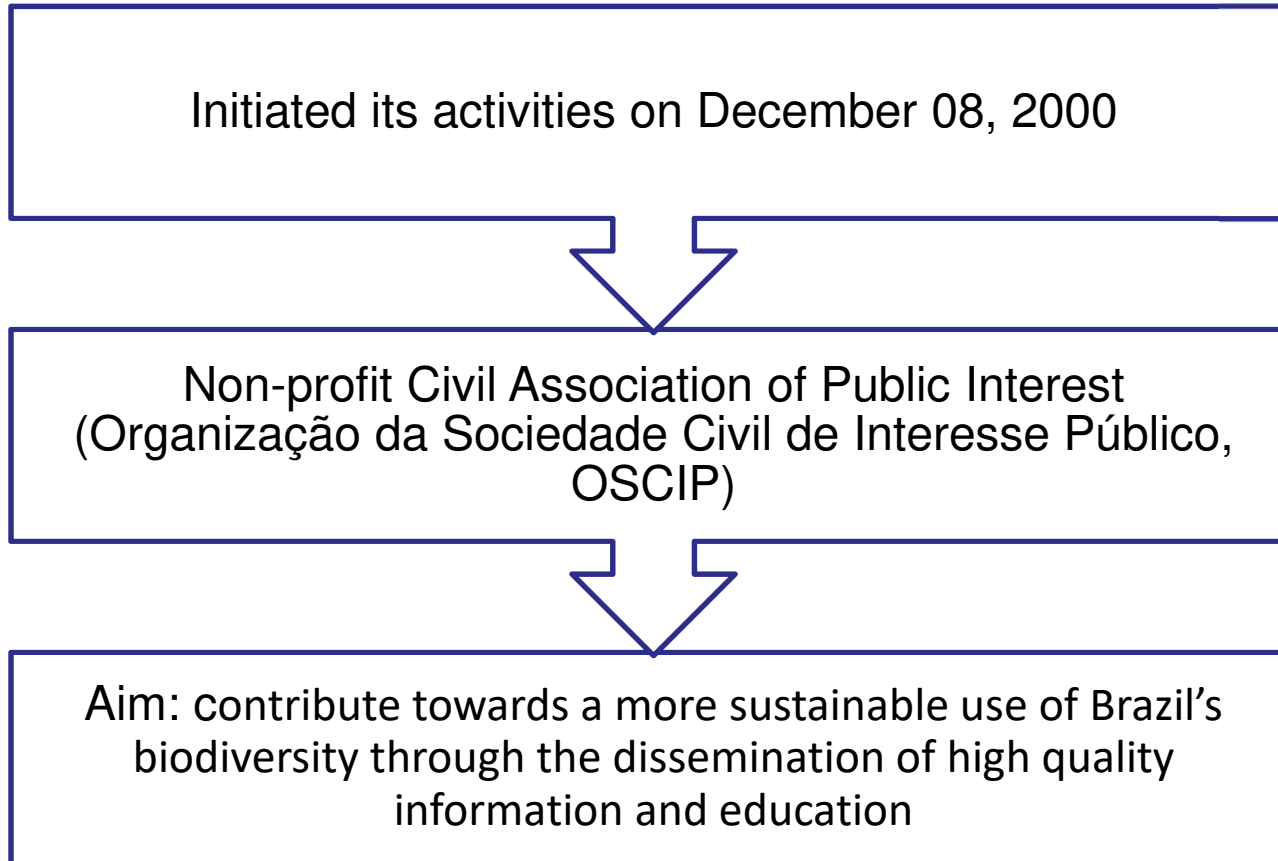
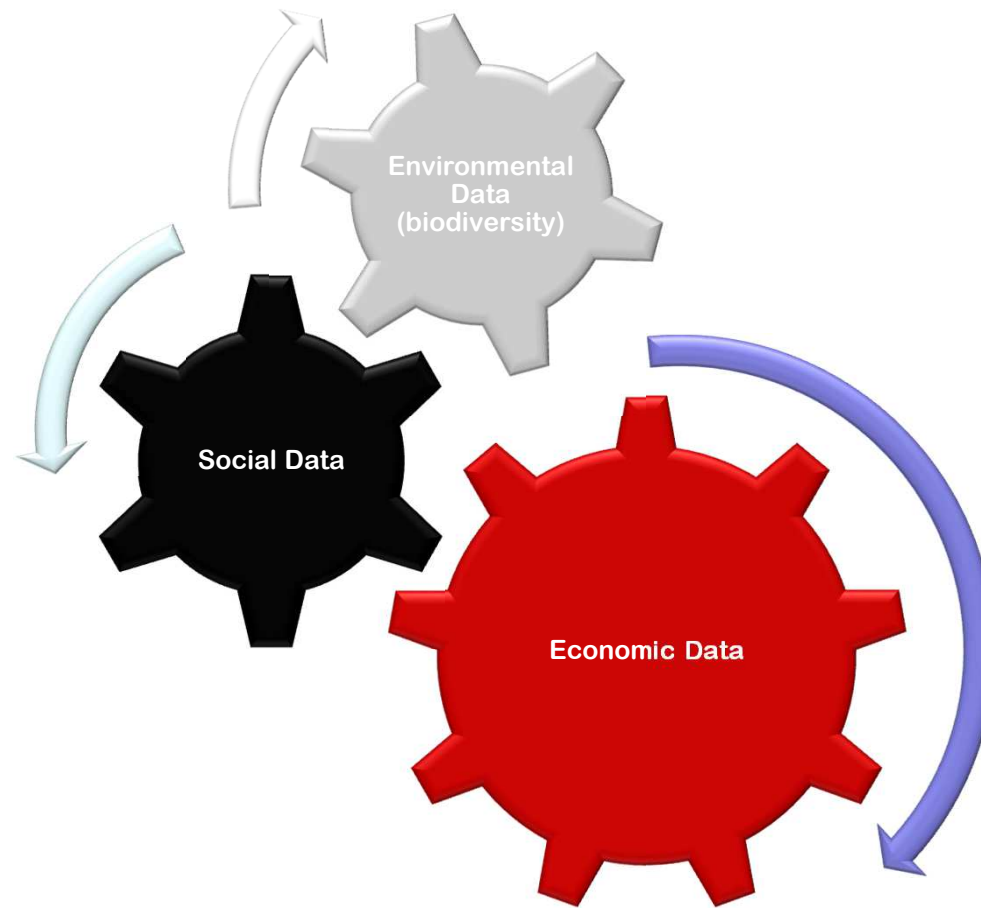


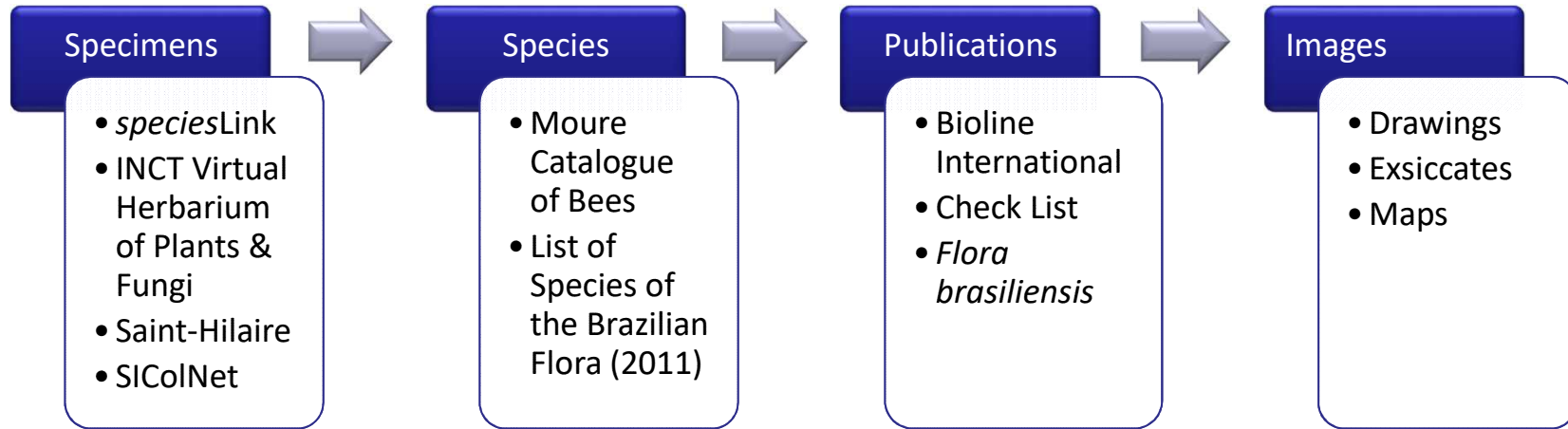
About CRIA



Economic, Social, & Environmental Policies



Main information systems



- *speciesLink*
- INCT Virtual Herbarium of Plants & Fungi
- Saint-Hilaire
- SICoLNet

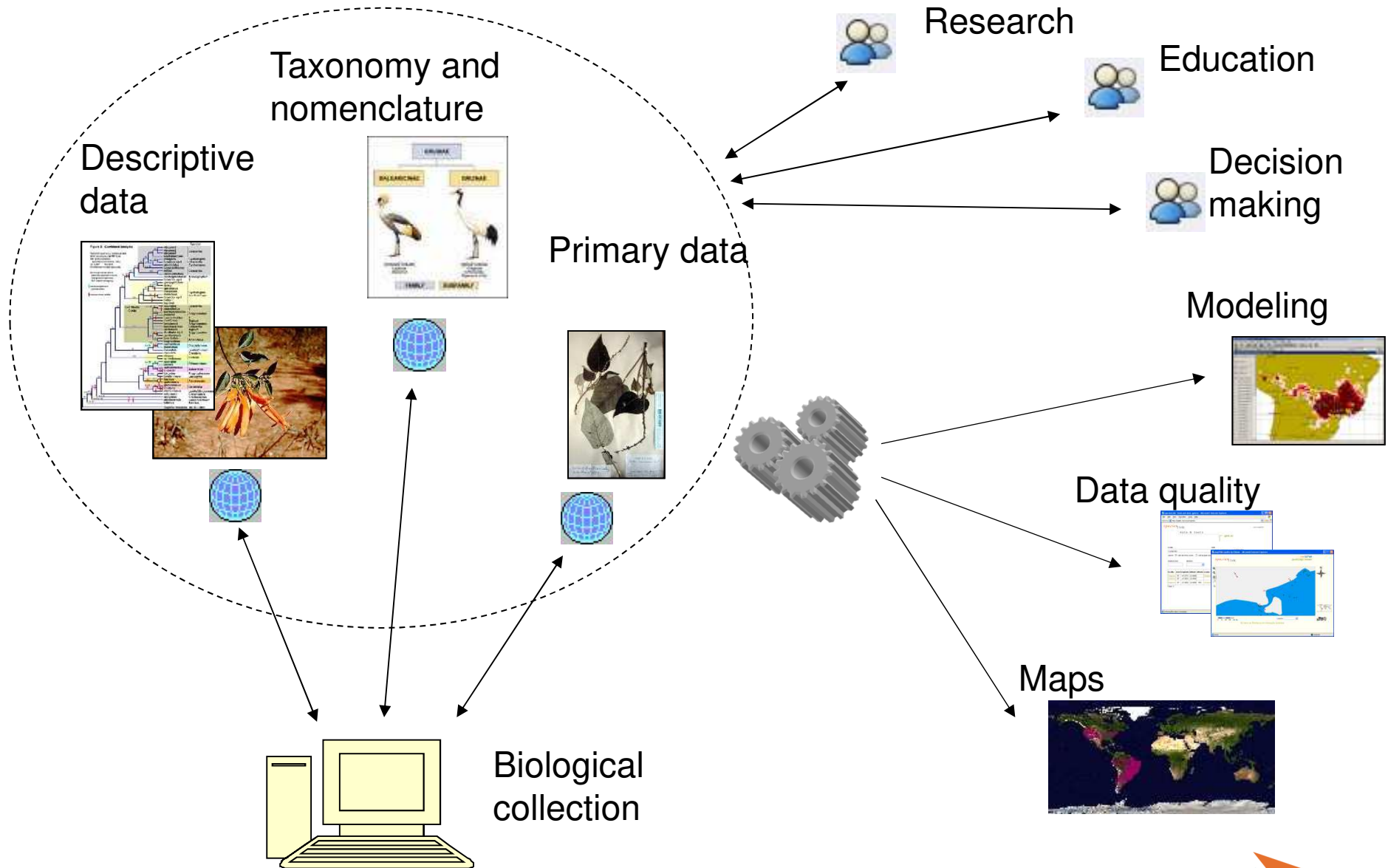
- Moure Catalogue of Bees
- List of Species of the Brazilian Flora (2011)

- Bioline International
- Check List
- *Flora brasiliensis*

- Drawings
- Exsiccates
- Maps



Biological Collections as Knowledge Centers



Content

Network Architecture

Tools

- Data cleaning
- Manager
- Collection profile
- Indicators
- Search & retrieval
- Image server
- Ecological niche modeling

Points to consider

Biological collections in Brazil

- A small number of “large” collections
- A large number of important small research collections

Average characteristics

- Human resources: expertise in informatics (normally insufficient)
- Equipments and installations (normally insufficient)
- Connectivity (normally slow or unstable)

Challenges

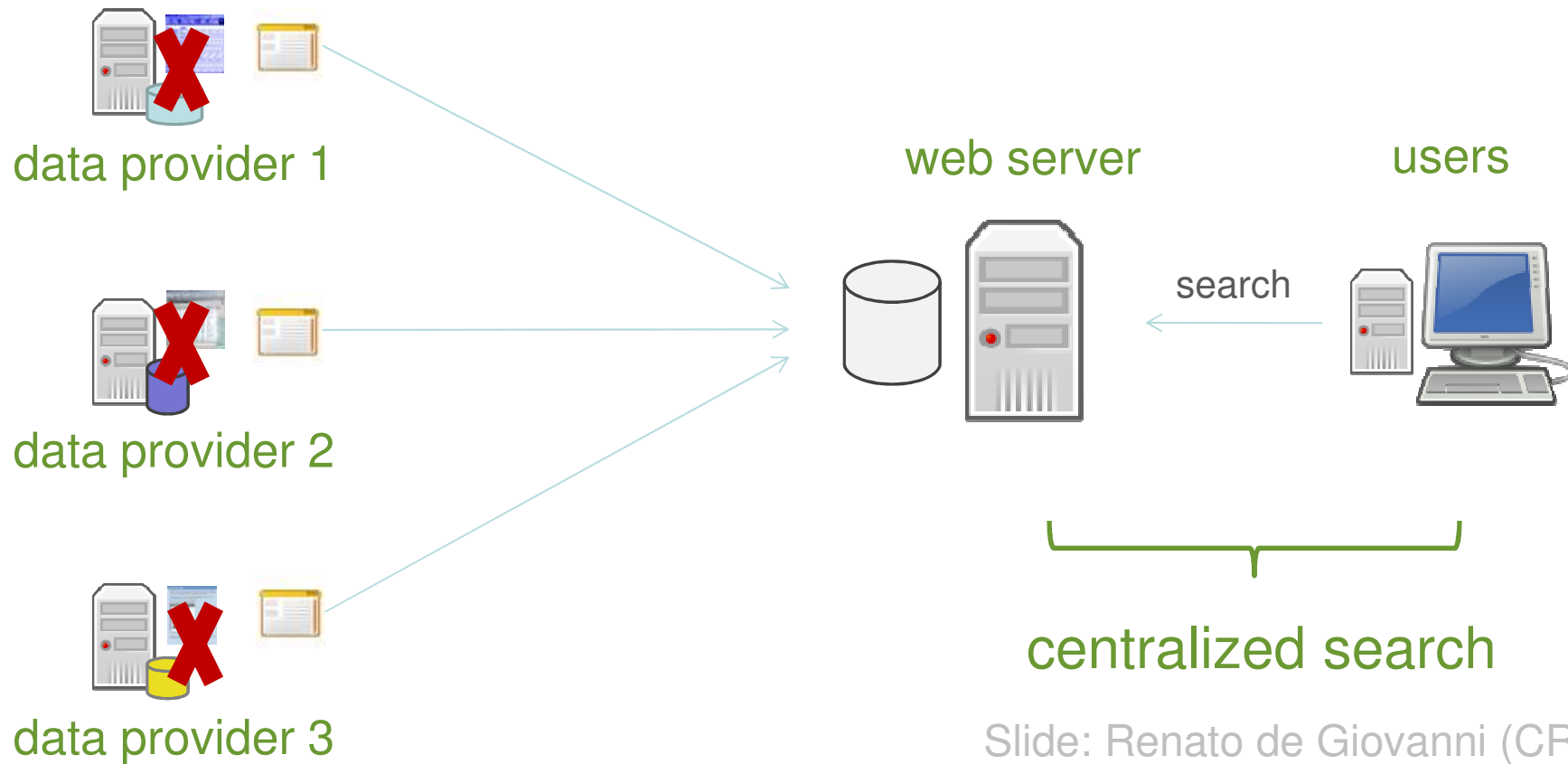
- Integration of primary data from all taxa, from distributed collections, using different software in diverse environments
- Integrating data from collections with slow and/or unstable internet connectivity, using basic hardware and no computer expertise
- Maintain full control over the data served to the network at the provider's end

Development parameters - architecture

- Collection's routine must not be altered
 - *Practically any software is accepted (Excel, Access, Specify, Biota, Brahms, PostgreSQL, MySQL, ...)*
- Data provider must have full control over the data
 - *What is sensitive data, what is open and free*
 - *Digitization strategy, data cleaning strategy*
- Data provider must be fully acknowledged
- Connectivity problem must be overcome
- Network must be interoperable with international initiatives

Strategies for data integration

Same software and database used by all providers



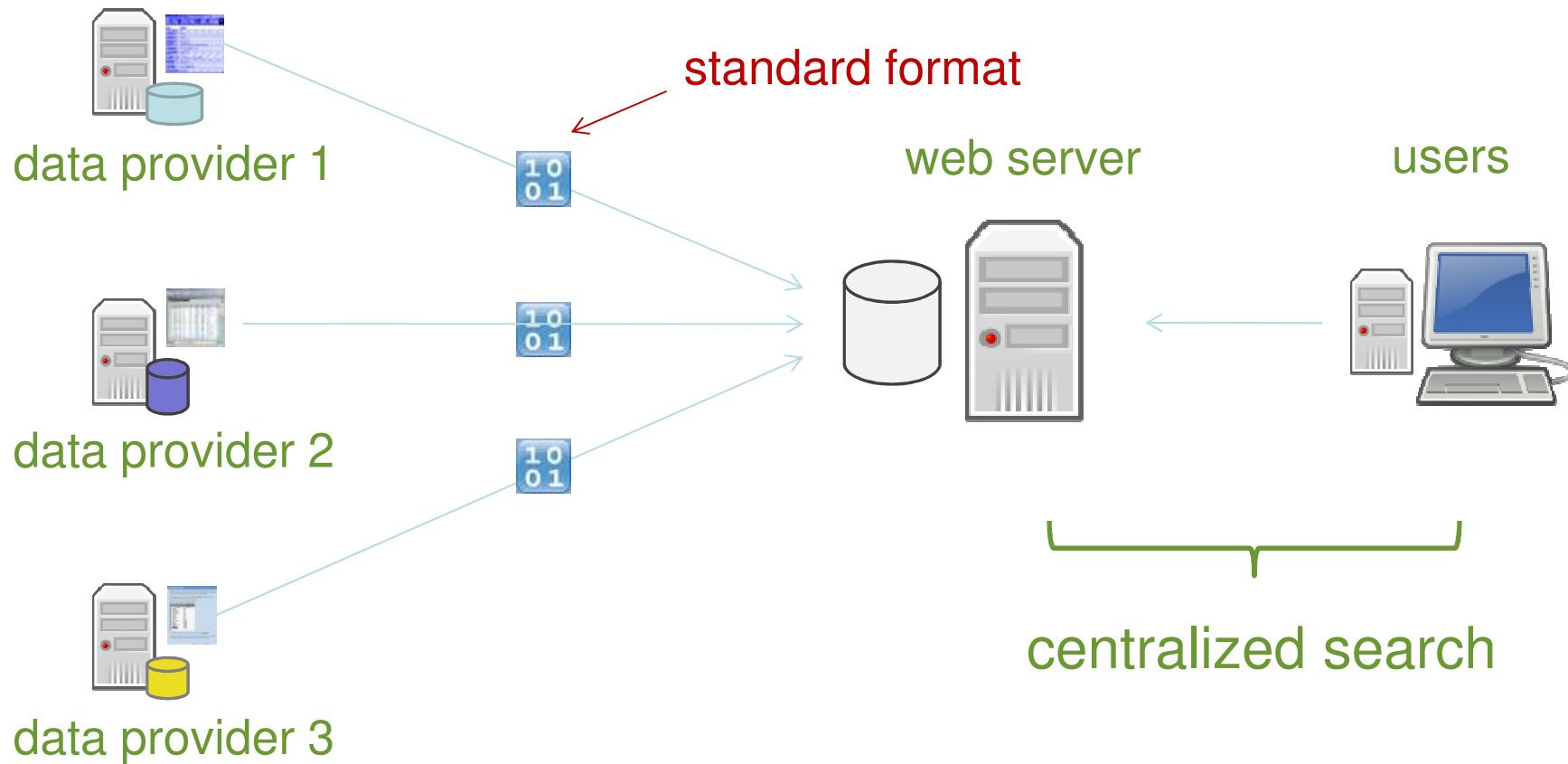
Slide: Renato de Giovanni (CRIA)

Strategies for data integration

- 1) Same software and database used by all providers
 - ✓ Interesting solution if all providers agree to use the same system:
 - ✓ Improvements benefit all participants.
 - ✓ Shared costs.
 - ✓ Good performance (although queries are run in the production database).
 - Lack of freedom to make custom adjustments.
 - Very difficult to accomplish if providers are already using their own management software (sometimes developed with considerable effort).

