



European Information pollen trap

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A google sheet has been created in order to collect information about pollen networks in Europe. A Google sheet with different questions was send to a list of people involved in aerobiology all over the world (cf list in annex). Only European colleagues responded, + some countries as Turkey and Israel.

The answers to questions are presented below for each country. They were classified into seven main categories:

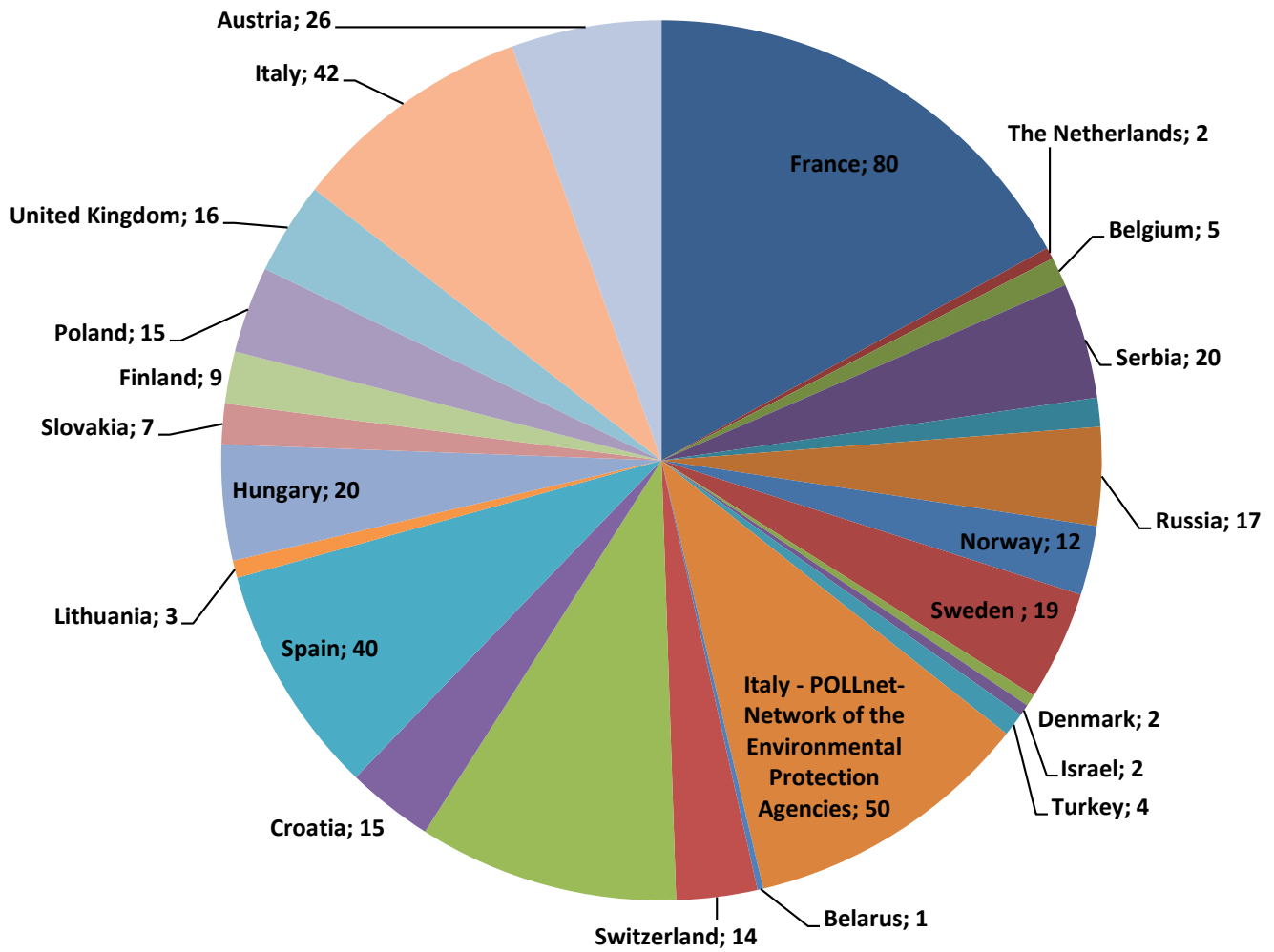
1. European information pollen traps
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Note: a lot of answer give pollen and moulds analysis without discrimination if all they produce pollens and moulds data for all the locations of the countries or only for some of them.

