

History and development of “www.gruppoleishmania.org” web site

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Introduction

The canine Leishmaniasis working group (C.L.W.G.) has been officially instituted on November 2005 in order to obtain a rational and uniform approach to leishmaniotic patient. All the activity of C.L.W.G. is supported by Hill’s Pet Nutrition Italia Company, worldwide leader in the small animal nutrition.

In order to spread out all news about the C.L.W.G. during the year 2006 a web site (www.gruppoleishmania.org) has been developed in cooperation with S.C.I.V.A.C. and E.V. Company. In the web site Dr. Paola Badiale is the graphical director, Prof. George Lubas is in charge for contents and Dr. Enrico Febbo is the I.T. director for technical and managing procedures. The information and contents of the web site are intended and addressed to the continuing education of the practitioner on canine leishmaniasis.

Review of the first three years of activity

Since the beginning of web site institution both an Italian and English version has been developed. During the year 2007 the home page has been organized with few section such as: goals and objectives, composition, study subgroups, aims of the C.L.W.G. activity, photo gallery, and activity during the year 2007. In addition, other web pages have been arranged, therefore starting from the home page it could be possible to access to: curricula (of C.L.W.G. members), references, photo gallery, medical photo gallery, links, and contacts. Since October 2007 also the access of visitors to the web site has been possible to monitor.

During the year 2008 the activity done has been updated and reported in the home page. In addition, since March 2008 the C.L.W.G. web pages have been enriched of sections for each of the following languages, Italian, English, French, and Spanish.

The Italian and English web pages have been supervised by Prof. G. Lubas, the French web pages by Dr. E. Zini, and the Spanish web pages by Dr. X. Roura.

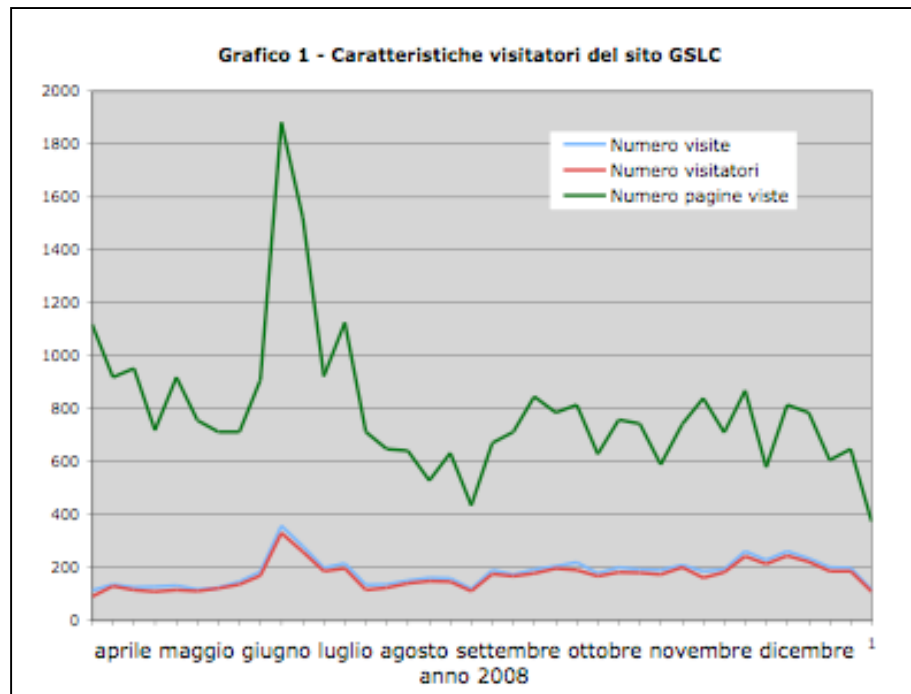
Since January 2009 a new link has been added, therefore from the home page is possible to reach a download page (download of products) which allows to obtain an Adobe Acrobat® file copy of all scientific activity elaborated from the C.L.W.G. in three years of activity. Currently, the web site contains for each of the four languages used, besides Italian, English, French, and Spanish, the following sections:

- from the home page of C.L.W.G. can be addressed directly to: aims and objectives, composition, study subgroups, objectives of the activity, photo gallery, activity of the year 2007, activity of the year 2008, activity of the year 2009,
- from the home page of C.L.W.G. can be addressed by means of a window to: curricula (it is possible to look at each member’s curriculum vitae), references (including several references in various topic related to leishmaniasis), gallery (devoted to pictures of members’ group), medical gallery (clinical images and other typical results of the disease induced by leishmaniasis), links (in the leishmaniasis topic), contacts, and download (where all the scientific production of the C.L.W.G. appears).