Strategies for data integration

Periodically export data to a central database

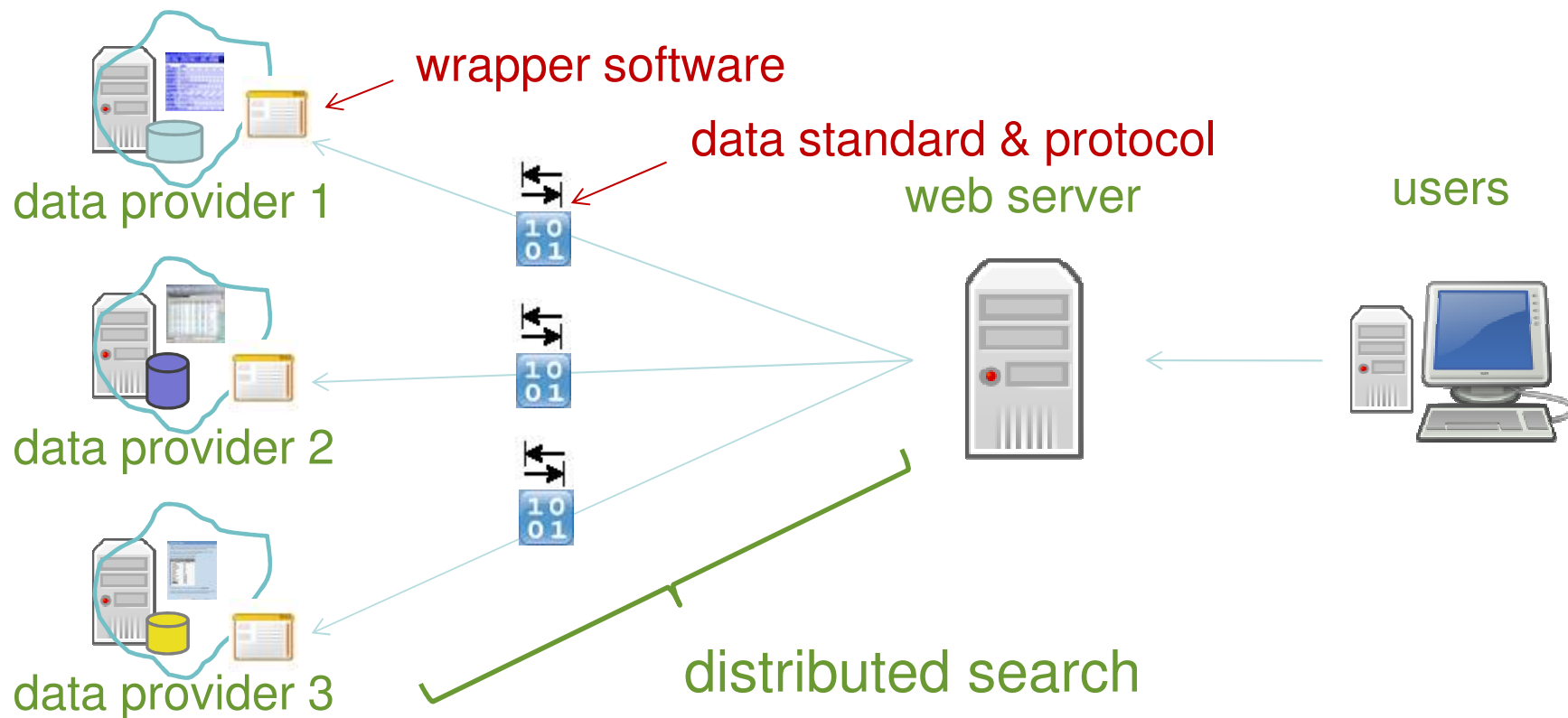


Strategies for data integration

- 2) Data providers periodically export data to a central database
- ✓ Good performance.
 - ✓ Easier to implement.
- Queries are performed on potentially non current data.
 - Onus on providers to transform data into a common format and periodically export it.
 - Experience with SICol: no updates

Strategies for data integration

Real time distributed queries



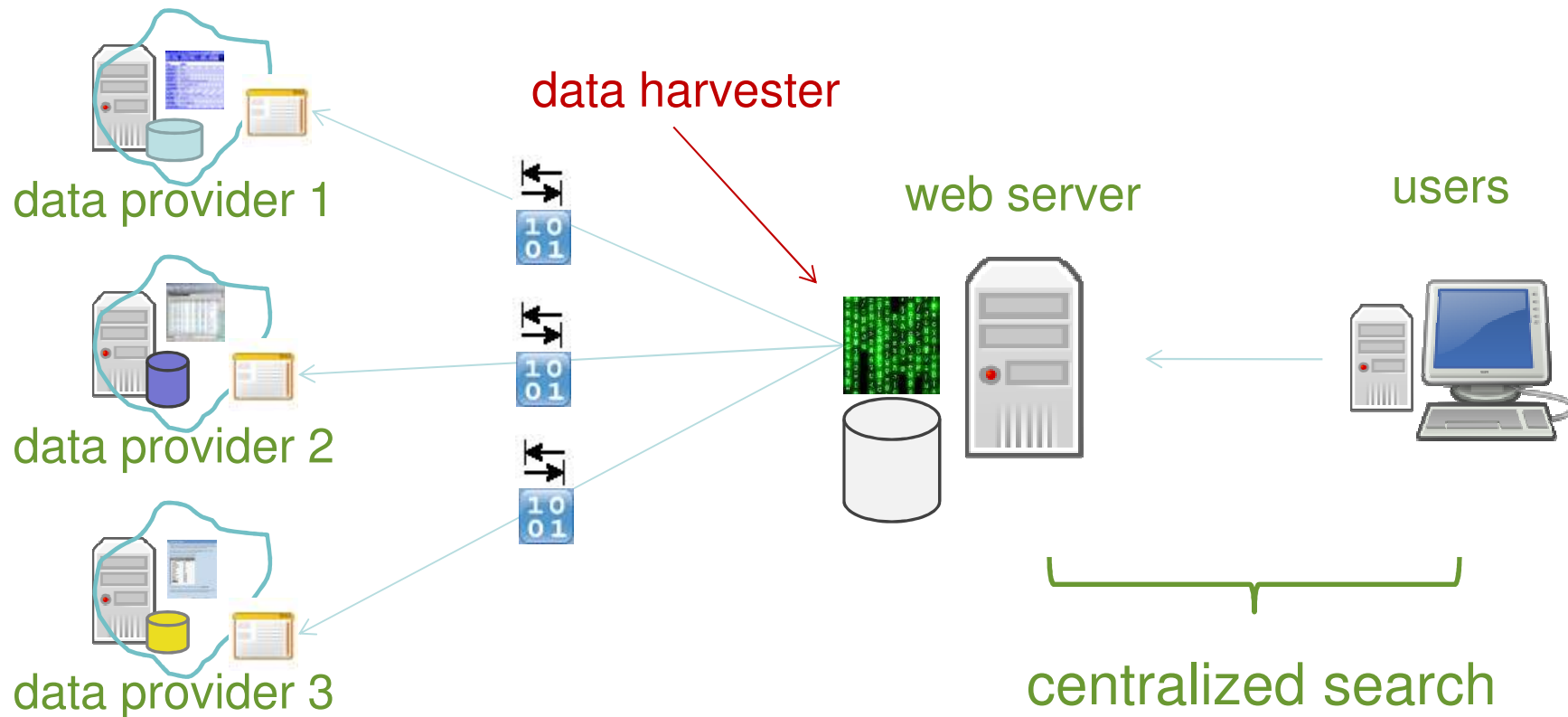
Strategies for data integration

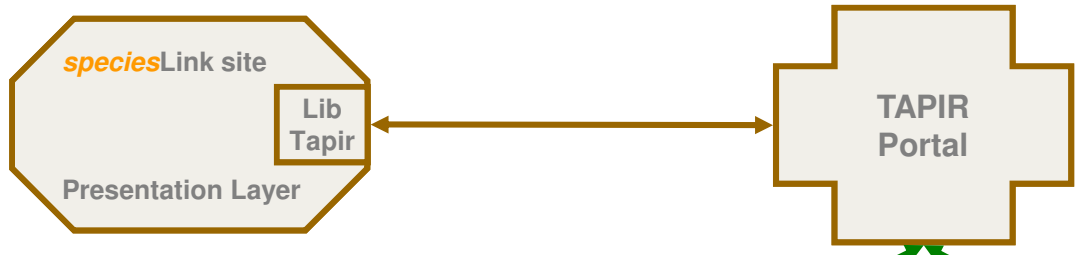
Real time distributed queries

- ✓ Access to current data.
- ✓ Providers have more confidence and sense of control.
- Performance and scalability bottlenecks.
 - Performance limited by the slowest data provider.
 - Servers sometimes down, network problems.
 - When data providers go offline their data become unavailable.

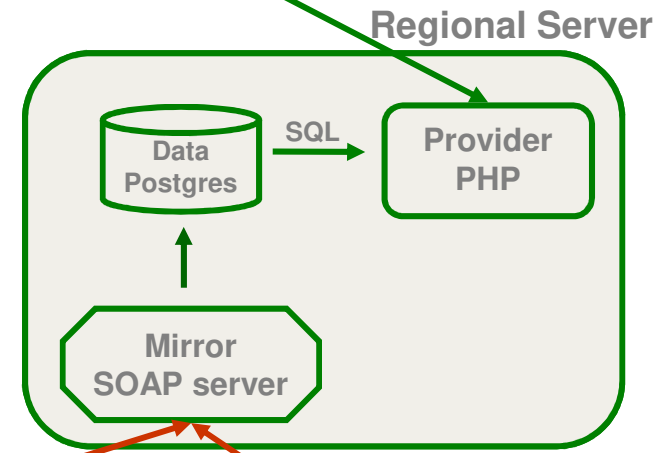
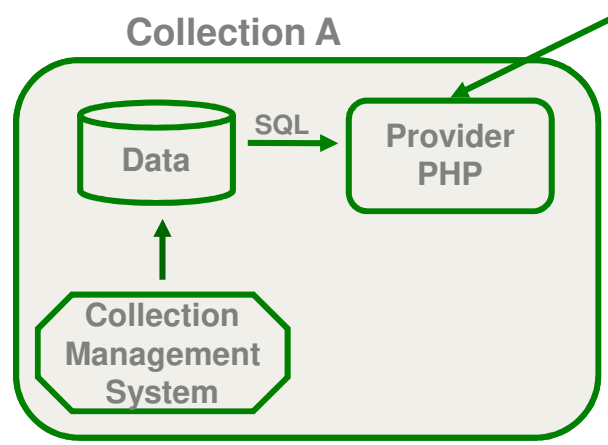
Strategies for data integration

Data harvesting

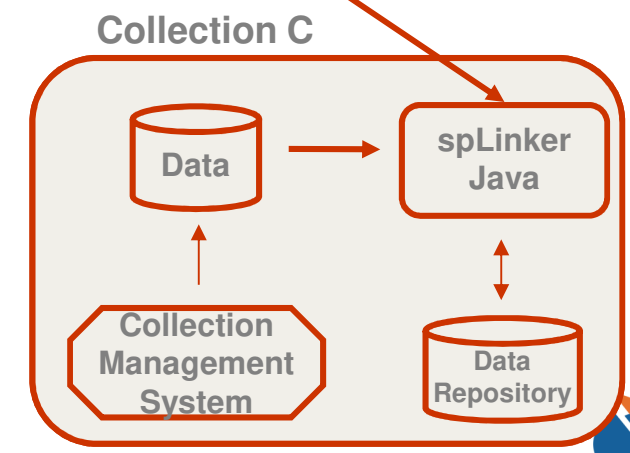
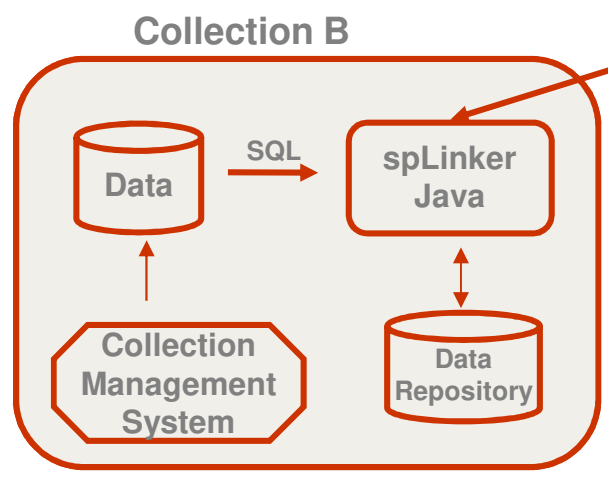




Fast and stable connectivity

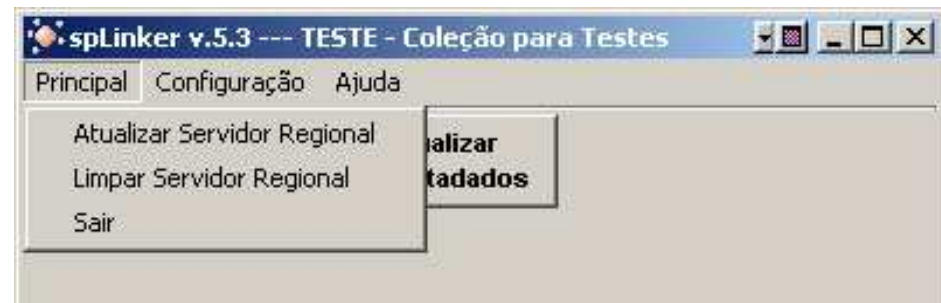
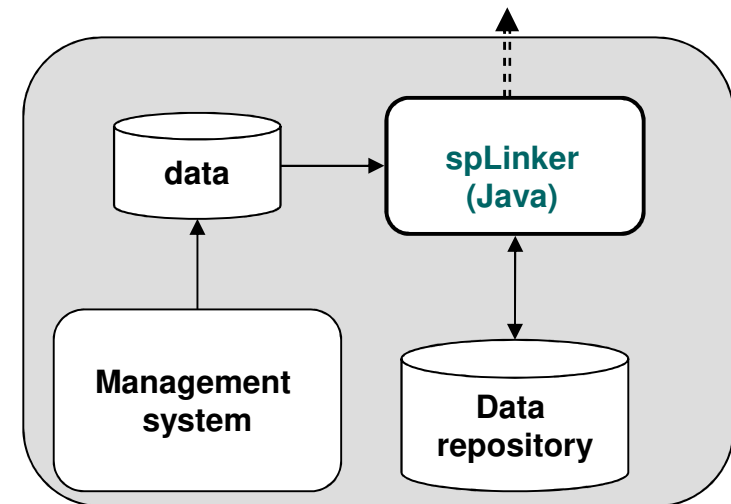


Slow or unstable connectivity

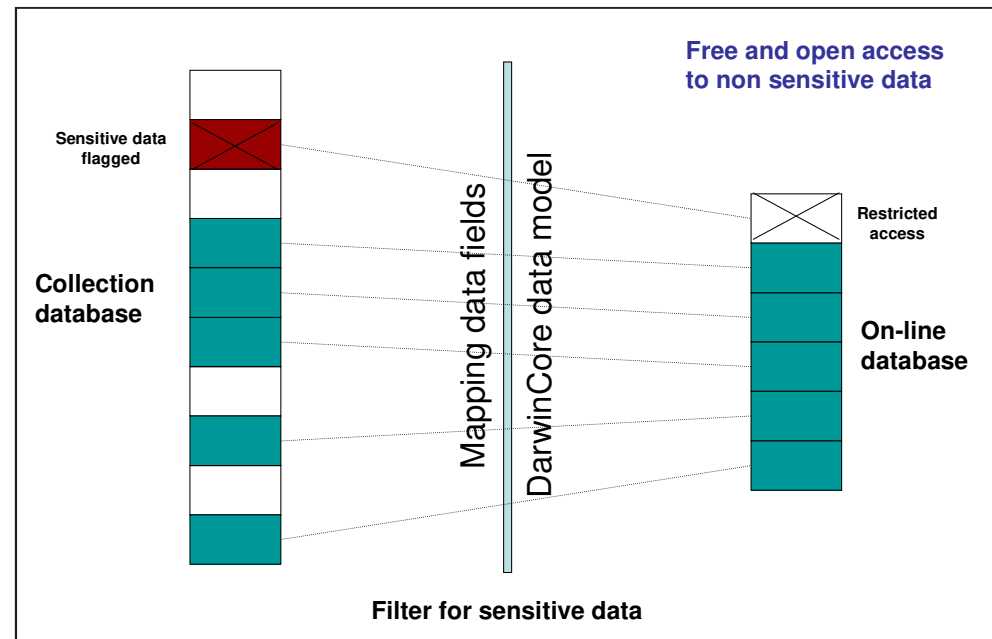


spLinker: software to send data to cache node

- Platform Independent (java)
- Connects to practically any database
- Offers full control over data
- Checks repository and only sends updates (low traffic)
- It is possible to filter sensitive data using regular expressions



spLinker



português



the project

speciesLink is a distributed information system that integrates primary data from biological collections. The development was funded by FAPESP, GBIF, JRS Foundation, MCT, CNPq, FINEP and CRIA.