1. European Information pollen traps

Country	Number	Types	Analyse	Data
Austria	26	Burkard, Lanzoni	Pollen, moulds	Daily data, bi-hourly data
Belarus	1	Burkard	pollen, moulds	daily data
Belgium	5	Burkard	pollen, moulds	daily data
Croatia	15	Burkard, Lanzoni	pollen	daily data, bi-hourly data
Denmark	2	Burkard	pollen, moulds	daily data, bi-hourly data
Finland	9	Burkard	pollen, moulds	bi-hourly data
France	80	Burkard, Lanzoni, SLT	pollen, moulds	daily data, bi-hourly data
Germany	45	Burkard	pollen, moulds	daily data
Hungary	20	Burkard, portable Lanzoni traps	pollen, moulds	daily data, bi-hourly data
Israel	2	Burkard	pollen, moulds	daily data
Italy - POLLnet-Network of the Environmental Protection Agencies	50	Burkard, Lanzoni	pollen, moulds	daily data
Italy AIA	42	Burkard, Lanzoni	pollen, moulds	daily data
Lithuania	3	Burkard	pollen, moulds	bi-hourly data
The Netherlands	2	Burkard	pollen	daily data
Norway	12	Burkard	pollen, moulds	bi-hourly data
Poland	15	Burkard, Lanzoni	pollen, moulds	daily data, bi-hourly data
Russia	17	Burkard, Lanzoni	pollen, moulds	daily data, bi-hourly data
Serbia	20	Burkard, Lanzoni	pollen	daily data, bi-hourly data
Slovakia	7	Burkard	pollen, moulds	daily data, bi-hourly data
Spain	40	Burkard, Lanzoni	pollen, moulds	daily data, bi-hourly data, depending on the site
Sweden	19	Burkard	pollen	bi-hourly data
Switzerland	14	Burkard	pollen	hourly data
Turkey	4	Burkard, Lanzoni	pollen	bi-hourly data
Ukraine	5	Burkard, home-made trap	pollen, moulds	daily data, bi-hourly data
United Kingdom	16	Burkard	pollen	daily data, bi-hourly data

Number of pollen traps by country



2. Phenology data and sentinel gardens

Country	Collect phenology data	Sentinel gardens in your country	How many
Austria	No	Yes	1
Belarus	No	No	
Belgium	No	No	
Croatia	No	Yes	
Denmark	No		
Finland	No	No	
France	Yes	Yes	12
Germany	Yes	Yes	1
Hungary	No	No	0
Israel	Yes	No	
Italy - POLLnet- Network of the Environmental Protection Agencies			
Italy	No	No	
Lithuania	Yes	Yes	
The Netherlands	No	No	
Norway	No		
Poland	Yes	Yes	2
Russia	No		
Serbia	No		
Slovakia	No		
Spain	Yes		
Sweden	Yes	Yes	
Switzerland	Yes	Yes	1
Turkey	No		
Ukraine	Yes		
United Kingdom	No	Yes	

3. Clinical data – Meteorological forecast – Allergy information

Country	Collect clinical data	Use clinical data for	Use meteorological forecast for information	Edition of an allergy information	Dissemination of pollen information
Austria	From patients	Information, scientific issues	Yes	Twice a week	Mail, Smartphone, TV, Radio, Facebook
Belarus	From doctors	scientific issues	Yes	Every week	mail
Belgium	No		Yes	daily hayfever forecast during grass pollen season	website
Croatia	No	NO	Yes	everyday	mail, smartphone, TV, Radio, Facebook
Denmark	We don't collect clinical data	No, we only provide pollen information to the public	mail, smartphone, TV, Radio, Facebook, Twitter, newspapers and homepages		
Finland	not routinely, only project-wise	scientific issues	Yes	Every day mon-fri	mail, TV, Radio, Facebook, Twitter, newspaper
France	From doctors, from patients	information	Yes	every week, twice a week in some stations	mail, website, smartphone, Facebook
Germany	from patients	information, scientific issues	It's included in the pollen forecast	on the website	smartphone, Radio
Hungary	From doctors, from patients	information, scientific issues	Yes	Every week	mail, TV, Radio, homepage
Israel	No			Every month	mail, Internet
Italy - POLLnet- Network of the Environmental Protection Agencies	No		I presume yes	Every week	Website with pollen bulletins
Italy	From doctors	only in a few cases, at a local level	Yes	Every week	mail, smartphone, Facebook, web-site
Lithuania	only for particular project needs	we do not use clinical data	Yes	Every week	TV, Radio, website
The Netherlands	from the public via our website alergieradar.nl	scientific issues	Yes	every day during the grass pollen season	smartphone, websites and teletext
Norway	Not regularly		Yes	Daily	smartphone, TV, Radio, Facebook, Internet