Finally, the monitoring of the access to the C.L.W.G. web site has been decided to be evaluated from March 31th 2008 through December 31th 2008, during a period of nine months, besides 38 weeks, starting since the web site has been available in four language version.

Review of the web site usage

It has been possible to date to the web site visitors that accessed during each week of the 38 weeks documented (from March 31th 2008 through December 31th 2008) with several features (in brackets the mean value per week): number of web site access (183), number of visitors (168), and number of web pages consulted (797) (see graph #1). The peak for these three parameters is observed just after the SCIVAC meeting in Rimini in 2008 where the guidelines for the leishmaniasis therapy have been presented.



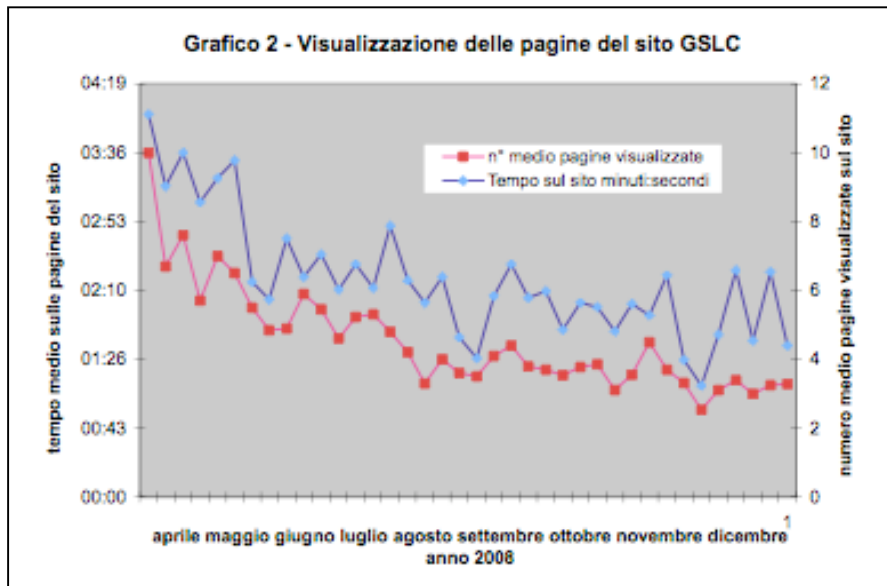
Graph #1 – characteristics of the visitors of the C.L.W.G. web site

Legend:
• number of access
• number of visitors
• number of pages seen

Abscissa – months of April, May, June, July, August, September, October, November, December, year 2008

In the graph #2 are reported the features of the web site access, besides the mean number of pages seen and the mean time spent in the web pages by users reported in minutes and seconds. Since the beginning of the monitoring in the month of March, where both the mean time spent in the web site and the mean number of web pages seen was rather high, these parameters stabilized during the other months of observation.

It has been possible to date the main web traffic sources, particularly to take note from which source or research engine the visitor was attracted to consult the C.L.W.G. web site (see graph #3). *Google* both as direct version and images research (*images.google.it*) has been the former. Some useful addressing have been received from web sites link of scientific society of veterinary medicine to which is related the C.L.W.G., besides *anmvioggi.it*, *cms.scivac.it* and *evsrl.it*. It should be pointed out that many visitors have arrived to the web site directly typing the appropriate address, therefore the address is easy to memorize and enough intuitive.