news

speciesLink^P



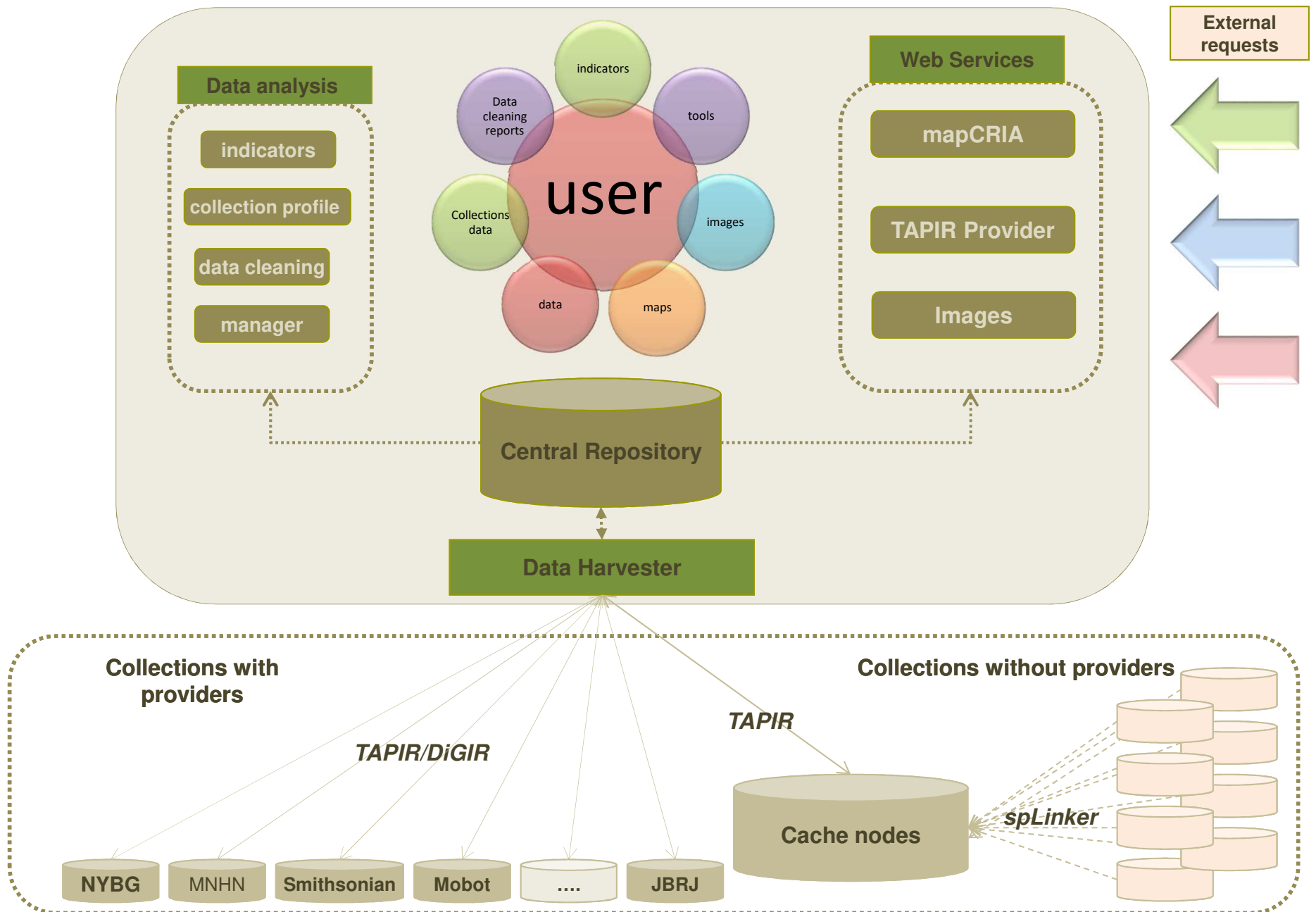
219 collections and sub-collections
4,513,320 on-line records
2,173,774 georeferenced
341,122 different species names
26 aug 2011 - 04:13

.....
indicators



data & tools

speciesLink Architecture



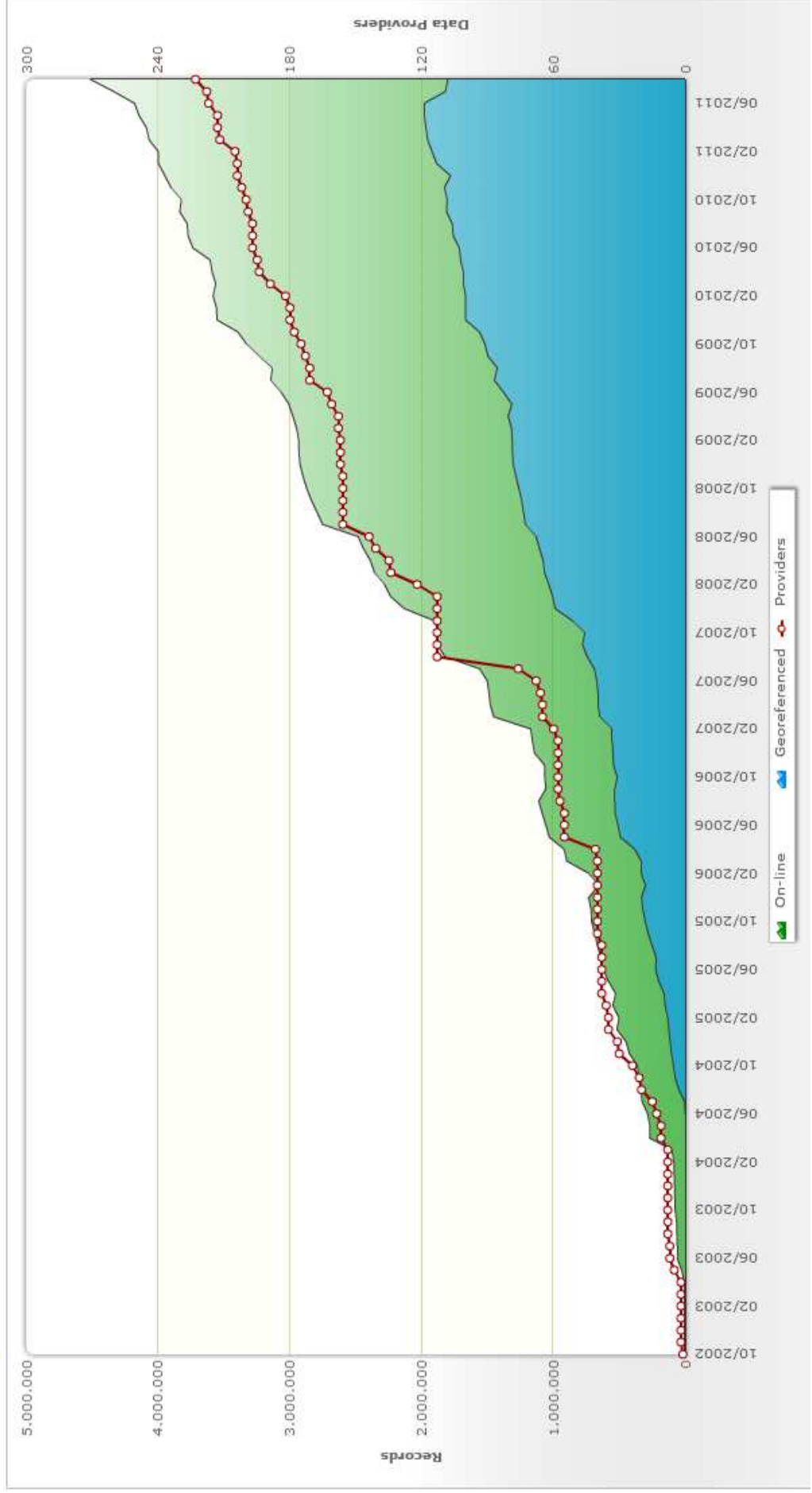


Data Repatriation:


- NYBG
- MOBOT
- Smithsonian
- MVZ Berkeley
- MNHN Paris

See other options for indicators here

All Networks - All Collections - records



Content

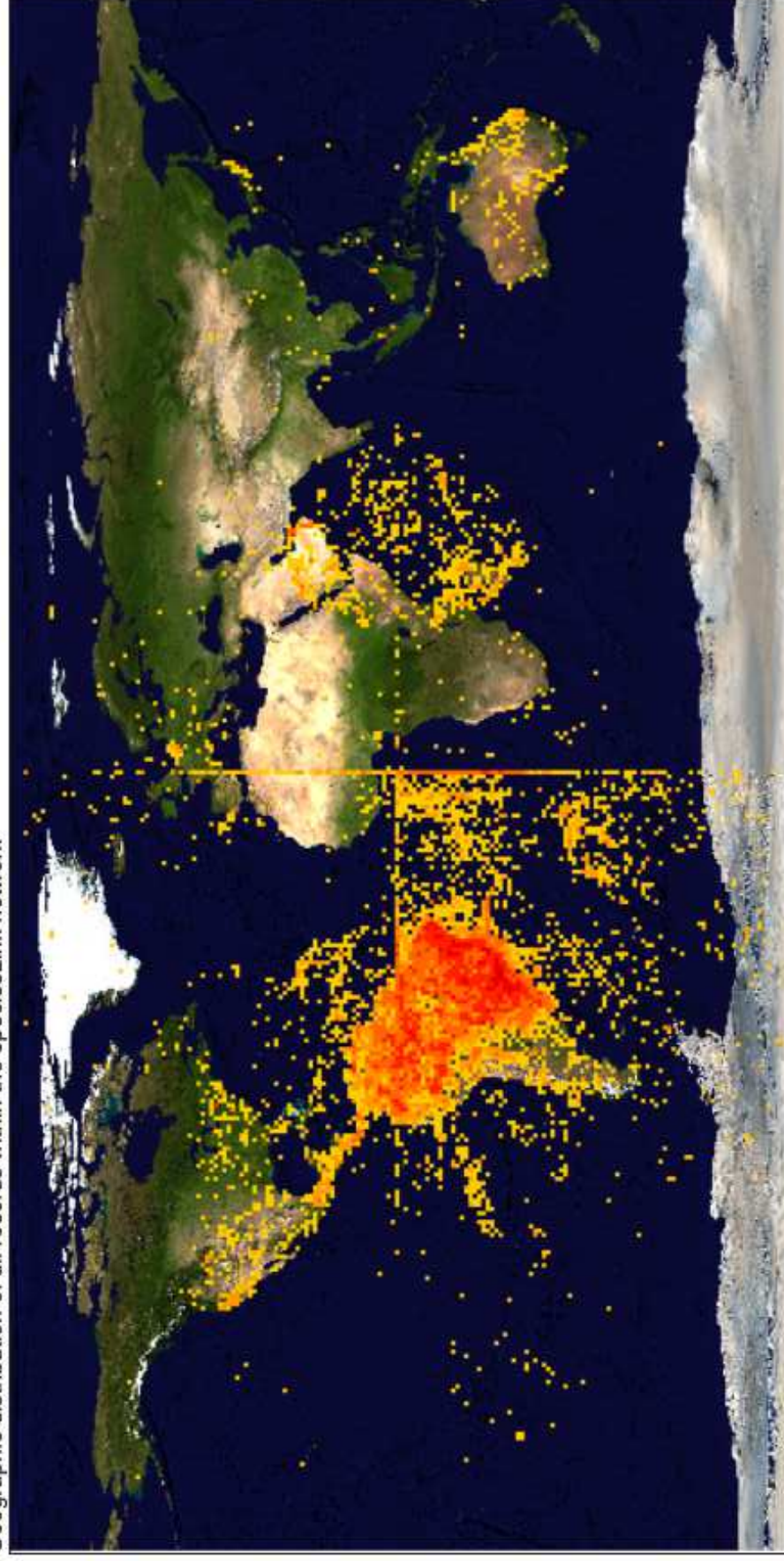
- Network Architecture 
- Tools
 - Data cleaning
 - Manager
 - Collection profile
 - Indicators
 - Search & retrieval
 - Image server
 - Ecological niche modeling

This tool aims at helping curators in identifying possible errors and to standardize data. Records are not modified. The system just presents "suspect" records, recommending that they be checked by each author or curator. The tool is under constant development, so any suggestion is more than welcome.

Select a collection



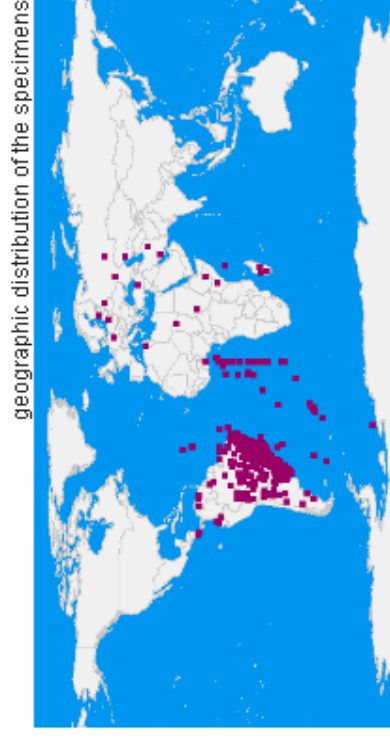
Geographic distribution of all records within the speciesLink network



This tool aims at helping curators in identifying possible errors and to standardize data. Records are not modified. The system just presents "suspect" records, recommending that they be checked by each author or curator. The tool is under constant development, so any suggestion is more than welcome.

Select a collection

collection:	BHCB
total number of records on-line	86189
- without coordinates	74829
- georeferenced	11360
- access to georeferenced data denied	31
- in the sea	1376
repeated records	
catalog number	30651
all fields	24106
collector's name and number	11711
last update	
of the collection	20-09-2011
of dataCleaning	21-09-2011



collection profile
dataCleaning statistics
geographic coordinates analysis

taxonomic data	
inventory	scientific name - collector - types
family	not found
genus	268 suspect records
species	152 suspect records
subspecies	not found
author	428 suspect records
duplicate	1786 suspect records
date collected	
collect before 1930	830 suspect records
last update previous to date collected	not found

locality data	
inventory	country - state - municipality
name of the country/state	83 suspect records
outlier	57 suspect records
long/lat outside the world limit	77 suspect records
equal long/lat	8 suspect records
long or lat equal to zero	1136 suspect records
long/lat in the sea (Brazil)	1322 suspect records
municipality name (Brazil)	2908 suspect records
coordinate unit analysis (Brazil)	15 suspect records
suggestions for blank fields	
long/lat (Brazil)	58284 suggestions 
country/state name	9 suggestions
municipality name (Brazil)	78 suggestions

collection: BHCB

Suspect species names

List of records that have the same genus name with a phonetic variation of the species name

Title: The names in red are not included in the dictionaries available, those in green are .

genus	species	subspecies	records	speciesLink	status Col	catalog number
[]	[clematis]	[]	1 see	1		120601
sp	[farnesiana]	[]	4 see	434	sinônimo	26423 26423 66470 849
sp	[pharnesiana]	[]	1 see	1		38752
sp	[]	[]	13 see	89		
sp	[hieracifolius]	[cacalioides]	1 see	4		130363
sp	[hieraciiifolius]	[cacalioides]	4 see	4		61103
sp	[erythroxyllum]	[]	1 see	70		144528
sp	[erythroxyllum]	[]	9 see	227		18336 18336 26830 26830 49712 51324 59802 61172 71203
sp	[heterocondylus] [amphidictyus]	[]	3 see	5		110510 142089 54184
sp	[heterocondylus] [amphidictyus]	[]	1 see	24	sinônimo	144560
sp	[siperuna] [poeppigi]	[]	1 see	5		76587
sp	[siperuna] [poeppigii]	[]	2 see	67		14208 70379
sp	[solanum] [sanctae-catharinae]	[]	2 see	88		24591 90796
sp	[solanum] [sanctaecatharinae]	[]	51 see	326	nome aceito	
sp	[solanum] [sanctae-katharinae]	[]	0	11		
sp	[solanum] [sisymbriifolium]	[]	16 see	110		
sp	[solanum] [sisymbriifolium]	[]	6 see	301	sinônimo	139853 143057 143071



Busca por No

Gênero esp



Busca por Nome Científico

Gênero espécie subespécie Reino/Domínio em buscar

Ajuda **Dicionários** **Sistemas no CRIA** **Sistemas Externos**

LFbr **Col** **Créd**

Lista de Espécies da Flora do Br
1 Nome foneticamente semelhante encontra

Plantae

Solanum sanctae-catharinae Dunal
Nome aceito.

1 sec

OPINÃO

Ajuda **Dicionários** **Sistemas no CRIA** **Sistemas Externos**

LFbr **Col** **Créditos**

Catálogo da Vida - Checklist Anual (ver 2011)
1 Nome exato encontrado

Plantae

Solanum sanctaeacatharinae Dunal

nome aceito.

1 sec

Sp **reç**

Incluir sinônimos

Checar si

Incluir sinônimos

Checar sistemas no CRIA

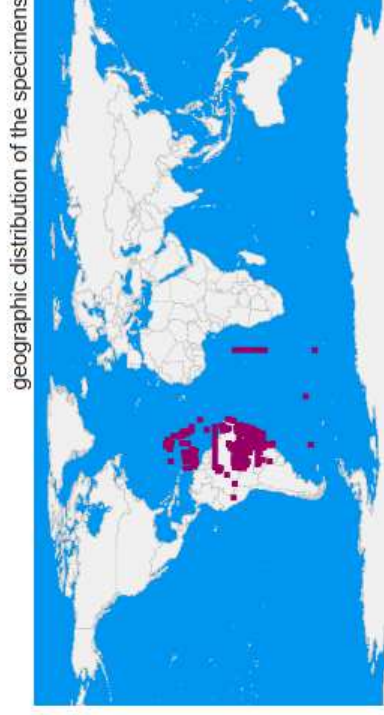
Checar sistemas externos

Mostrar reaç

This tool aims at helping curators in identifying possible errors and to standardize data. Records are not modified. The system just presents "suspect" records, recommending that they be checked by each author or curator. The tool is under constant development, so any suggestion is more than welcome.

