenhouse and in open field.
Damages	Where	Notes		
2009	in greenhouse and in open field up to 100% of fresh consumable tomtoes			
2010	less than 2009			

Detected in 2008



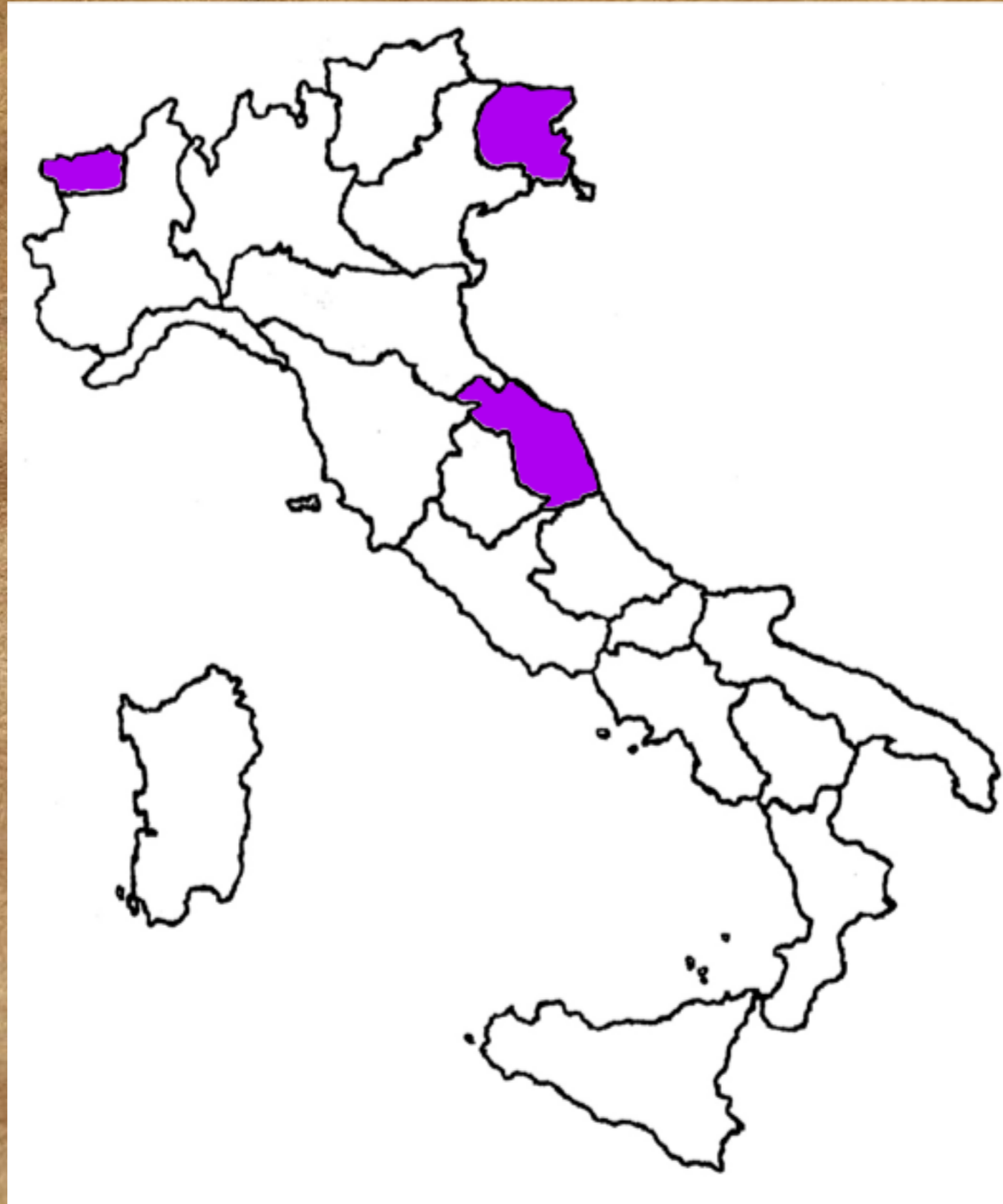
Detected in 2009



Detected in 2010



Region Tuta assoluta free in Italy 2011



Italian activities

National Coordination Activities

February 29th 2009 the National Plant Protection Service has set the Tuta absoluta working group, with representatives of 11 Regions, that aims to draw up the status of the pest in Italy, the level of infestation detected, and indications concerning control methodologies and submit these results to the National Plant Protection Committee.

Research Activities

Several research institutions and universities are involved in researches about the ecology of the insect and the definition of the best pest control strategies. An example is the national project entitled "Biology and integrated control of Tuta absoluta (Meyrick) in Italy" managed by prof. Rapisarda (University of Catania) in collaboration with the University of Sassari and the CNR. Also, an example of international cooperation is the project MAE-MynCiT between Italy and Argentina entitled "Assessing the feasibility of biological control of Tuta absoluta recently introduced in Italy" managed by the University of Tuscia, Viterbo in collaboration with the Centro de Estudios y de Parasitológicos Vectores, CCT La Plata UNLP-CONICET.

Control of Tuta absoluta in Italy

• Calendar treatments

• IPM: monitoring with pheromones traps followed by insecticide treatments

Active Ingredient allowed in Italy to control T. absoluta infesting tomato

- EMAMECTINA BENZOATO
- INDOXACARB
- METAFLUMIZONE
- SPINOSAD



Special thanks to....

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<u>Cocco A.,</u>	<u>Iodice A.,</u>	Rossi E.,	Zappalà L.
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Thank you for your
attention