Graph #2 – access to the C.L.W.G. web site pages

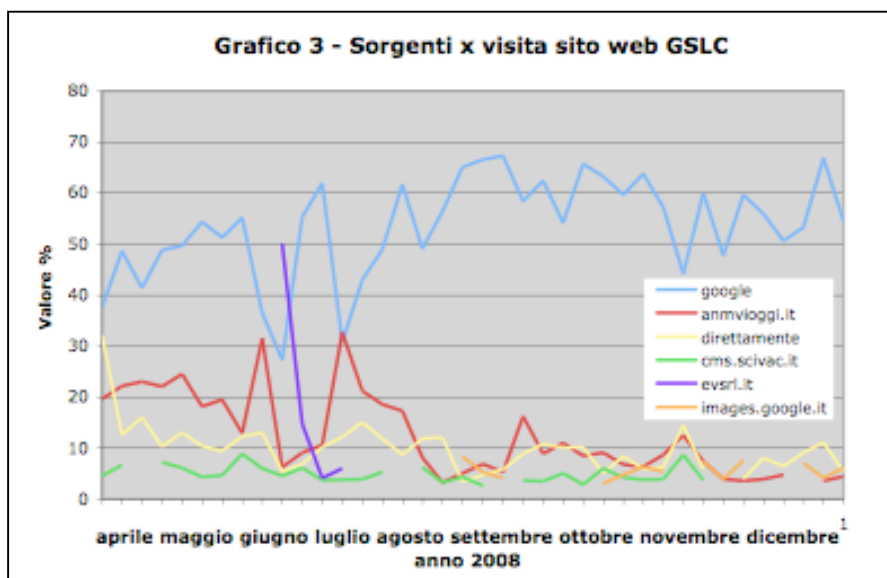
Legend:

- Mean number of pages seen
- Time on the site in minutes and seconds

On the right – mean time on the web site pages

On the left – mean number of web site pages seen

Abscissa – months of April, May, June, July, August, September, October, November, December, year 2008



Graph #3 – sources of access to the web site of C.L.W.G.

Legend:

- Google
- Anmvioggi.it
- Directly
- Cms.scivac.it
- Evsrl.it
- Images.google.it

On the right – value %

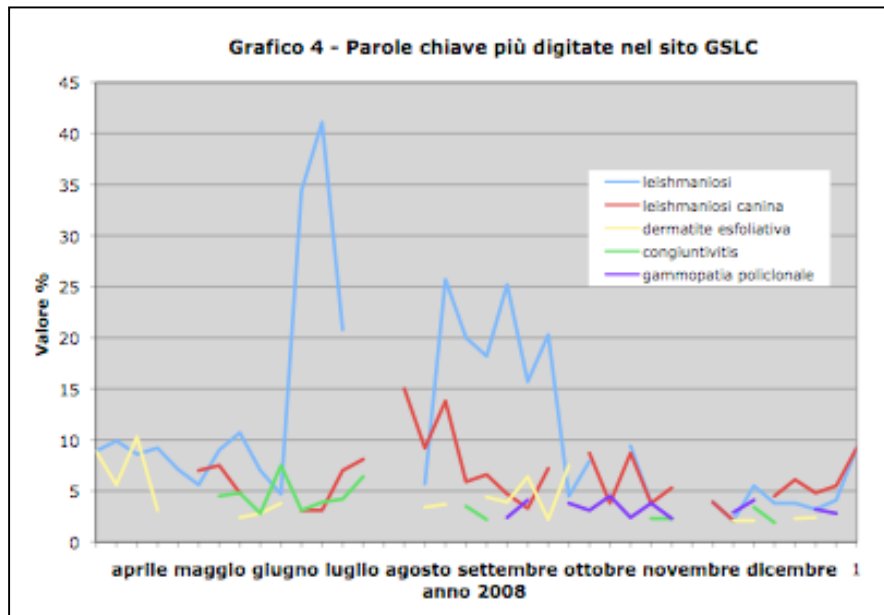
Abscissa – months of April, May, June, July, August, September, October, November, December, year 2008

In table #1 are reported in descending order all sources that have addressed and link to visit the web site of C.L.W.G.

	totals x 9 months	% on 9 months
google (organic)	2031.5	53.5
anmvioggi.it (referral)	454.6	12.0
(direct) ((none))	364.5	9.6
cms.scivac.it (referral)	140.5	3.7
evsrl.it (referral)	102.9	2.7
images.google.it (referral)	86.8	2.3
alice (organic)	34.94	0.9
images.google.es (referral)	29.8	0.8
leishmania.it	18.7	0.5
images.google.fr (referral)	14.1	0.4
images.google.com.mx	10.7	0.3
yahoo (organic)	4.3	0.1
wpo2.libero.it (referral)	4.0	0.1

Table 1 – complete list of sources of access to the web site of C.L.W.G.