Select a collection **ESA**

collection: ESA	
total number of records on-line	94179
- without coordinates	77149
- georeferenced	17030
- access to georeferenced data denied	643
- in the sea	2143
repeated records	
catalog number	1273
all fields	42
collector's name and number	3420
last update	
of the collection	08-11-2007
of dataCleaning	12-09-2010



collection profile
dataCleaning statistics
geographic coordinates analysis

taxonomic data	
inventory	scientific name - collector - types
family	3 suspect records
genus	1389 suspect records
species	2767 suspect records
subspecies	not found
author	41477 suspect records
duplicate	not found
date collected	
collect before 1930	220 suspect records
last update previous to date collected	not found

locality data	
inventory	country - state - municipality
name of the country/state	3 suspect records
outlier	1110 suspect records
long/lat outside the world limit	3 suspect records
equal long/lat	not found
long or lat equal to zero	1498 suspect records
long/lat in the sea (Brazil)	1738 suspect records
municipality name (Brazil)	6128 suspect records
coordinate unit analysis (Brazil)	2770 suspect records
suggestions for blank fields	
long/lat (Brazil)	67309 suggestions
country/state name	2 suggestions
municipality name (Brazil)	36 suggestions



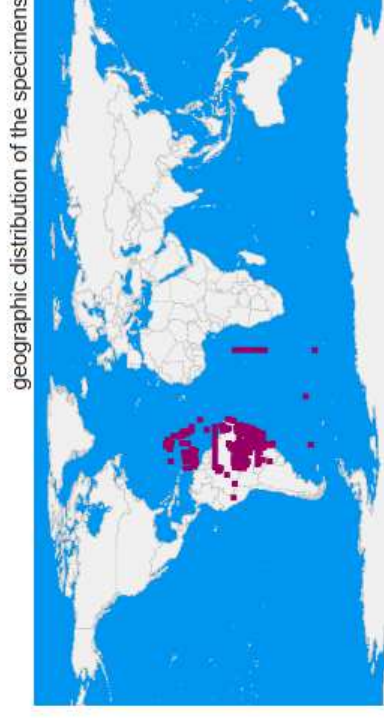
collection: **ESA**
collected before 1930.

year	month	day	records
1892	04	22	1 see
1892	04	26	1 see
1897	01	03	1 see
1897	01	10	1 see
1898	01	01	1 see
1899	01	01	1 see
1900	02	15	1 see
1900	07	28	1 see
1903	01	10	1 see
1903	04	28	1 see
1904	08		1 see
1905	06	13	1 see
1905	08	19	1 see
1906	04		1 see
1906	09	21	1 see
1906	10	10	1 see
1907	04	02	1 see
1907	08	04	1 see
1907	10	12	2 see
1907	10	16	1 see
1907	12	13	1 see
1908	07	25	1 see
1908	10		3 see
1908	10	01	1 see
1908	10	09	1 see
1908	10	17	1 see
1909	03	27	1 see

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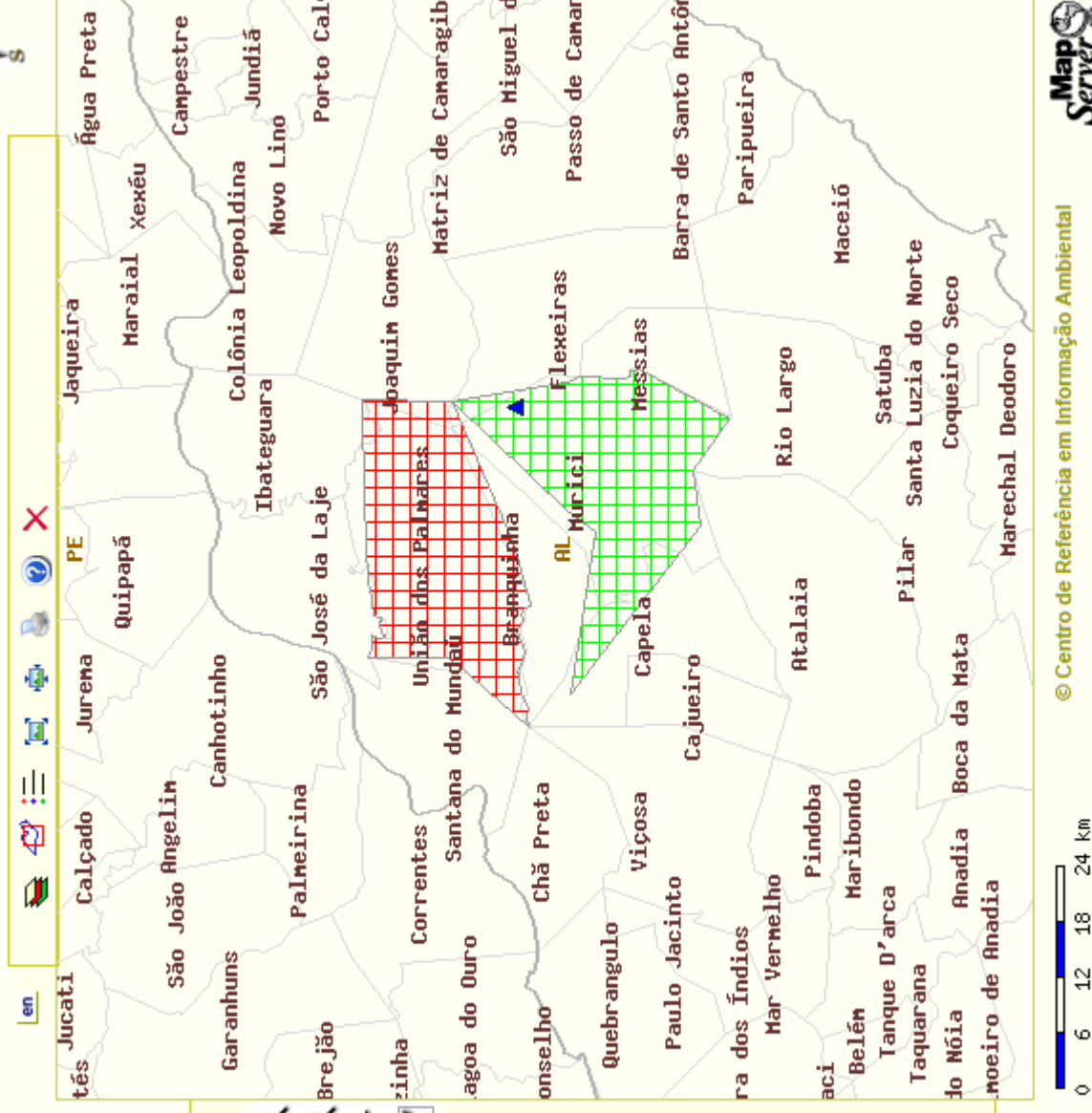
collection: **ESA**

Suspect municipality or county - the informed coordinate does not fa

country	state	county	lon
Brasil	[Alagoas]	[União dos Palmares]	-35.
Brasil	[Amazonas]	[Camarua]	-63.
Brasil	[Amazonas]	[Manaus]	-60.
Brasil	[Amazonas]	[Manaus]	-59.
Brasil	[Amazonas]	[Manaus]	-59.
Brasil	[Amazonas]	[Manaus]	-58.
Brasil	[Amazonas]	[Manaus]	-47.
Brasil	[Amazonas]	[Manaus]	-47.
Brasil	[Amazonas]	[Manaus]	-46.
Brasil	[Amazonas]	[Novo Airão]	-60.
Brasil	[Amazonas]	[Velho Airão]	-61.
Brasil	[Amazonas]	[Velho Airão]	-61.
Brasil	[Amazonas]	[Velho Airão]	-61.
Brasil	[Bahia]	[Abaíra]	-46.
Brasil	[Bahia]	[Abaíra]	-41.
Brasil	[Bahia]	[Abaíra]	-41.
Brasil	[Bahia]	[Abaíra]	-41.
Brasil	[Bahia]	[Barra da Estiva]	-41.
Brasil	[Bahia]	[Barra da Estiva]	-41.
Brasil	[Bahia]	[Barra da Estiva]	-41.
Brasil	[Bahia]	[Barra da Estiva]	-41.
Brasil	[Bahia]	[Barrolândia]	-39.
Brasil	[Bahia]	[Caetitê]	-42.

speciesLink

dataCleaning - ESA

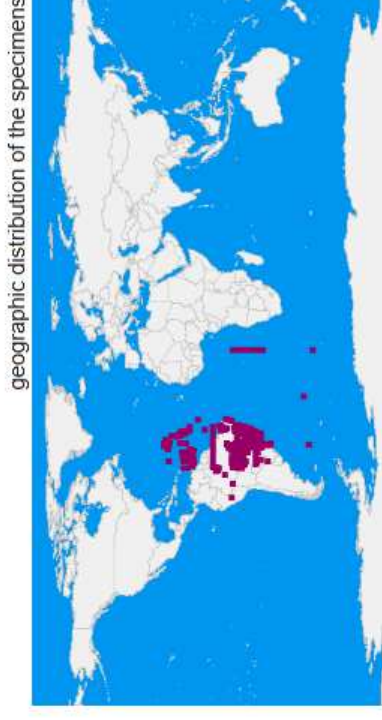


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collection: **ESA**

Georeferencing records based on IBGE (Instituto Brasileiro de Geografia e Estatística)

Obs: if this coordinate is used

country	state/province
---------	----------------

Brasil	Ad
Brasil	Aq
Brasil	Ar
Brasil	Ba
Brasil	An
Brasil	Ca
Brasil	Co
Brasil	Ig
Brasil	It
Brasil	It
Brasil	Jal
Brasil	Pa
Brasil	Pi
Brasil	Pi
Brasil	Po
Brasil	Ra

595





Brasil	Sa
--------	----

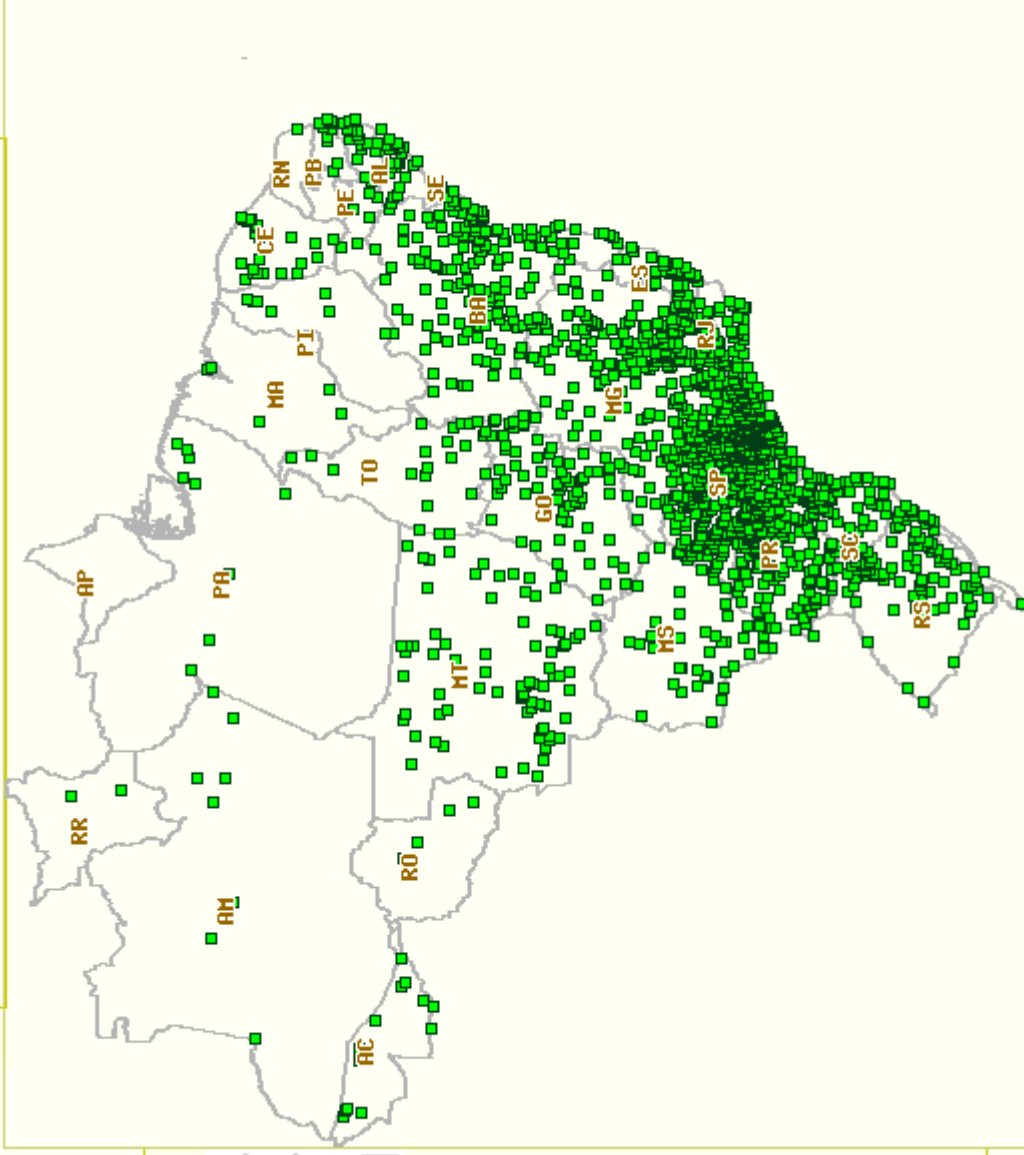
Brasil

speciesLink

dataCleaning - ESA




















en       





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-41.43 -44.14 41 41 443 00 54007 10000
00° 24"

records	map
1 see	
1 see	
1 see	
4 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	
1 see	

Content

- Network Architecture 
- Tools 
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networkManager is a tool used to manage the collections of network. In order to obtain more information on each collection, please click on the acronym. It is possible to "filter" the data by typing in keywords such as "plants" or "Ribeirão Preto" in order to view only information about plant collections or about collections locate in the Ribeirão Preto city. See the network [indicators](#).

filter

[Click here to also see collections that are off-line](#)

acronym *	county	state	network	software	records **	on-line	%	georef ***	%	auto georef ****	update
AcanESALQ	Piracicaba	São Paulo	BiotaSP	Biota 2.04	17.606	17.606	100%	2.395	14%	7.802	09/08/2010
ALCB	Salvador	Bahia	INCT Virtual Herbarium	Brahms6.04	99.132	71.400	72%	59.834	84%	372	26/07/2011
Aranhas Solobioima	Curitiba	Paraná	TaxonLine	MS-Excel	47	47	100%	0	0%	44	08/07/2008
ASE	São Cristóvão	Sergipe	Northeast Herbarium INCT Virtual Herbarium	Brahms6.8	19.609	19.609	100%	2.292	12%	15.786	09/09/2011
RAH	Salvador	Bahia	Northeast Herbarium	MS-Excel	18.000	3.630	20%	299	6%	2.734	21/07/2011
ZUEC AMP	Campinas	São Paulo	BiotaSP	MS-Excel	18.072	18.072	100%	11.997	66%	3.396	16/09/2011
ZUEC ARA	Campinas	São Paulo	BiotaSP	MS-Access	2.000	1.179	59%	930	79%	0	15/09/2011
ZUEC AST	Campinas	São Paulo	BiotaSP	MS-Access	100	44	44%	32	73%	11	16/05/2011
ZUEC AVE	Campinas	São Paulo	BiotaSP	MS-Access	2.279	2.279	100%	1.603	70%	5	26/05/2011
ZUEC BIV	Campinas	São Paulo	BiotaSP	MS-Access	27.000	3.205	12%	1.672	52%	866	15/09/2011
ZUEC COL	Campinas	São Paulo	BiotaSP	MS-Access	5.000	1.086	22%	1.076	99%	3	07/10/2010
ZUEC CRU	Campinas	São Paulo	BiotaSP	MS-Access	200	84	42%	2	2%	45	26/08/2011
ZUEC DIP	Campinas	São Paulo	BiotaSP	MS-Access	500	43	9%	0	0%	37	07/10/2010
ZUEC ECH	Campinas	São Paulo	BiotaSP	MS-Access	100	17	17%	10	59%	5	18/08/2011
ZUEC EPH	Campinas	São Paulo	BiotaSP	MS-Access	100	35	35%	0	0%	34	07/10/2010
ZUEC GAS	Campinas	São Paulo	BiotaSP	MS-Access	950	620	65%	471	76%	18	15/09/2011
ZUEC LEP	Campinas	São Paulo	BiotaSP	MS-Access	20.000	5.666	28%	2.239	40%	3.343	18/08/2011
ZUEC MAM	Campinas	São Paulo	BiotaSP	MS-Access	2.471	2.471	100%	2.129	86%	12	08/06/2011
ZUEC NEU	Campinas	São Paulo	BiotaSP	MS-Access	100	10	10%	0	0%	9	07/10/2010
ZUEC OPH	Campinas	São Paulo	BiotaSP	MS-Access	32.000	1.863	6%	1.552	83%	276	15/09/2011
ZUEC PIS	Campinas	São Paulo	BiotaSP	MS-Access	6.439	6.439	100%	5.747	89%	191	06/09/2011
ZUEC POL	Campinas	São Paulo	BiotaSP	MS-Access	60.000	9.009	15%	5.406	60%	773	08/04/2011
ZUEC REP	Campinas	São Paulo	BiotaSP	MS-Access	3.582	3.582	100%	2.766	77%	322	16/09/2011
225 collections					10.975.277	4.667.488	43%	1.842.993	39%	1.613.668	

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Click here to also see collections that are off-line

acronym*	county	state	network	software	records	on-line	georef	auto georef	update
					%	%	%	%	date
Aranhas Solobioma	Curitiba	Paraná	TaxonLine	MS-Excel	47	100%	0	44	08/07/2008
NUP	Maringá	Paraná	TaxonLine	MS-Excel	11.101	100%	9.086	1.974	20/12/2010
PEUFR	Recife	Pernambuco	INCT Virtual Herbarium Northeast Herbarium	MS-Excel	50.623	26%	3.142	8.514	09/09/2011
R	Rio de Janeiro	Rio de Janeiro	Fluminense INCT Virtual Herbarium	MS-Excel	550.000	2%	53	6.673	20/09/2011
R Tipos	Rio de Janeiro	Rio de Janeiro	Fluminense INCT Virtual Herbarium	MS-Excel	6.000	74%	42	1.275	20/09/2011
SPF Algae	São Paulo	São Paulo	INCT Virtual Herbarium BiotaSP	MS-Excel	22.828	97%	0	5.570	05/06/2008
SPFw	São Paulo	São Paulo	BiotaSP INCT Virtual Herbarium	MS-Excel	4.000	79%	1.481	699	19/08/2011
TEPB	Teresina	Piauí	Northeast Herbarium INCT Virtual Herbarium	MS-Excel	23.130	47%	1.699	7.650	16/06/2011
UBTU	Botucatu	São Paulo	BiotaSP	MS-Excel	3.500	99%	1.439	1.603	11/11/2010
UFACPZ	Rio Branco	Acre	INCT Virtual Herbarium PPBio-INPA	MS-Excel	18.378	20%	6	0	23/08/2011
UFES Bentologia	Vitória	Espírito Santo	Capixaba	MS-Excel	300	0%	0	0	01/08/2007
UFES CTA	Vitória	Espírito Santo	Capixaba	MS-Excel	3.100	63%	1.830	119	10/06/2011
UFES MAM	Vitória	Espírito Santo	Capixaba	MS-Excel	2.063	100%	1.991	60	16/09/2011
ZEE AMPH	Rio Branco	Acre	Acre	MS-Excel	1.340	100%	1.333	7	08/03/2010
ZEE AVI	Rio Branco	Acre	Acre	MS-Excel	3.561	100%	3.274	110	08/03/2010
ZEE HERP	Rio Branco	Acre	Acre	MS-Excel	343	100%	0	35	08/03/2010
ZEE ICTIO	Rio Branco	Acre	Acre	MS-Excel	868	100%	0	179	08/03/2010
ZEE MAM	Rio Branco	Acre	Acre	MS-Excel	2.587	100%	1.548	141	08/03/2010
ZUEC AMP	Campinas	São Paulo	BiotaSP	MS-Excel	18.072	100%	11.997	3.396	16/09/2011
82 collections					6.560.318	9%	206.513	182.975	

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Click here to also see collections that are off-line

Universidade Federal do Paraná filter

acronym *	county	state	network	software	records	on-line	%	georef	%	auto georef	update
Aranhas Solobioma	Curitiba	Paraná	TaxonLine	MS-Excel	47	47	100%	0	0%	44	08/07/2008
DZUP Ascidiacea	Curitiba	Paraná	TaxonLine	MS-Excel	600	410	68%	338	82%	14	03/07/2008
DZUP Cnidaria	Curitiba	Paraná	TaxonLine	MS-Excel	1.000	0	0%	0	0%	0	03/07/2008
DZUP Coleoptera	Curitiba	Paraná	TaxonLine	BonaBio (MS-Access)	700.000	82.365	12%	54.602	66%	11.444	25/11/2010
DZUP Dermaptera	Curitiba	Paraná	TaxonLine	BonaBio (MS-Access)	1.389	430	31%	425	99%	0	30/03/2010
DZUP Diptera	Curitiba	Paraná	TaxonLine	BonaBio (MS-Access)	1.500.000	28.647	2%	13.722	48%	8.229	09/11/2010
DZUP Hymenoptera	Curitiba	Paraná	Pollinators TaxonLine	MS-Access	500.000	16.405	3%	14.633	89%	469	24/08/2011
DZUP Lepidoptera	Curitiba	Paraná	Pollinators TaxonLine	BonaBio (MS-Access)	268.005	5.286	2%	2.220	42%	2.088	31/03/2011
DZUP Mammalia	Curitiba	Paraná	TaxonLine	BonaBio (MS-Access)	534	534	100%	482	90%	0	08/07/2008
DZUP Trichoptera	Curitiba	Paraná	TaxonLine	BonaBio (MS-Access)	151.154	4.276	3%	4.276	100%	0	08/07/2008
U PCB	Curitiba	Paraná	INCT Virtual Herbarium TaxonLine	Brahms5	71.151	71.151	100%	14.274	20%	48.446	23/05/2011
11 collections					3.193.880	209.551	7%	104.972	50%	70.734	

Date of last update: 21/09/2011 06:32

* Collections in **red** were off-line when the Network Manager was last updated due to temporary problems with the cache node (provider) and those in **orange** are in the process of being connected to the network.