Country	Collect clinical data	Use clinical data for	Use meteorological forecast for information	Edition of an allergy information	Dissemination of pollen information
Poland	From doctors	scientific issues	Yes	Every week	mail, TV
Russia	No		Yes	Every week	smartphone Facebook, web site
Serbia	No	No	Yes	Every week	Website, mail, smartphone, TV, radio
Slovakia	From doctors	information, scientific issues	Yes	Every week	TV, Radio
Spain	from doctors, from patients, only in some places	information, scientific issues, only in some places	Yes	Every week	web and others in some places
Sweden	from patients and from doctors	information	Yes	Some of our stations issue pollen forecasts every working day (5 days a week) and some of the stations three days a week.	mail, smartphone, TV, Radio, Twitter, Internet, newspapers, answering machine
Switzerland	No	scientific issues	Yes	every day during pollen season, every week outside	mail, smartphone, Internet web-site, Apps
Turkey	from patients	Yes	No	web	
Ukraine	From doctors	scientific issues	Every week	polleninfo.org	
United Kingdom	No		Yes	Every weekday during the grass season, otherwise weekly	TV, Radio, Twitter, website

4. Annual budget – Law or other regulatory text

Country	Organization	Annual budget of pollen and moulds network in your country	Origins of your budget	Law or other regulatory text about pollen survey	Do you send your data to European Aeroallergen Network (EAN)?
Austria	University	0	Sponsorship, clinical trial	No	Yes
Belarus	Governmental organization	Yes	government	Yes	Yes
Belgium	Governmental organization	government	no	Yes	
Croatia	Governmental organization	Depends on the town, station	government	No	Yes
Denmark	association			No	Yes
Finland	University	costs are around 120 000 euros	overheads from building microbiology incomes, selling of pollen forecasts	No	Yes
France	Non-Governmental organization, association	750.000€	government, Private operators, sponsorship	Yes and No	Yes
Germany	Foundation	about 40.000,- €	selling data to pharmaceutical companies	No	Yes
Hungary	Governmental organization	government, Private operators	Yes	Yes	
Israel	University	USD 40,000 (33 969 euros)	government	No	Yes
Italy - POLLnet- Network of the Environmental Protection Agencies	Governmental organization	not established	government	not yet	No
Italy	association	No budget at national level	Private operators, mecenat	No	Yes
Lithuania	University	0	we do not have specific budget and do activities on our scientific interest	No	Yes
The Netherlands	University Medical Center	the 2 stations in the Netherlands are initiatives of hospitals and do not have a specific budget	(university) medical centers	No	Yes

Country	Organization	Annual budget of pollen and moulds network in your country	Origins of your budget	Law or other regulatory text about pollen survey	Do you send your data to European Aeroallergen Network (EAN)?
Norway	Non-Governmental organization, Norw. Society of Asthma and Allergy	Ab. 2,5 million NKR (273 224 euros)	Government, NAAF pays a small share.	No	Yes
Poland	University		University	Yes	Yes
Russia	Private company, University	Private operators	No	yes Moscow station only	
Serbia	University and governmental organization	It is about 10K euro for six traps my team maintains. However this is not secured so sustainability of monitoring at these stations depends on funding availability for particular season.	government	Yes	Yes
Slovakia	University			no	yes
Spain	University, private institutions	Variable;	University	Not in the government, yes in the network	Yes
Sweden	University and governmental organization	For the entire national budget: 3000000 (300 000 €)	government, Private operators, regional authorities, media	No	Yes
Switzerland	Governmental organization	600 000 CHF (571 373 euros) for the direct costs of personnel and equipment	Regular task of Meteo Swiss	no, just a mandate to Meteoswiss	Yes
Turkey	University	none	University, myself	No	Yes
Ukraine	University		Private operators	Yes	Yes
United Kingdom	Governmental organization	£120,000 (153 450 euros)	Commercial sponsorship	No	Yes