It has been interesting to know which was the key word more utilized that has allowed the addressing to the web pages (see graph #4). The key words more utilized were *leishmaniasis* and *canine leishmaniasis*. The other key words that often have been used in addressing to visit the web site were: *dermatite esfoliativa* (in Italian, espholiative dermatitis), *congiuntivitis* (in English) e *gammopatia policlonale* (in Italian polyclonal gammopathy), features, for some aspect, more distinctive of the disease.



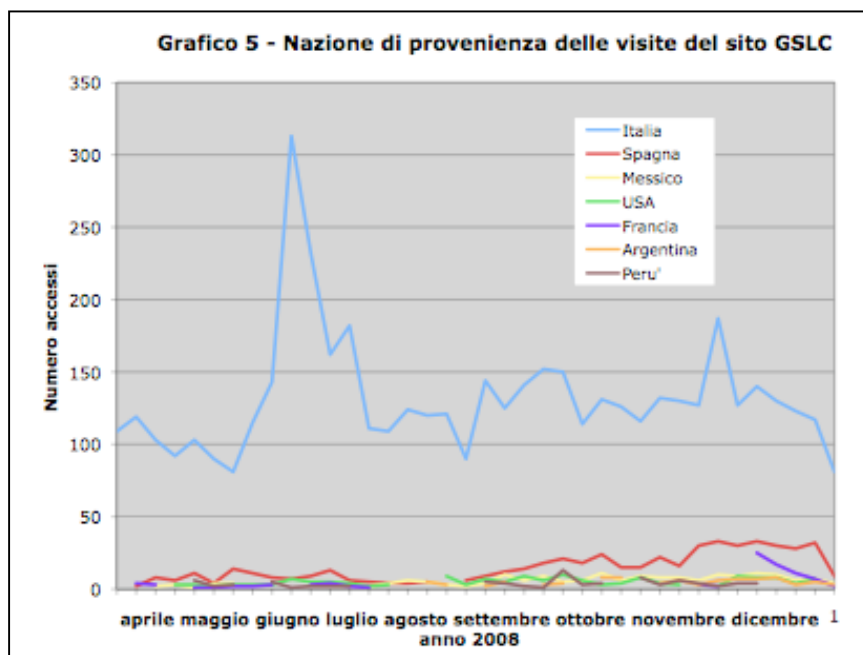
Graph #4 – key word most used to access to the C.L.W.G. web site
 Legend:
 • leishmaniasis
 • canine leishmaniasis
 • espholiative dermatitis
 • congiuntivitis
 • polyclonal gammopathy
 On the right – value %
 Abscissa – months of April, May, June, July, August, September, October, November, December, year 2008

In table 2 are reported in descending order all the key words that have induced to visit the C.L.W.G. web site. Among this list we may find Italian, English or Spanish words suggesting an interest from visitors from all over the countries other than Italy.