** When the value of the records column is **blue**, the number of on-line records is larger than the number of total records informed by the collection.

*** The number of georeferenced records is provided by each Mirror. Collections with dynamic connections (those that don't use splinker) have this number provided by the dataCleaning (DC) tool. We would like to remind users that DC is generated once a day, so there may be a delay in updating the information.

**** Auto georef are records from Brazil with data on State and Municipality that have been automatically georeferenced.

***** Update refers to the date of the record that was last updated (collections with providers) or, when this information is not available, it is the date the data was sent to the provider (collections that use splinker). Dates in **green** refer to updates in the last 6 months; dates in **yellow** more than 6 months ago and less than 12 and **red**, more than 12 months.

networkManager is a tool used to manage the collections of network. In order to obtain more information on each collection, please click on the acronym. It is possible to "filter" the data by typing in keywords such as "plants" or "Ribeirão Preto" in order to view only information about plant collections or about collections locate in the Ribeirão Preto city. See the network indicators.

Click here to also see collections that are off-line

filter

acronym*	county	state	network	software	records**	on-line	%	georef***	%	auto georef****	update*****
CGMS	Campo Grande	Mato Grosso do Sul	INCT Virtual Herbarium	MS-Excel	32.500	26.064	80%	14.487	56%	10.819	09/09/2011
CM	Nova Xavantina	Mato Grosso		MS-Excel	568	568	100%	172	30%	357	04/08/2011
UFMT CAP	Cuiabá	Mato Grosso		speciesBase	1.035	0	0%	0	0%	0	---
3					34.103	26.632	78%	14.659	55%	11.176	

collections

Date of last update: 21/09/2011 06:32

* Collections in **red** were off-line when the Network Manager was last updated due to temporary problems with the cache node (provider) and those in **orange** are in the process of being connected to the network.

** When the value of the records column is **blue**, the number of on-line records is larger than the number of total records informed by the collection.

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dataCleaning

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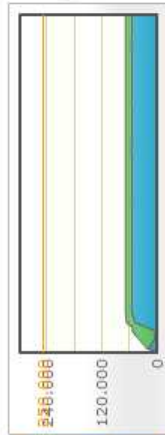
filter

Click here to only see collections that are online

acronym *	county	state	network	software	records	on-line	%	georef	%	auto georef	update
JBRJ RB	Rio de Janeiro	Rio de Janeiro	INCT Virtual Herbarium Fluminense	Jabot	550.000	454.193	83%	102.680	23%	195.348	20/09/2011
NYBG BR	Bronx	NY	INCT Virtual Herbarium International	MS-Access	289.986	289.986	100%	164.167	57%	36.976	22/12/2010
INPA Herbario	Manaus	Amazonas	INCT Virtual Herbarium PPBio-INPA	Brahms6.91	235.335	235.335	100%	77.240	33%	74.177	09/09/2011
MBM	Curitiba	Paraná	INCT Virtual Herbarium TaxonLine	Brahms6	320.000	234.588	73%	0	0%	162.007	08/12/2010
HFSL	Porto Velho	Rondônia	INCT Virtual Herbarium	Brahms	5.664	0	0%	0	0%	0	---
HAS	Porto Alegre	Rio Grande do Sul	INCT Virtual Herbarium	Specify 4.6	111.500	0	0%	0	0%	0	---
Fiocruz CTIOC	Rio de Janeiro	Rio de Janeiro	Fluminense	MS-Excel	24.000	0	0%	0	0%	0	---
Fiocruz COLPROT	Rio de Janeiro	Rio de Janeiro	SICol	MS-Excel	0	0	0%	0	0%	0	---
Fiocruz CMIOC	Rio de Janeiro	Rio de Janeiro	Fluminense	Inventare	6.104	0	0%	0	0%	0	---
Fiocruz CLEP	Rio de Janeiro	Rio de Janeiro	SICol	MS-Excel	237	0	0%	0	0%	0	22/08/2011
Fiocruz CEIOC	Rio de Janeiro	Rio de Janeiro	Fluminense	MS-Excel	5.000.000	0	0%	0	0%	0	---
Fiocruz CCULI	Rio de Janeiro	Rio de Janeiro	Fluminense	MS-Excel	2.050	0	0%	0	0%	0	---
Fiocruz CCER	Rio de Janeiro	Rio de Janeiro	Fluminense	MS-Excel	703	0	0%	0	0%	0	---
Fiocruz CBMA	Rio de Janeiro	Rio de Janeiro	SICol	SICol (MySQL)	152	0	0%	0	0%	0	---
FAUNA GO	Anápolis	Goiás	MS-Excel	MS-Excel	0	0	0%	0	0%	0	---
DZUP Cnidaria	Curitiba	Paraná	TaxonLine	MS-Excel	1.000	0	0%	0	0%	0	03/07/2008
CESJ	Juiz de Fora	Minas Gerais	Minas Gerais	Brahms6.6	56.000	0	0%	0	0%	0	---
247 collections					16.258.059	4.668.211	29%	1.842.993	39%	1.613.668	

Content

- Network Architecture 
- Tools
 - Data cleaning 
 - Manager 
 - Collection profile
 - Indicators
 - Search & retrieval
 - Image server
 - Ecological niche modeling



more information

description

records [search] [dataCleaning]

total: 250000

on-line: 69912

georeferenced: 55713

last update: 17/09/2011

on-line since: 25/03/2004

software: MS-Access

summary

Coleção Camargo, located in the Biology Department of FFCLRP/USP, was initiated in 1965. Since then it has become an important reference in the study of the Neotropical bee fauna. Various expeditions to the Amazon and other areas of the Neotropical Region were crucial for the growth of this collection, as well as exchange of material with various museums in Brazil and other countries. Currently, this collection is estimated to comprise about 250,000 specimens of bees in general, mounted on pins or in preserved in fixative solution (therein included larvae, juveniles, males, workers, and queens of social species). Of those, more than 150,000 are Neotropical Meliponini (stingless bees) and this is the only collection worldwide to comprise a large number of works built by bees (pieces of nests) obtained from about 1000 nests studied in detail and photographic records of bionomic aspects of bees (approximately 5,500 slides). Coleção Camargo includes more than 1000 type specimens, among which 81 are primary types.

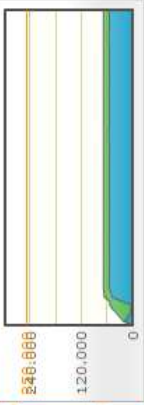
data use restrictions

Information about specimens housed in Coleção Camargo (RPSP) are made available for access provided that the following terms and conditions are observed: explicit reference to information from Coleção Camargo obtained from this website shall be made in the 'Acknowledgements', the source of the data ought to be clearly indicated, and the curator in charge of the collection must be notified; all data, even if partial shall never be re-distributed without explicit written authorization from curator in charge. Reprints of any publication resulting from usage of information herein distributed shall be sent to RPSP. Researchers and their institutions are responsible for the proper usage of information. Coleção Camargo (RPSP) bears no responsibility on the accuracy of specimens and accompanying data.

how to cite

Coleção Camargo (RPSP)

holding description



more information
 profile

profile
 states (Brazil)

- records
- families
- databasing
- collectors
- collect dates
- countries
- states (Brazil)**
- type status
- brazilian regions

records per brazilian states ratio

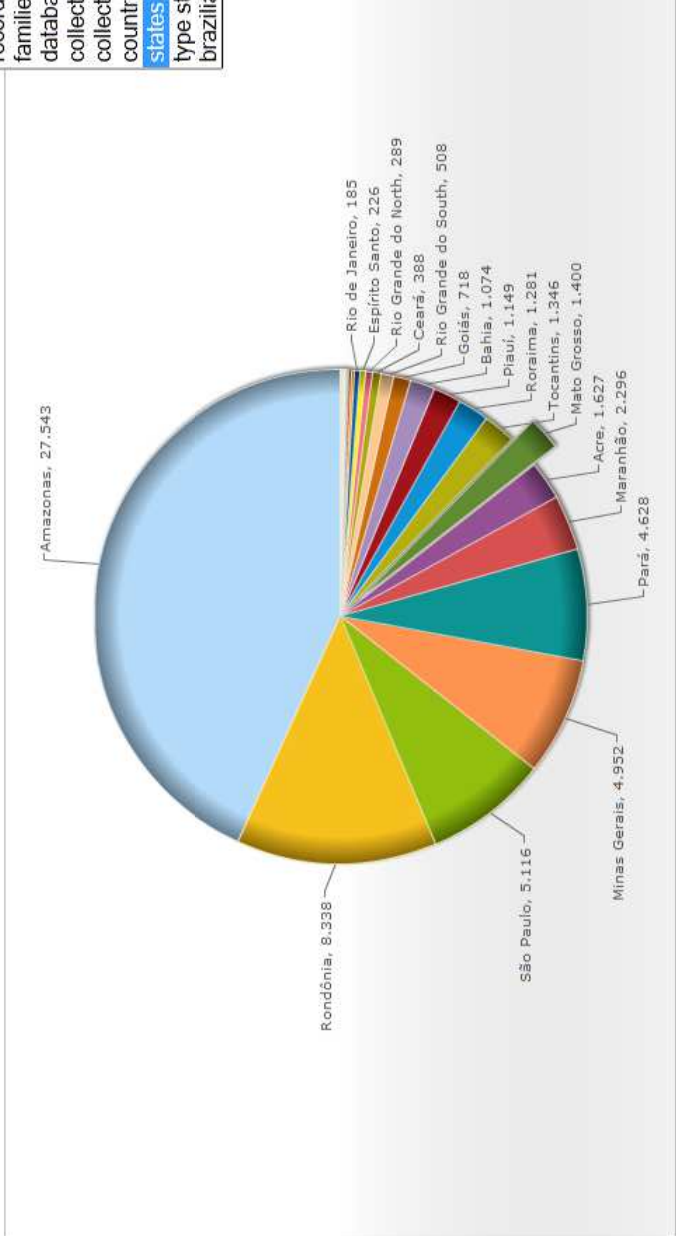



Chart with the percentage of records for each Brazilian State. As holdings are digitized and made available in the network, this indicator will show the percentage of records per state, possibly showing geographic information gaps.

Updated on 18/09/2011 18:04

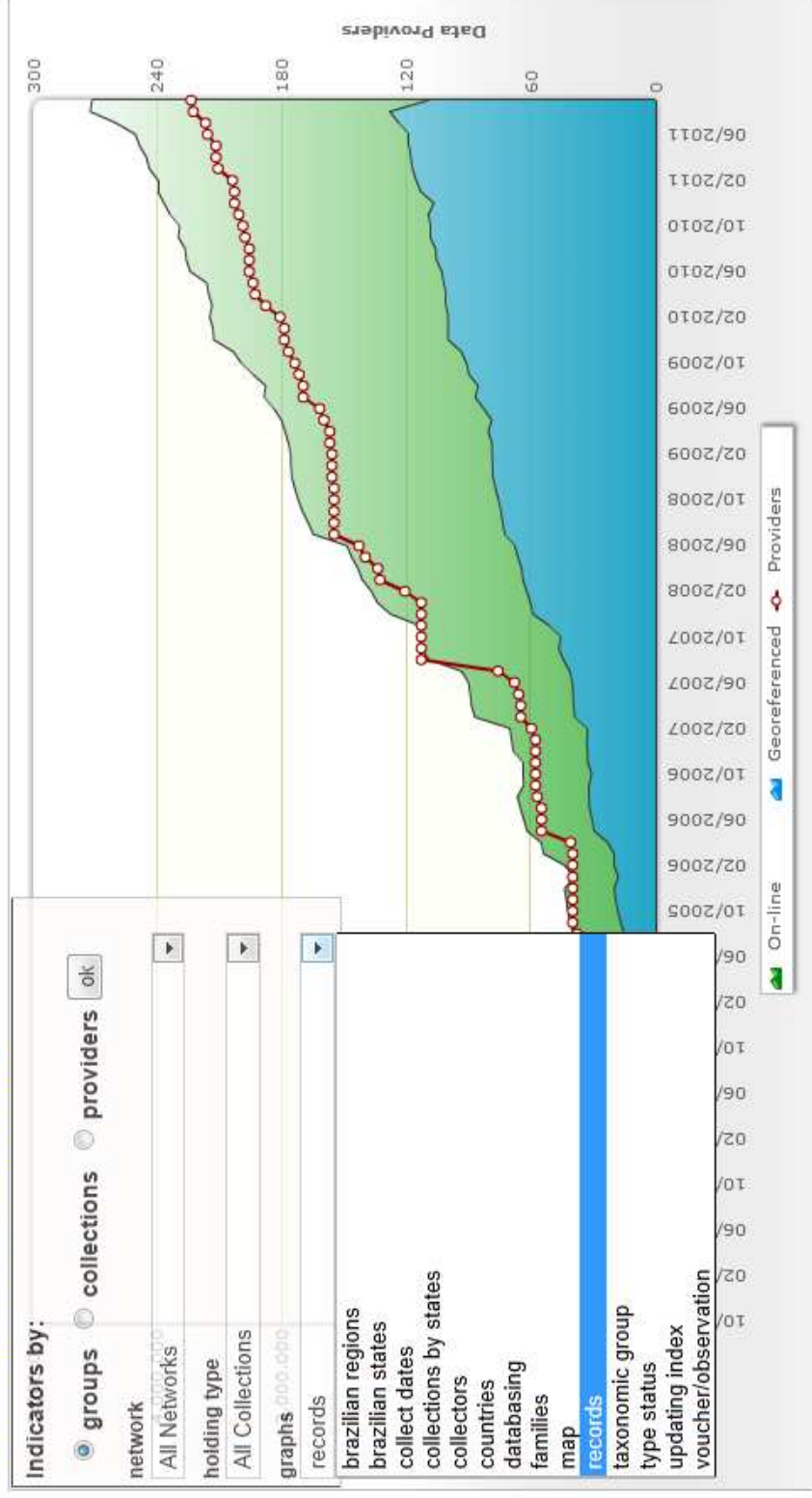
Content

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All indicators presented are based on on-line data only. They are dynamic or daily reports presented as charts or graphs. The indicator reflects only the analysis of data that is available on-line so therefore may not reflect the reality of each collection, especially those with a low percentage of digitized data. [Click here to view the table data contribution x dependency per state.](#)

[See other options for indicators here](#)

All Networks - All Collections - records



This graph reflects the movement of data (entry and removal) in the network. Monthly averages are presented for both total on-line records and total georeferenced records. The red line shows the number of data providers per month.

[See other options for indicators here](#) ↴

International Network - Plants and Fungi (dried specimens) - Brazilian states

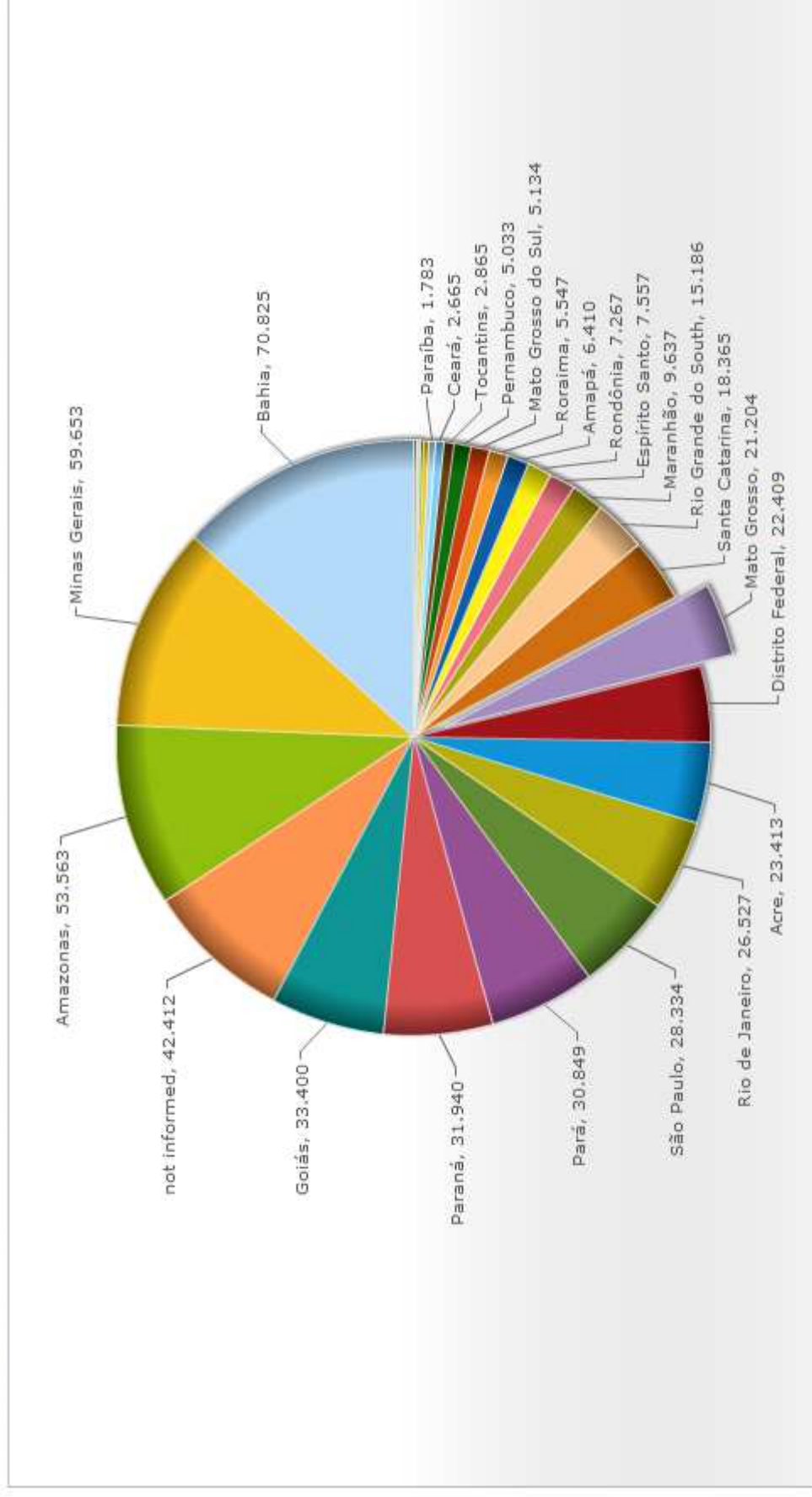


Chart with the percentage of records for each Brazilian State. As holdings are digitized and made available in the network, this indicator will show the number of records per state, possibly showing geographic information gaps.