5. Comments

Country	Any comments
Austria	
Belarus	No
Belgium	
Croatia	
Denmark	No, but I would very much like to have more information on this subject
Finland	yes, we have a project where we correct SILAM with real pollen data; that is at least 'semi realtime information'.
France	
Germany	The financial basis for the German Network is very bad!
Hungary	
Israel	
Italy - POLLnet-Network of the Environmental Protection Agencies	<p>The Pollnet-Network results from the collaboration of the Environmental Protection Agencies. Pollen bulletins are published on the regional web pages of www.pollnet.it. Furthermore many Environmental protection Agencies publish their data on their own web pages which are listed at http://www.pollnet.it/link.asp</p> <p>I can't answer to all your questions, activities can vary between the different agencies.</p>
Italy	It would be necessary an European legislation on pollen survey taking into consideration its importance from the health point of view
Lithuania	
The Netherlands	
Norway	
Poland	No
Russia	
Serbia	
Slovakia	
Spain	<p>We are involved in the AENOR, but in this moment we do not count with the normalization. Trying to clarify that all members in the network count pollen, but only some of them count spores or are involved on field phenology</p>
Sweden	<p>The government started an investigation of the possibility for steady funding of our activities in 2009, since we work on a one-to-one year basis. They are not yet finished with this investigation.</p> <p>Patient data are not collected by us, as yet (we plan a cooperation with Vienna pollen diary), but by the Allergy Competence Center at the University of Lund, in the Scania Region in southernmost Sweden.</p> <p>We are three separate laboratories in Sweden. The Stockholm lab (Palynological Laboratory at the Swedish Museum of Natural History) receives money from the government (on an annual basis). They keep a part of this sum and distribute another part of this sum to the other two laboratories, so that we can take responsibility</p> <p>In addition, our laboratory in Gothenburg has our own agreements with a number of regional authorities to run and analyse data from another four traps; thus in 2014, we ran in total seven traps, of which three were financed by the government via the Stockholm lab.</p> <p>Analysis: In Stockholm we analyze two species of mould spores: Alternaria and Cladosporium. No forecasts for mould spores are done.</p> <p>The Government (Ministry of Health and Social Affairs) initiated an investigation of the possibility for steady funding of our activities in 2010, since we work on a one-to-one year basis. In 2014 there was a complementary investigation. It is not yet finished, the result of the investigations may be accounted for in 2015.</p> <p>Budget: The sum mentioned above is almost sufficient to run 10 out of the 18 Swedish pollen</p>

	<p>stations. The last two years the Palynological laboratory has got an extra contribution while the governmental investigation (mentioned above) evaluates by the Ministry of Health and Social Affairs. The extra money was distributed among the Swedish stations irrespective of which pollen laboratory. A smaller part of the sum comes from pollen forecast selling to media. In some of the other stations the regional county health care contributes to the monitoring which is not included in the sum above as we have no insight in the budget of the local counties. Most of the salaries for the three persons in the laboratory staff is not included in the sum.</p> <p>Clinical data from patients: We get some clinical data from the Pollen diary.</p>
Switzerland	Dissemination of information also made in partnership with other organisations (see pollenetallergie.ch)
Turkey	
Ukraine	
United Kingdom	

6. Modelisation for information and real time pollen information

Country	Do you make modelisation for information?	Do you work on "real time pollen information"?	Do you work on "real time pollen measurement"?
Austria	Yes	Yes	In development
Belarus	Yes	No	No
Belgium	No	Yes	No
Croatia	No, unfortunately	Yes	No
Denmark		No	No, but I would very much like to have more information on this subject
Finland		Yes	yes, we have a project where we correct SILAM with real pollen data; that is at least 'semi realtime information'.
France	Yes but not made by ourself	Yes	in development
Germany	Yes	Yes	In development
Hungary	No		
Israel	No	No	No
Italy - POLLnet- Network of the Environmental Protection Agencies	?	No	No
Italy	No	Yes	No
Lithuania	No	No	not yet

Country	Do you make modelisation for information?	Do you work on "real time pollen information"?	Do you work on "real time pollen measurement"?
The Netherlands	we develop a model to forecast hay fever symptoms during the grass pollen season	No	no
Norway			
Poland		Yes	No
Russia	Yes	Yes	every day data on web site, answering questions from patients on real time scale via web site, information to mobile phone
Serbia	Yes	No	No
Slovakia			
Spain	We make modelisation at different levels, but not to generate the weekly information for media	Yes	No, we inform every week to the media, but not real time
Sweden	Phenological models	No	No
Switzerland	yes, see http://www.meteosuisse.admin.ch/web/fr/meteo/sante.html	Yes	Yes
Turkey		No	No, but I would like to work.
Ukraine			
United Kingdom	No	Yes	No but "Near real-time" (previous 24 hours)

7. Annex: list of people who received the questionnaire

Name	Network	Email	Country
Uwe Berger	Austrian Pollen Information Service	uwe.berger@meduniwien.ac.at	Austria (AT)
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