	totals x 9 months	% on 9 months
leishmaniosi	369.0	9.7
leishmaniosi canina	179.4	4.7
congiuntivitis	90.1	2.4
amminosidina	63.4	1.7
glomerulonefrite proliferativa	39.4	1.0
ulcera nasal	28.2	0.7
gammapatia policlonal	23.5	0.6
ulceras nasales	23.2	0.6
vasculite	20.6	0.5
dermatite esfoliativa	20.5	0.5
www.gruppoleishmania.org/it	18.8	0.5
dermatitis granulomatosa en	15.4	0.4
leishmania	12.0	0.3
domperidone leishmaniasis	8.5	0.2
andrea zatelli	7.9	0.2
glomerulonefritis	6.8	0.2
aspetto histologico	6.7	0.2
epistassi canina	6.1	0.2
gslc leishmaniasis	5.5	0.1
leishmania.org	4.8	0.1
inflamacion granulomatosa	4.6	0.1
proteinograma	4.4	0.1
dermopatia	4.4	0.1
allopurinolo cane	4.3	0.1
epistaxiz canina	4.2	0.1
cura leishmania allopurinolo	4.2	0.1
gruppo di studio leishmania	4.0	0.1
gruppo di studio leishmaniosi	3.4	0.1
congiuntive granulomatosa	3.0	0.1
Cura leishmaniosi canina	3.0	0.1
gruppo leishmania	2.8	0.1
maroli michele	2.8	0.1
congiuntive	2.6	0.1
depigmentazione	2.4	0.1
sieroelettroforesi	2.3	0.1
epidemiologia clinica	2.3	0.1
approccio terapeutico	2.3	0.1
gaetano oliva	2.3	0.1
badiale	1.9	0.1

Table 2 – Key words most used to access to the C.L.W.G. web site

In relationship to the previous consideration it has been interesting to know the origin of the access to the web pages identifying the country from where the access was deriving (see graph #5). In absolute numbers the country with the most access was obviously Italy, followed by Spain, Mexico, USA, France, Argentina and Peru, with a high interest from areas where Spanish language is used.



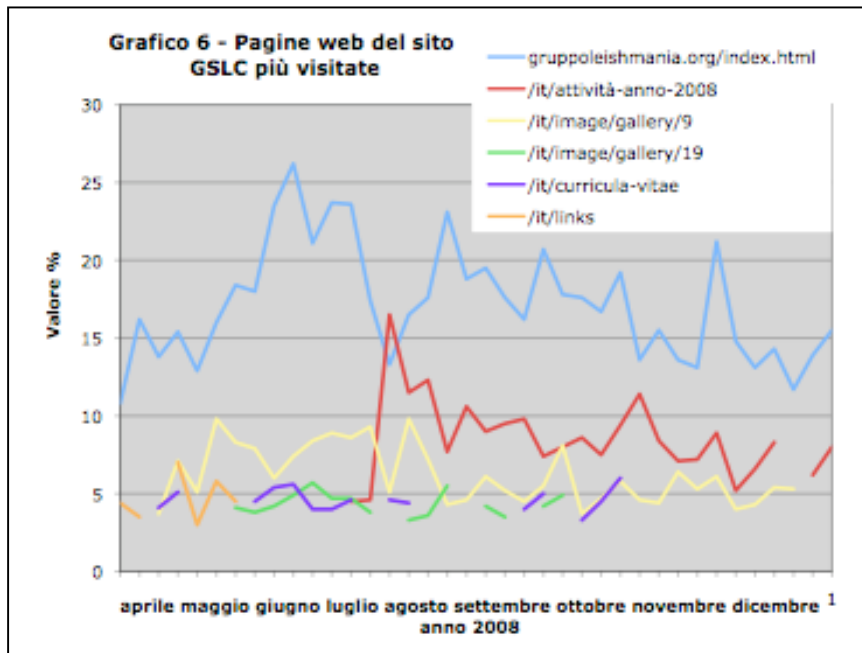
Graph #5 – Most important countries accessed to the C.L.W.G. web site
 Legend:
 • Italy
 • Spain
 • Mexico
 • USA
 • France
 • Argentina
 • Peru'
 On the right – number of access
 Abscissa – months of April, May, June, July, August, September, October, November, December, year 2008

In table 3 is reported in descending order the complete list of countries from where was deriving the access to the web pages.