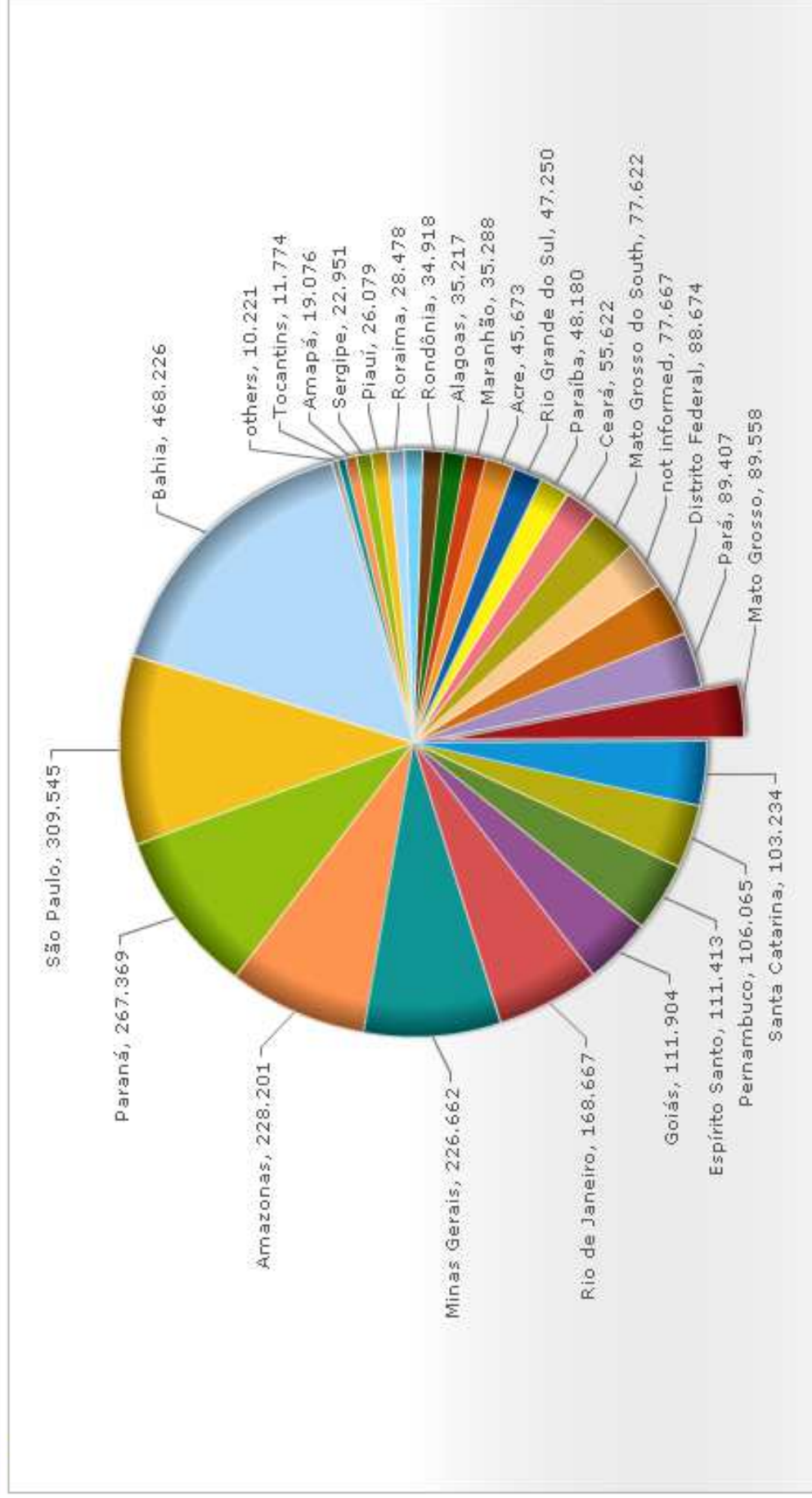
Updated on 20/09/11 04:15

Source: MNHN_P_PC_BR, MOBOT_BR, NMNH-Botany_BR, NYBG_BR

See other options for indicators here

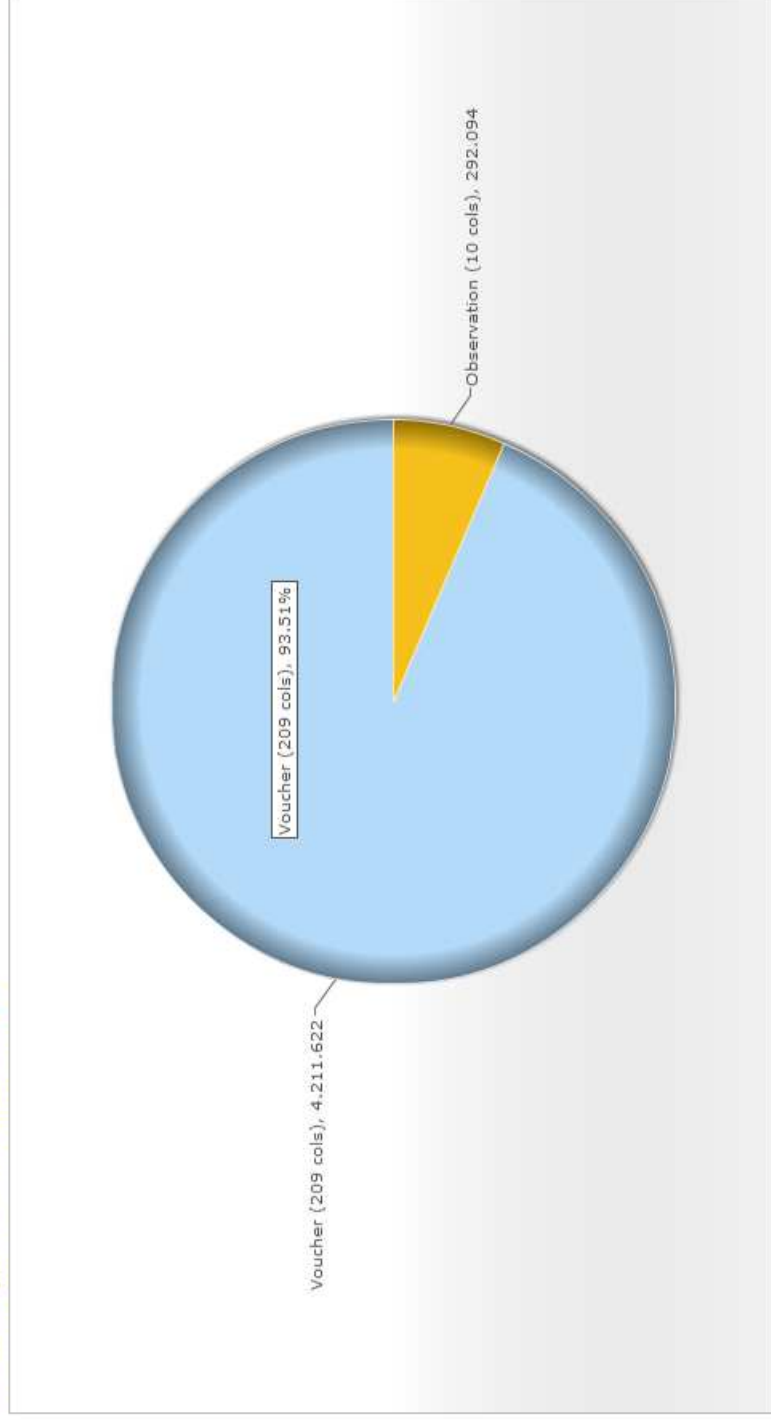


Brazilian Networks - Plants and Fungi (dried specimens) - Brazilian states



See other options for indicators here

All Networks - All Collections - voucher/observation

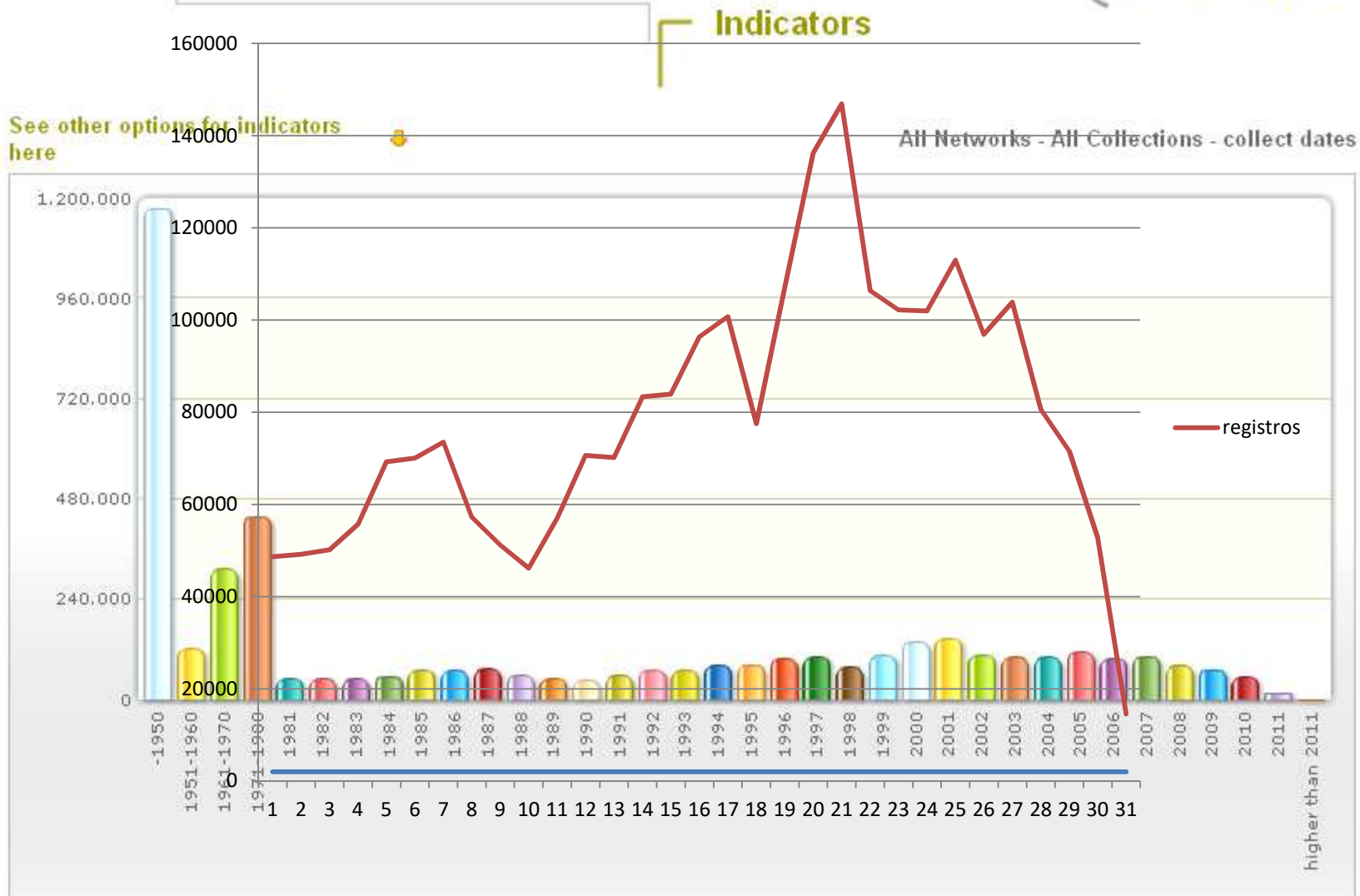


This chart shows the number of records per type of data, associated to an observation or voucher and the number of collections serving each type of data.

Updated on 20/09/11 04:05

Source: ALCB, ASE, AcariESALQ, Aranhas-Solobioma, BAH, BCTw, BGB, BOTU, BOTw, BR, CBMAI, CE-UFPE, CECG, CEMeC, CEPANN, CEPEC, CFAF, CFBH, CG, CGMS, CIUFES, CM, CPMA, CRAR, CRHRO, CRMRO, CSUEL, DSEC, DZSJRP-Acari, DZSJRP-Amphibia-adults, DZSJRP-Amphibia-tadpoles, DZSJRP-Chiroptera, DZSJRP-Pisces, DZUP-Ascidiacea, DZUP-Coleoptera, DZUP-Dermoptera, DZUP-Diptera, DZUP-Hymenoptera, DZUP-Lepidoptera, DZUP-Mammalia, DZUP-Trichoptera, EAC, EAN, ESA, FLOR, FNJV, FPR-Colombia, FUEL, FURB, Fiocruz-CBAM, Fiocruz-CCBS, Fiocruz-CCFF, Fiocruz-CCGB, Fiocruz-CFAM, Fiocruz-CLIOC, Fiocruz-CMM, Fiocruz-CMT, Fiocruz-COEIFER, Fiocruz-COITDYP, Fiocruz-COINIVEC, Fiocruz-COSING, HCF HFSI, Fimmae HISA, HPCR



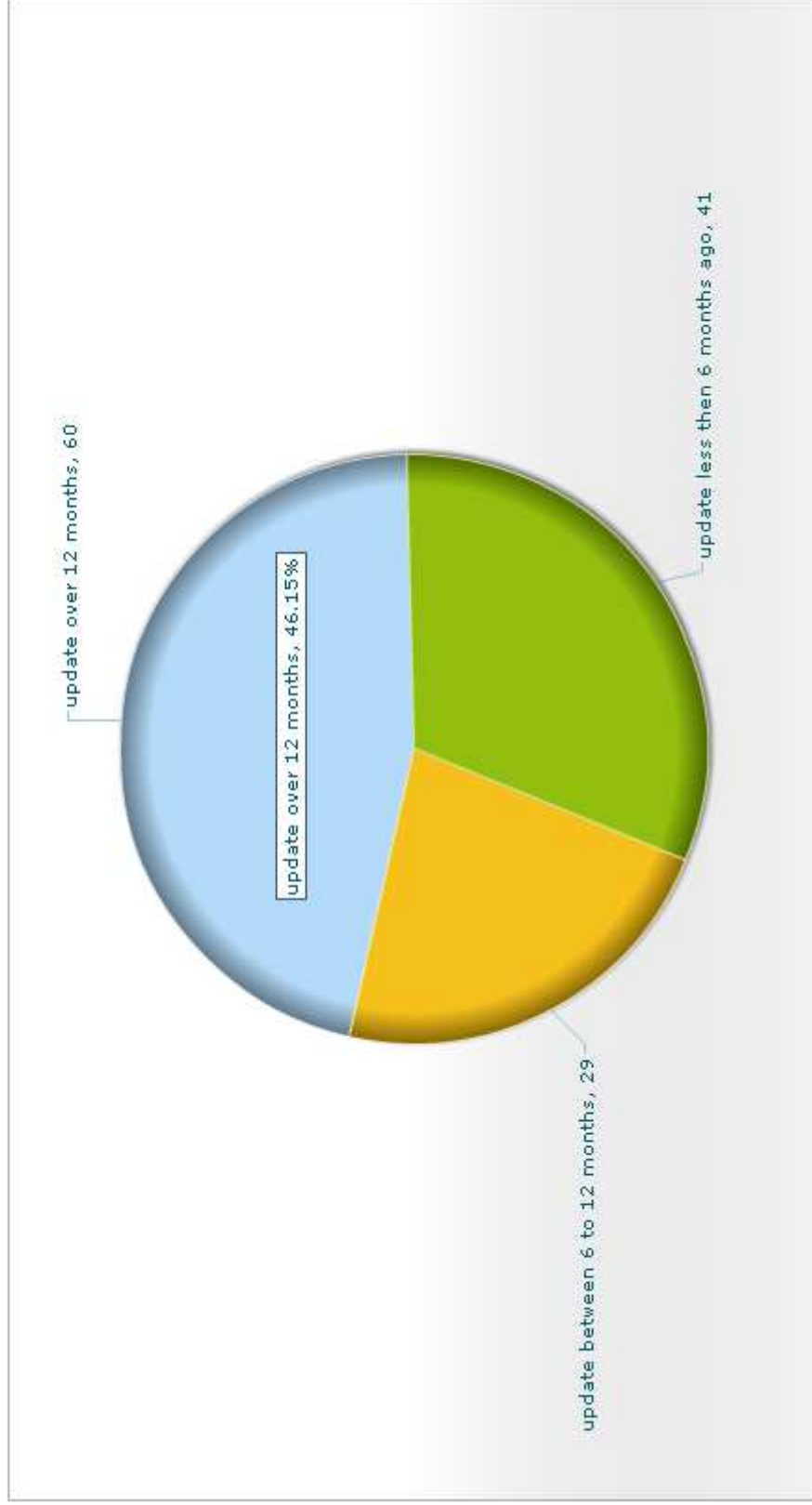


Graph with the number of records per year collected. Older records were grouped as follows: before 1950; 1951-1960; 1961-1970; 1971-1980; and annually as of 1981. When most holdings have been digitized, this indicator may show the impact of certain research programs, the impacts of laws that restrict collecting activities, etc.



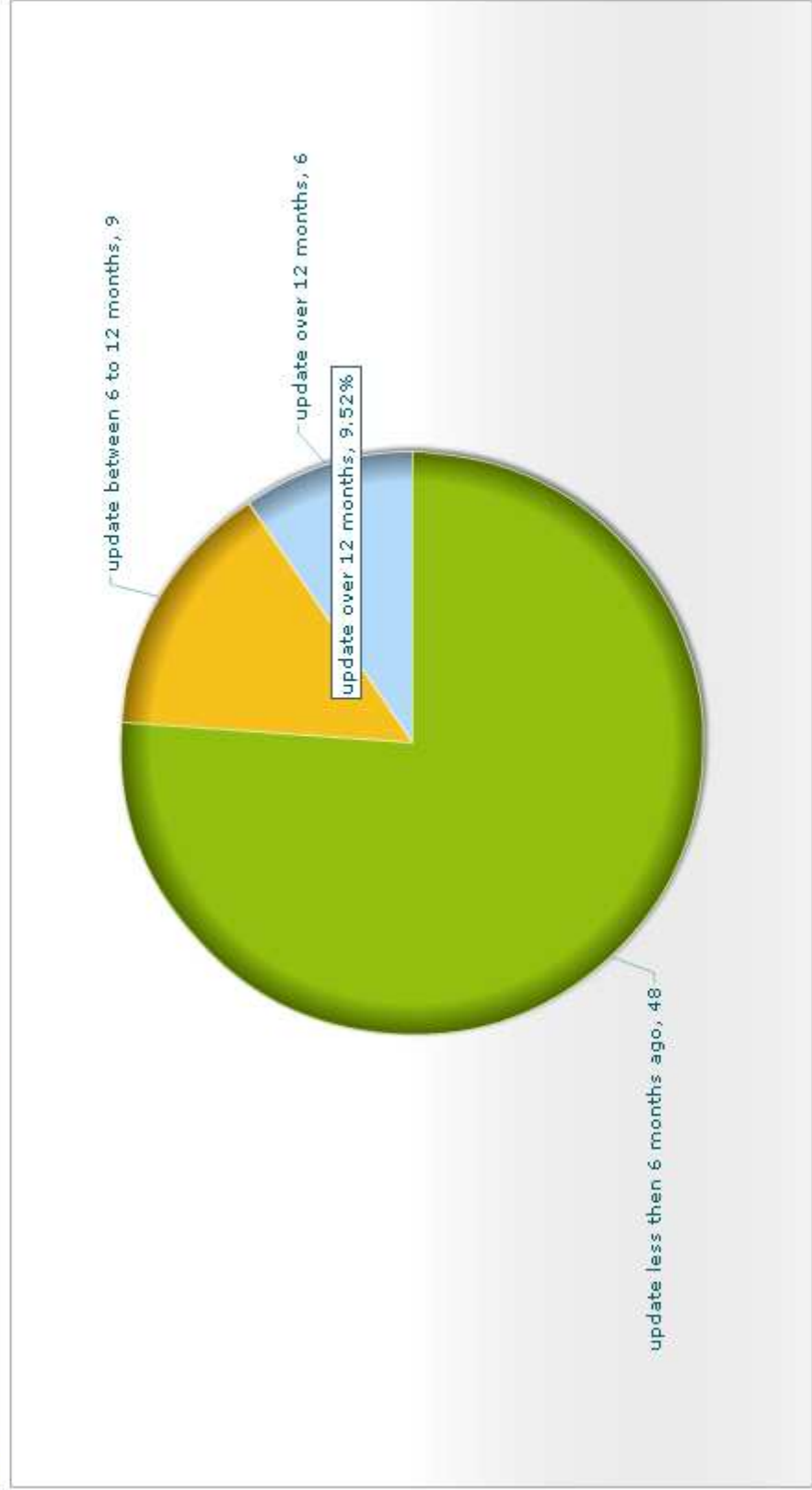
See other options for indicators  here

All Networks - Animals - updating index



See other options for indicators  here

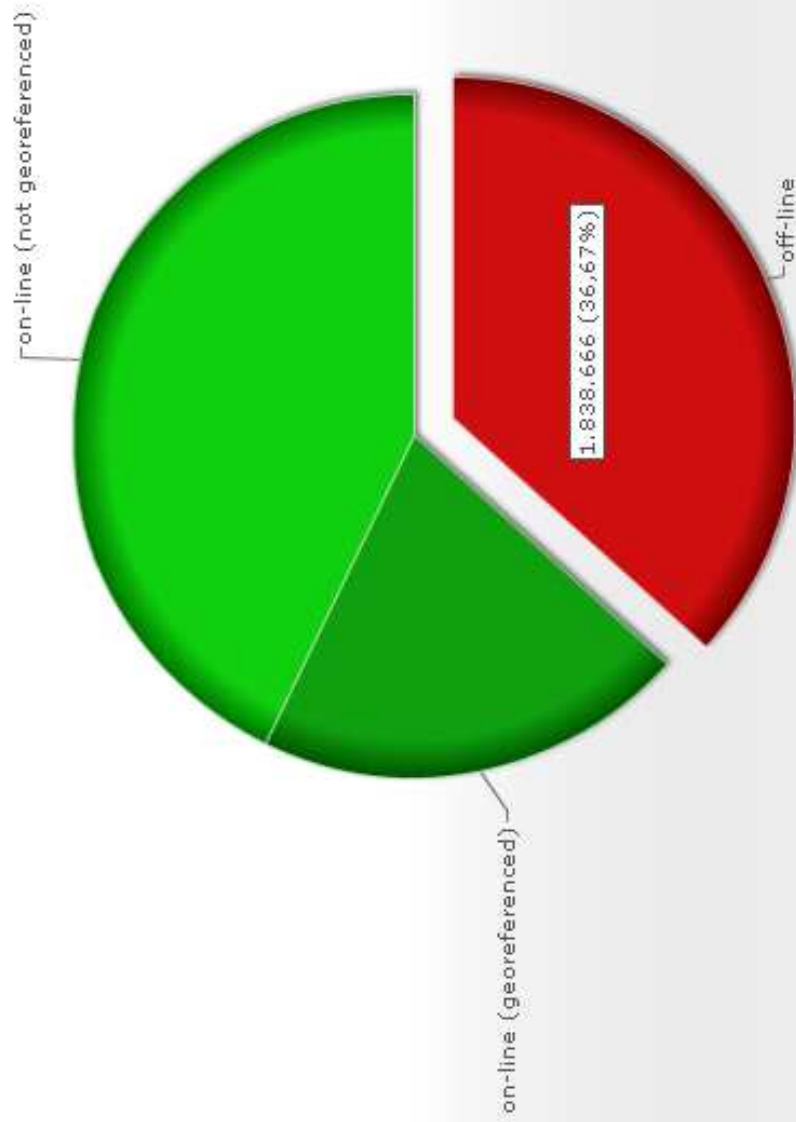
National Network - All Collections - updating index



See other options for indicators [here](#)



INCT Virtual Herbarium Network - All Collections - databasing



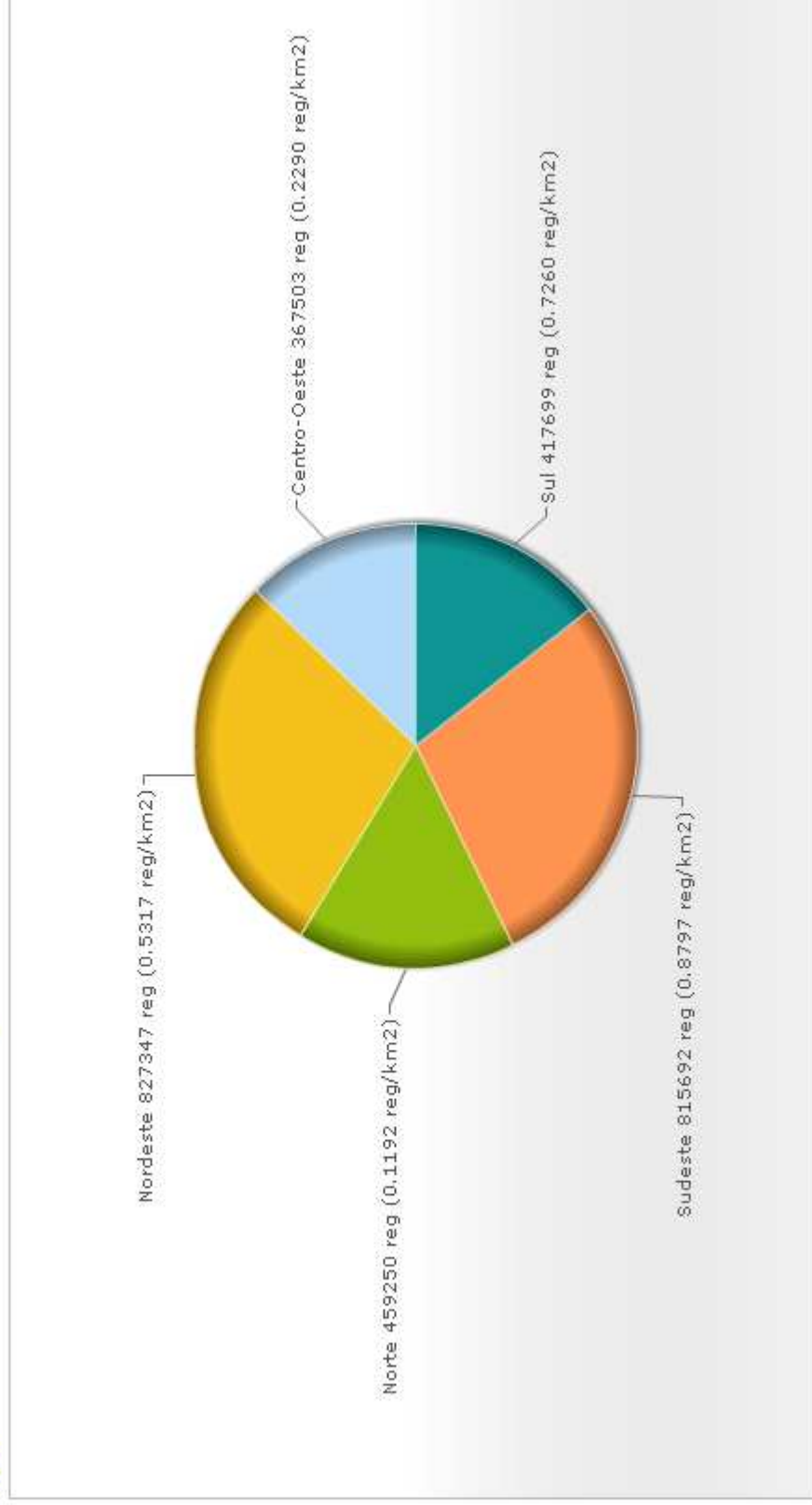
dados e ferramentas

Indicadores

Veja outras opções de indicadores aqui



todas as redes - Plantas e Fungos Herborizados - regiões brasileiras



O indicador "regiões brasileiras" mostra o número de registros por região geográfica do Brasil, para todos os registros da rede ou para determinada rede, grupo taxonômico ou coleção. O indicador também apresenta o número de registros por km2 por região. A idéia é comparar o nível de conhecimento das regiões e oferecer mais um elemento de análise para auxiliar pesquisadores e tomadores de decisão na definição das regiões prioritárias para coletas.



Table Data Contribution x Dependency per State.




UF [nCo]	AC	AL	AM	AP	BA	CE	DF	ES	GO	MA	MG	MS	MT	PA	PB	PE	PI	PR	RJ	RN	RO	RR	RS	SC	SE	SP	TO	Total	Cont(%)	
AC [7]	11723	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11724	0.30%	
AL [1]	0	19522	38	20	1015	138	58	30	65	38	71	8	57	335	163	892	114	29	51	723	6	15	12	22	626	371	67	24486	0.62%	
AM [35]	11979	50	167209	1779	2247	311	1130	453	1498	1447	1502	308	13051	26891	167	647	198	1872	1030	45	14737	18413	893	139	6	866	667	269595	6.81%	
AP [0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
BA [7]	122	2378	693	121	298653	5841	3055	5286	5221	1248	12327	1096	2310	1289	1385	6600	4229	5850	3563	1447	177	170	1337	990	1717	6862	1111	375078	9.48%	
CE [1]	5	421	40	58	2080	31387	446	32	443	1780	228	158	155	652	729	959	3272	158	97	1171	28	43	298	21	27	168	55	44911	1.14%	
DF [4]	62	86	575	120	4869	78	39538	155	24562	822	9961	2471	9978	506	55	269	826	1959	306	56	87	137	98	89	89	3123	2365	103242	2.61%	
ES [17]	259	144	1195	59	7106	53	204	128573	1013	402	4057	178	618	305	73	211	105	850	2514	354	124	9	1625	273	194	7858	242	158598	4.01%	
GO [2]	1	0	20	3	98	15	344	2	7043	43	126	35	104	47	0	8	6	71	33	2	13	9	62	29	0	110	622	8846	0.22%	
MA [0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
MG [5]	358	43	818	238	289	380	18	513	500	192	12118	180	568	742	25	190	247	276	943	65	455	157	1090	400	29	407	313	21584	0.54%	
MS [1]	10	0	60	6	164	10	32	30	552	4	464	46058	1390	92	0	20	12	1176	10	6	0	42	686	82	0	532	8	51446	1.30%	
MT [1]	0	0	0	0	0	0	0	0	0	0	0	1	561	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01%	
PA [0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
PB [4]	12	812	354	7	2511	536	250	185	380	61	195	1	285	91	49280	3786	311	100	144	2510	63	6	213	19	303	869	35	63319	1.60%	
PE [10]	388	9360	9552	7144	19616	5859	1354	572	1133	13323	2025	225	1622	2069	7112	94693	4498	885	877	4094	5619	1591	1015	263	9424	2792	665	207770	5.25%	
PI [1]	16	422	21	2	511	285	470	31	433	263	211	41	43	60	12	239	6514	46	9	164	7	7	0	1	18	198	70	10094	0.26%	
PR [33]	840	441	8994	431	22138	677	3094	13018	8732	632	30009	10369	14226	3201	488	1448	211	318681	9779	675	3144	354	14036	25394	240	24253	1455	516980	13.07%	
RJ [13]	5750	1291	24678	2619	37658	4035	10808	22930	19396	2683	58029	4889	12599	19375	2076	6025	2741	14253	124058	848	3081	1557	4902	12041	1386	22856	2428	424992	10.74%	
RN [3]	0	513	6	1	871	2761	256	7	77	424	201	30	26	10	248	1008	593	147	9	18064	8	4	41	6	18	42	12	25383	0.64%	
RO [6]	0	0	1	0	88	0	0	0	16	0	178	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6033	0.15%
RR [1]	58	0	281	0	0	0	0	0	0	0	0	0	1	386	0	1	0	0	0	0	0	2	3782	2	0	0	0	0	4513	0.11%
RS [2]	0	0	0	0	11	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	199	0	26684	0.67%	
SC [2]	17	21	39	59	584	28	110	161	226	20	1163	431	193	115	5	125	5	5048	175	78	7	10	6265	48852	6	662	16	64421	1.63%	
SE [1]	0	469	1	0	892	245	158	2	33	83	185	16	23	11	230	802	114	211	3	215	4	57	6	19	15529	202	36	19546	0.49%	
SP [61]	5656	2895	56179	1801	37843	4117	6908	19600	18607	8804	78136	17969	39630	27685	2944	8528	3949	35886	21997	2521	11118	3059	15993	15102	837	565617	5915	1019296	25.76%	
TO [0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
EX [6]	24158	1259	55596	6410	71020	2716	22410	7677	33402	9637	60001	5279	21502	30877	1883	5081	1264	32054	26879	445	7267	5647	15190	18369	612	28334	2896	497765	12.58%	
Total	61414	40127	326350	20878	510264	59472	90643	199257	123332	41906	271191	89743	118942	114745	66875	131532	29209	419553	192477	33483	51693	34969	90174	122170	31061	666322	18978	3956760	100%	
Dep(%)	81%	51%	49%	100%	41%	47%	56%	35%	94%	100%	96%	49%	100%	100%	26%	28%	78%	24%	36%	46%	89%	89%	71%	60%	50%	15%	100%			

The aim of this table is to show each state's dependency on data from institutions outside of the state. If one reads each row, the chart shows the state's acronym followed by a number which is the number of data providers of that state. The numbers that follow indicate the number of records that the providers of that specific State have of other States. This may indicate the existence of joint research with other states. At the end of the row is the total number of records being provided by institutions of that state and what this represents in terms of percentage of the total network.

Following the numbers by columns, one can see if there are important data providers from other states or from collections abroad "EX" that are repatriating data from Brazil. At the end of the column a dependency rate is shown. A dependency rate of 90% means that 90% of the data from that state is being shared by providers outside of the state.

Updated on 20/09/2011

Content

- Network Architecture 
- Tools
 - Data cleaning 
 - Manager 
 - Collection profile 
 - Indicators 
 - Search & retrieval
 - Image server
 - Ecological niche modeling

Simple search

1 | Collections

Next

Use the options below to select the collections to be searched

Uncheck all

Collection type	
Animals	<input checked="" type="checkbox"/> CE-UFPE - Coleção Entomológica da UFPE
Terrestrial Invertebra	<input checked="" type="checkbox"/> CEMeC - Coleção Entomológica Moure & Costa
Insects	<input checked="" type="checkbox"/> CEPANN - Coleção Entomológica Paulo Nogueira-Neto - IB/USP
Hymenoptera (ants, ...)	<input checked="" type="checkbox"/> DZUP-Hymenoptera - Coleção Entomológica Pe. Jesus Santiago Moure (Hymenoptera)
all	<input checked="" type="checkbox"/> INPA-Formicidae - Coleção de Formigas INPA
	<input checked="" type="checkbox"/> INPA-Hymenoptera - Coleção de Hymenoptera INPA
Collection location	<input checked="" type="checkbox"/> LEBIC - Laboratório de Ecologia e Biogeografia de Insetos da Caatinga
all	<input checked="" type="checkbox"/> MCP - Coleção de Abelhas do Museu de Ciências e Tecnologia da PUCRS
Net	<input checked="" type="checkbox"/> MZUEL-Abelhas - Museu de Zoologia da Universidade Estadual de Londrina - Coleção de Abelhas
all	<input checked="" type="checkbox"/> RPSP - Coleção Camargo - FFCLRP/USP
Data source	
Voucher	

Advanced search

Indicators

dataCleaning

Indicators

data cleaning

networkManager

email

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Fundação de Amparo à Pesquisa do Estado de São Paulo



Simple search 1 | Collections 2 | Filters

| Next

It is necessary to fill out at least one filter to carry out a search

Family	Scientific name	Collector	Catalog number
	Melipona		
Locality	County	State or province	Country

Filters (data subsets) - about

- Type specimen
- Georeferenced at source
- Select "suspect" records
- Automatic georeferencing (municipality level)
- Select "not suspect" records

Advanced search Indicators dataCleaning

Indicators
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Centro de Referência em Informação Ambiental
Fundação de Amparo à Pesquisa do Estado de São Paulo

The records found are presented per collection. Choose the content type, format, and desired output (text, maps, and Google maps).

Collection	Records	At source	Automatic	Content	Format	Output
CE-UFPE	569	563	0	Short	HTML	see
CEMeC	457	0	0	Complete	MS-Excel	see
CEPANN	3750	3162	3	Short	XML	see
DZUP-Hymenoptera	19	19	0	Short	KML	see
INPA-Hymenoptera	786	62	340	Short	HTML	see
LEBIC	1	0	1	Short	HTML	see
MCP	587	302	11	Short	HTML	see
RPSP	11958	9666	489	Short	HTML	see
Total	18127	13774	844	Short	HTML	see

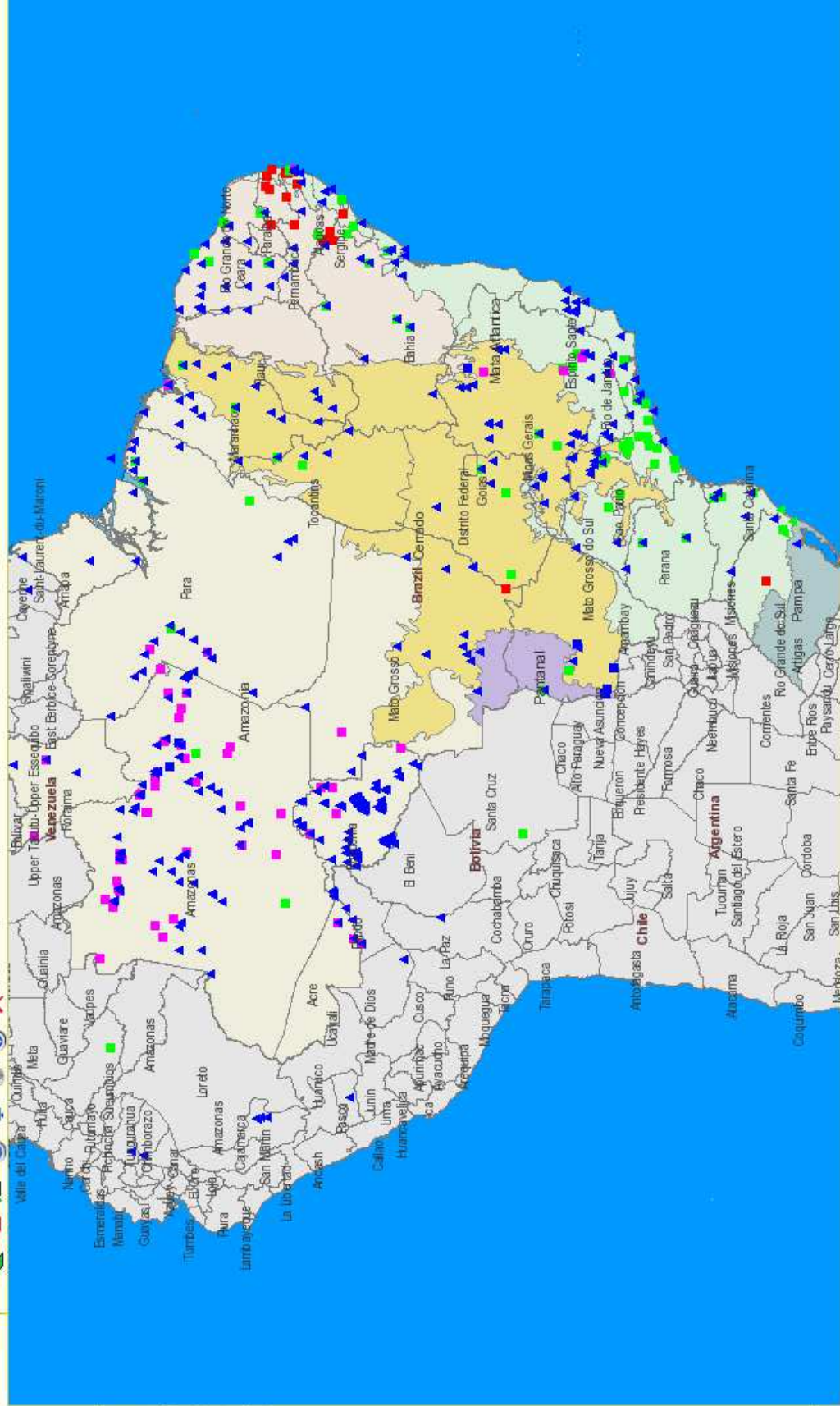
Automatic georeferencing is carried out for records from Brazil that do not have geographic coordinates, but have information on municipality. Records that have geographic coordinates blocked by curators are not georeferenced by the tool, respecting the decision that this is sensitive data. The system adopts the coordinates determined for the municipality by IBGE (Brazilian Institute of Geography and Statistics).