	totals x 9 mo.s	% on 9 mo.s		totals x 9 mo.s	% on 9 mo.s
Italy	5012	131.89	Dominican Republic	3	0.08
Spain	532	14.00	Denmark	2	0.05
Mexico	184	4.84	Nicaragua	2	0.05
USA	159	4.18	Austria	2	0.05
France	106	2.79	Paraguay	2	0.05
Argentina	104	2.74	Guatemala	2	0.05
Peru'	90	2.37	Serbia	2	0.05
Colombia	77	2.03	Malta	2	0.05
United Kingdom	64	1.68	Australia	2	0.05
Chile	42	1.11	Romania	1	0.03
Svizzera	29	0.76	South Africa	1	0.03
Brazil	24	0.63	Moldova	1	0.03
Venezuela	20	0.53	India	1	0.03
Germany	12	0.32	New Zealand	1	0.03
Bolivia	11	0.29	Philippines	1	0.03
Portugal	8	0.21	Poland	1	0.03
Ecuador	8	0.21	China	1	0.03
Netherlands	8	0.21	Australia	1	0.03
Canada	6	0.16	Morocco	1	0.03
El Salvador	5	0.13	Cayman Island	1	0.03
Uruguay	5	0.13	Ireland	1	0.03
Greece	5	0.13	Bulgaria	1	0.03
Panama	4	0.11	Serbia & Montenegro	1	0.03
Belgium	4	0.11	United Arab Emirates	1	0.03

Table 3 – Countries of origin of the access to the C.L.W.G. web site

Finally, it has been of interest to point out which was the most attractive web page in the C.L.W.G. site in order to enrich these pages and possibly insert new ones with the same interest (see graph 6). Obviously, the most visited page was the home page with a particular interest in the year 2008 activity followed by the medical photo gallery. It should notice that the visitors were also attracted by the curricula of the C.L.W.G. members and the links available.



Graph #6 – Most accessed web pages in the C.L.W.G. web site
 Legend:
 • www.gruppoleishmania.org/index.html
 • /it/attività-nell'anno-2008
 • /it/image/gallery/9
 • /it/image/gallery/19
 • /it/curricula-vitae
 • /it/links
 On the right – value %
 Abscissa – months of April, May, June, July, August, September, October, November, December, year 2008

In table 4 is reported the list in descending order all the most visited pages in the web site pointing out that the preferences were for the Italian and Spanish web pages.

	totals x 9 months	% on 9 months
www.gruppoleishmania.org/index.html	651.9	17.16
/it/attività-nell'anno-2008	223.8	5.89
/it/image/gallery/9	214.4	5.64
/it/image/gallery/19	87.6	2.31
/it/curricula-vitae	77.9	2.05
/it/links	45.9	1.21
it/curricula-vitae	24.9	0.66
/it/referenze-bibliografiche-sulla-prevenzione-della-leishmaniosi	23.2	0.61
/it/images-galleries/galleria medica/	19.5	0.51
/es/actividad-durante-el-ano-2008	12.45	0.33
/it/ulcere-dei-cuscinetti-digitali-secondaria-a-vasculite	11.6	0.31
/it/dermatite-esfoliativa-periorbitale-e-nei-pressi-del-tartufo	10.3	0.27
/it/epistassi-monolaterale	10.2	0.27
/it/referenze-bibliografiche-sulla-prevenzione-della-leishmaniosi-	9.5	0.25
/it/depigmentazione-erosione-e-ulcere-nel-piano-nasale	7.1	0.19
/it/dermatite-esfoliativa-e-segno-degli-occhiali	6.9	0.18
/it/image-galleries-/medica	4	0.11
/es/node	3.7	0.10
/es/proteinograma-pico-con-una-	3.6	0.09
/es/actividad-durante-el-ano-2008	3.5	0.09
/it/pagina-web	3	0.08
it/attività-nell'anno-2007	2.9	0.08
/it/obiettivi-e-finalità	2.8	0.07
/en/image/gallery/19	2.8	0.07
/it/node	2.6	0.07

Table 4 – Most accessed web pages of the C.L.W.G. site

Conclusions

The development of the web site resulted an interesting means to spread out the activity of the C.L.W.G. documented by an increasing interest toward the contents of the web pages. The consultation of the web pages by the visitors is related to an appropriate circulation and reporting from other sources of this type of information such as congresses, meetings, and even printed papers that share the common interest on canine leishmaniasis. As previously reported the Multihall International Congress of SCIVAC represents an important event to consult or access to the web site addressed to the continuing education of the practitioner that is involved in facing the canine leishmaniasis.