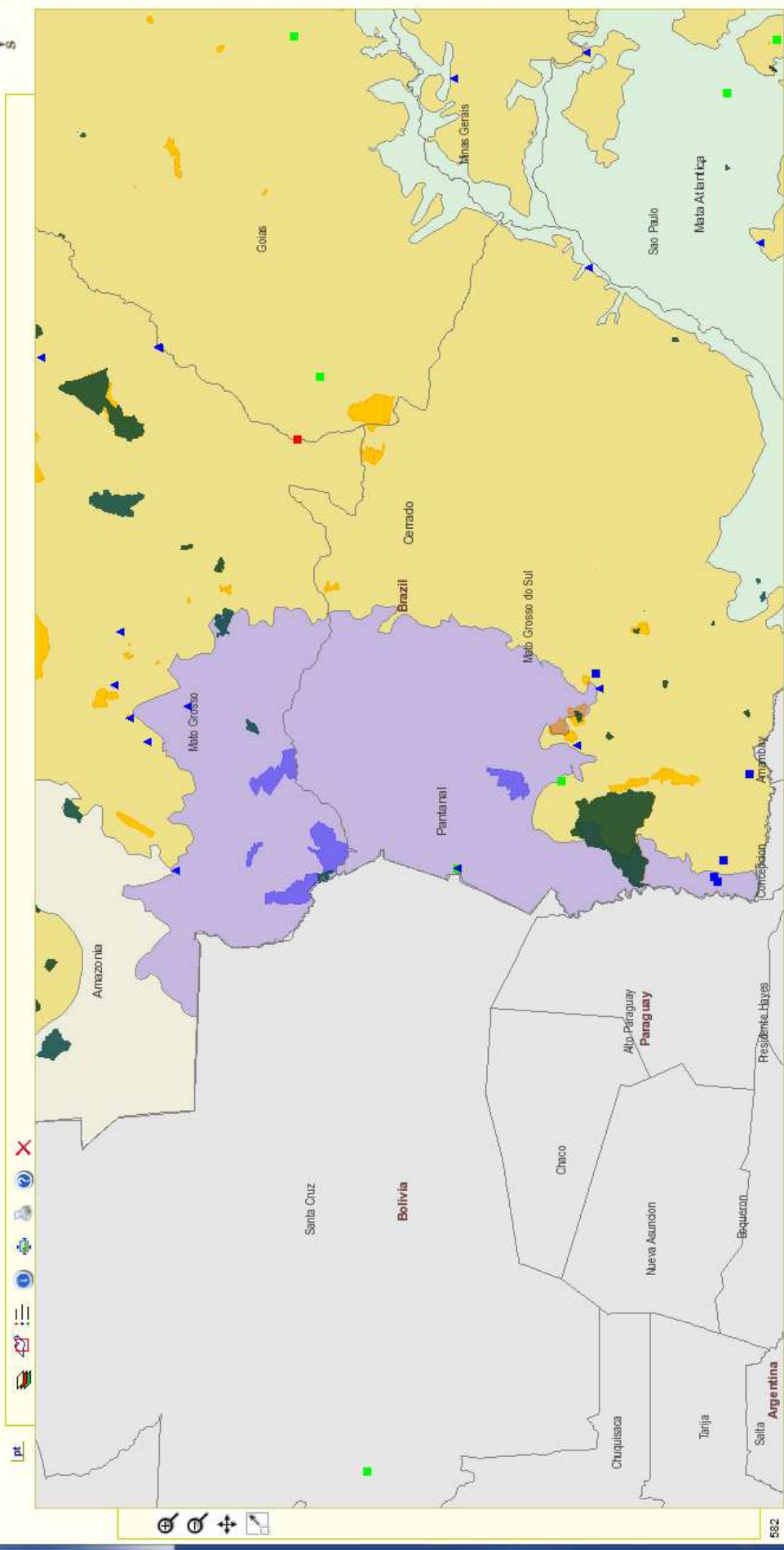
"Suspect" records are those that the geographic coordinate is not consistent with country, state, and/or municipality data according to the IBGE database. They are points that don't fall within the geographic space registered by the collection. The system does not evaluate whether the species is aquatic or terrestrial. Therefore if a record has "Brazil" as the country data and the coordinate falls within Brazil's maritime boundaries, this record is not suspect even if one is considering a terrestrial specie, as there is no geographic inconsistency. At the same time, records that have not updated the municipality data, may have correct coordinates but will be shown as suspect records as, in this case, there is a geographic inconsistency.



CE-UFPE - Coleção Entomológica da UFPE
 Universidade Federal de Pernambuco, UFPE
[How to cite](#) | [Use restrictions](#)

sPLink	scientific name	type status	family	catalog number	year collected	month collected	day collected	collector	continent or ocean	country	state
	Melipona asilvae	-	Apidae	11284	1998	08	08	Petrucio Medeiros	-	Brasil	Paraib.
	Melipona asilvae	-	Apidae	11285	1998	01	25	Clemens Schilindwein	-	Brasil	Pernan
	Melipona asilvae	-	Apidae	13331	2001	01	28	Clemens Schilindwein	-	Brasil	Alagoa
	Melipona asilvae	-	Apidae	13332	2001	12	05	Clemens Schilindwein	-	Brasil	Alagoa
	Melipona asilvae	-	Apidae	13333	2001	12	05	Clemens Schilindwein	-	Brasil	Alagoa
	Melipona asilvae	-	Apidae	13334	2001	12	05	Clemens Schilindwein	-	Brasil	Alagoa
	Melipona asilvae	-	Apidae	13335	2001	12	05	Clemens Schilindwein	-	Brasil	Alagoa
	Melipona asilvae	-	Apidae	17258	2002	05	23	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	17259	2002	07	30	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	24720	1999	04	17	Petrucio Medeiros	-	Brasil	Paraib.
	Melipona asilvae	-	Apidae	25566	2005	07	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25567	2005	07	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25568	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25569	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25570	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25571	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25572	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25573	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25574	2005	09	20	Debora Moura	-	Brasil	Sergipá
	Melipona asilvae	-	Apidae	25575	2005	11	25	Debora Moura	-	Brasil	Sergipá





mapcrista Layers - Mozilla Firefox

http://www.cria.org.br/mapcrista/v4.0/le

- Acre - Assentamentos
- Acre - Vias de Acesso
- Acre - Rios principais
- Acre - Limite municipal
- Acre - Sedes
- All records of the network speciesLink

Maps Mundi Transparent

- Mundi - Countries
- Mapa Mundi Administrativo
- Mundi - GADM

grid

Search Results

- CE-UFPE
- CEPANN
- DZUP-Hymenoptera
- INPA-Hymenoptera
- LEBIC
- MCP
- RPSP
- Registros com georeferenciamento original
- Registros com georeferenciamento automático

mapcrista Map of search v4.0 - Mozilla Firefox

http://www.cria.org.br/mapcrista/viewer:4.0?server=mapcrista3.cria.org.br&proto=tc&port=59500&map=1316537047&ref=1316537048&lang=en&logo=http://www.cria.org.br/logo

speciesLink

pt

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[Advanced search](#) | **1** Collections | [Next](#)

Use the options below to select the collections to be searched

ALCB - Herbário Alexandre Leal Costa
 ASE - Herbário da Universidade Federal de Sergipe
 BHCB - Herbário da Universidade Federal de Minas Gerais
 BOTU - Herbário Irina Delanova Gerntchujnicov
 CEPEC - Herbário do Centro de Pesquisas do Cacau
 CGMS - Herbário da Fundação Universidade Federal de Mato Grosso do Sul
 GRI - Herbário Pe. Dr. Raulino Reitz
 EAC - Herbário Prisco Bezerra
 EAN - Herbário Jaime Coelho de Moraes
 FLOR - Herbário do Departamento de Botânica da Universidade Federal de Santa Catarina
 FUEL - Herbário da Universidade Estadual de Londrina

[Simple search](#) | [Indicators](#) | [dataCleaning](#)

Coordination

Coordinator: Leonor Costa Maia/UFPE
 Vice-Coordinator: Maria Regina Barbosa/UFPB
 Email: inct@florabrasil.net

Support





Advanced search 1 | Collections 2 | Filters

| Next

Select the field, operator and put the value.
Use the buttons to add and remove condition according to the combination you want to search.

Field	Operator	Value
Family <input type="text"/>	<input type="text" value="not equals"/>	<input type="text" value="blank"/>
and <input type="text"/>		
Genus: <input type="text"/>	<input type="text" value="equals"/>	<input type="text" value="blank"/>
<input type="button" value="Add condition"/>	<input type="button" value="Remove last condition"/>	

[Simple search](#)
 [Indicators](#)
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Coordination

Coordinator: Leonor Costa Maia/UFPE
 Vice-Coordinator: Maria Regina Barbosa/UFPB
 Email: inct@florabrasil.net








Support













Advanced search 1 | Collections 2 | Filters 3 | Results

The records found are presented per collection. Choose the content type, format, and desired output (text, maps, and Google maps).

Georeferenced records

Collection	Records	At source	Automatic	Content	Format	Output
ALCB	4848	4275	26	Short	HTML	 see
ASE	59	3	48	Short	HTML	 see
BOTU	150	78	59	Short	HTML	 see
CEPEC	8080	7398	645	Short	HTML	 see
CGMS	2258	1042	1150	Short	HTML	 see
EAC	1330	145	993	Short	HTML	 see
EAN	477	5	366	Short	HTML	 see

UB	3201	1741	658	Short	HTML	 see
UEC	3217	1034	1914	Short	HTML	 see
UFACPZ	391	0	0	Short	HTML	see
UFG	684	97	529	Short	HTML	 see
UFP-Carpoteca	22	0	16	Short	HTML	 see
UFRN	465	200	251	Short	HTML	 see
UFRN-Fungos	7	3	2	Short	HTML	 see
UPCB	958	135	303	Short	HTML	 see
URM	533	0	350	Short	HTML	 see
VIES	2206	2050	138	Short	HTML	 see
Total	104178	52966	35846	Short	HTML	 see

SPF	184	65	102	Short	HTML	see	G
SPF-Algae	2	0	0	Short	HTML	see	
SPFw	98	67	30	Short	HTML	see	G
SPSF	812	99	662	Short	HTML	see	G
TEPB	421	96	284	Short	HTML	see	G
UB	3201	1741	658	Short	HTML	see	G
UEC	3217	1034	1814	Short	HTML	see	
UFACPZ	391	0	0	Short	HTML	see	
UFG	684	97	529	Short	HTML	see	G
UFP-Carpoteca	22	0	16	Short	HTML	see	G
UFRN	465	200	251	Short	HTML	see	G
UFRN-Fungos	7	3	2	Short	HTML	see	G
UPCB	859	135	303	Short	HTML	see	G
URM	533	0	350	Short	HTML	see	G
VIES	2206	2050	138	Short	HTML	see	G
Total	104178	52966	35846	Inventory	Family	MS-Excel	see

family	total
rubiaceae	6195
myrtaceae	5498
asteraceae	5047
melastomataceae	3435
bignoniaceae	3358
euphorbiaceae	2667
poaceae	2660
malpighiaceae	2638
cyperaceae	2489
apocynaceae	2481
lauraceae	2425
orchidaceae	2217
acanthaceae	1675
sapotaceae	1637

Advanced search | **1** Collections | **2** Filters | **Next**

Select the field, operator and put the value.
 Use the buttons to add and remove condition according to the combination you want to search.

Field	Operator	Value
Family	equals (phonetic)	rubiaceae
and		
Genus	equals	blank
Add condition	Remove last condition	blank

[Simple search](#) | [Indicators](#) | [dataCleaning](#)

Coordination

Coordinator: Leonor Costa Maia/UFPE
 Vice-Coordinator: Maria Regina Barbosa/UEPB
 Email: inct@florabrasil.net

Support



Advanced search 1 | Collections 2 | Filters 3 | Results

The records found are presented per collection. Choose the content type, format, and desired output (text, maps, and Google maps).

Georeferenced records

Collection	Records	At source	Automatic	Content	Format	Output
ALCB	319	256	0	Short	HTML	see
BHCB	87	53	28	Short	HTML	see
BOTU	3	2	1	Short	HTML	see
MAC	407	139	246	Short	HTML	see
MBML-Herbario	520	433	80	Short	HTML	see
MIRR	161	28	101	Short	HTML	see
MNHN_P_PC_BR	4	0	0	Short	HTML	see
NYBG_BR	93	50	7	Short	HTML	see
RON	20	13	7	Short	HTML	see
RON-e	1	0	1	Short	HTML	see
SP	193	81	100	Short	HTML	see
SPFw	7	6	1	Short	HTML	see
SPSF	35	3	28	Short	HTML	see
TEPB	9	2	6	Short	HTML	see
UB	68	53	8	Short	HTML	see
UEC	32	22	10	Short	HTML	see
UFACPZ	2	0	0	Short	HTML	see
UFRN	28	10	17	Short	HTML	see
UPCB	80	14	12	Short	HTML	see
VIES	115	97	18	Short	HTML	see
Total	6282	3777	1868	Short	HTML	see



INCT - Herbário Virtual da Flora e dos Fungos

português | help

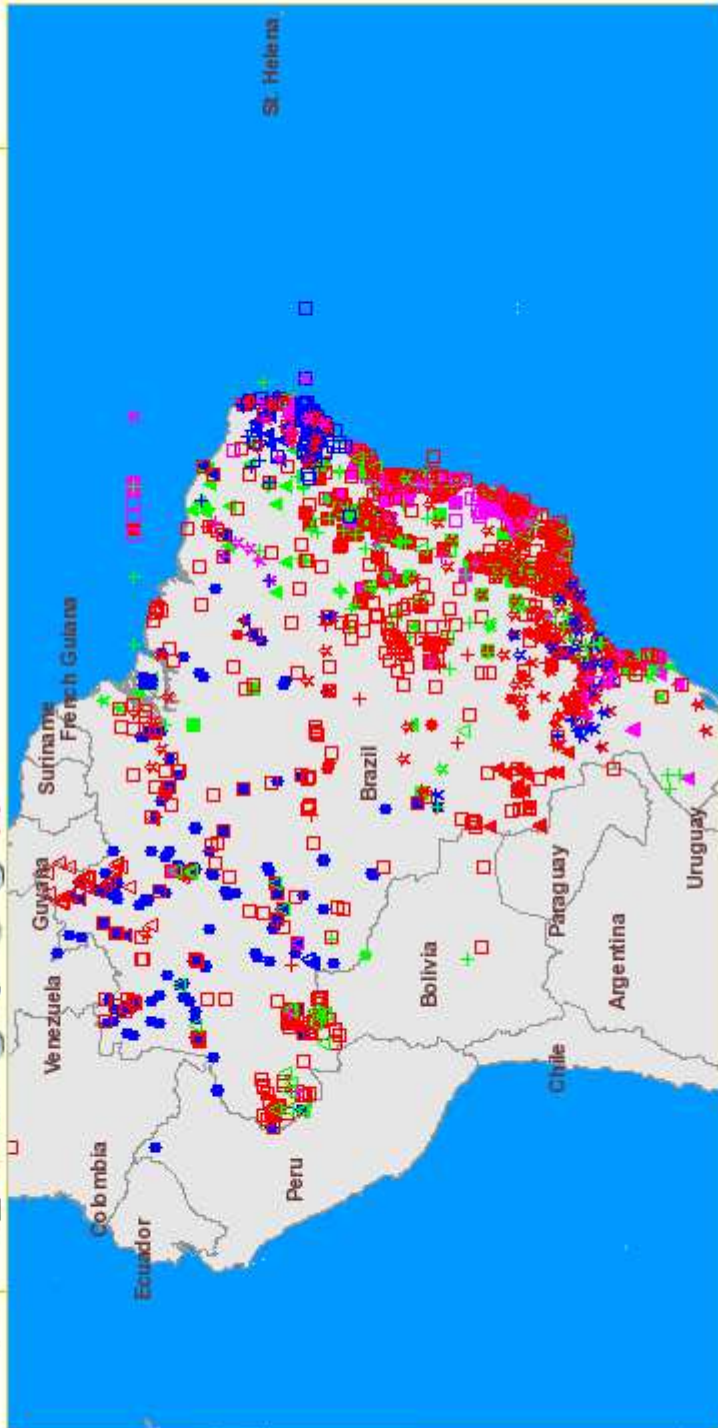


mapcria Map of search v4.0 - Mozilla Firefox

http://www.cria.org.br/mapcria/viewer4_0?server=mapcria3.cria.org.br&proto=tcp&port=59700&map=1316660346&ref=1316660349&lang=er



Map of search



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FEEDBACK

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Content

- Network Architecture 
- Tools
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 - Manager 
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 - Image server
 - Ecological niche modeling



Busca simples

1 | Coleções

| Próximo

Use as opções abaixo para selecionar as coleções a serem pesquisadas

Tipo de Acervo

Localização da coleção

Rede

- ALCB - Herbário Alexandre Leal Costa
- ASE - Herbário da Universidade Federal de Sergipe
- BHCB - Herbário da Universidade Federal de Minas Gerais
- BOTU - Herbário Itina Delanova Gemtchúnicov
- CEPEC - Herbário do Centro de Pesquisas do Cacau
- EAC - Herbário Prisco Bezerra
- EAN - Herbário Jaime Coelho de Moraes
- FUEL - Herbário da Universidade Estadual de Londrina
- FURB - Herbário Dr. Roberto Miguel Klein
- HCF - Herbário da Universidade Tecnológica Federal do Paraná Campus Campo Mourão
- HFSL-Fungos - Herbário Dr. Ayr Tupinambá Penna Pinheiro - Fungos

Desmarcar todas

Busca avançada [Indicadores](#) [dataCleaning](#)

Coordenação

Coordenação: Leonor Costa Maia/UFPE
Vice-Coordenadora: Maria Regina Barbosa/UFPB
Email: inct@florabrasil.net

Apoio



Busca simples 1 | **Coleções** 2 | **Filtros** | **Próximo**

Preencha um ou mais campos abaixo para localizar os registros desejados

Ordem	<input type="text"/>	Família	<input type="text"/>	Nome científico	<input type="text"/>	Coletor	<input type="text"/>
País	<input type="text"/>	Estado ou província	<input type="text"/>	Tachigali	<input type="text"/>	Localidade	<input type="text"/>
Número de catálogo	<input type="text"/>			Município	<input type="text"/>		

Filtros (restringir a seleção) - [leia mais](#)

- Material tipo
- Imagens
- Georeferenciamento original
- Georeferenciamento automático por município

- Selecionar registros "suspeitos"
- Selecionar registros "não suspeitos"

[Busca avançada](#) [Indicadores](#) [dataCleaning](#)

Coordenação

Coordenação: Leonor Costa Maia/UFPE
Vice-Coordenadora: Maria Regina Barbosa/UFPB
Email: incri@norabrazil.net

Apoio





INCT-Herbário Virtual
do Flor e dos Fungos

english | ajuda



Universidade
Estadual de Londrina



FURB



UnB



UFPA



Universidade Federal do Rio de Janeiro



UFPA



UFPA

Busca simples 1 | Coleções 2 | Filtros 3 | Resultados

Os registros são apresentados por coleção. Escolha o tipo de conteúdo, formato e saída desejada textual, mapas e Google maps

Coleção	Georeferenciados				
	Registros Original	Automático	Conteúdo	Formato	Saída
BHCB	7	0	7 Resumido	HTML	ver
MYBG_BR	16	2	1 Resumido	HTML	ver
SP	1	0	1 Resumido	HTML	ver
Total	24	2	9 Resumido	HTML	ver

O georeferenciamento automático é realizado nos registros do Brasil que não têm coordenadas geográficas, mas têm o nome do município. Registros que tiveram os valores das coordenadas geográficas bloqueados não são georeferenciados pela ferramenta, respeitando a decisão do curador de classificá-los como dados sensíveis. O sistema utiliza a coordenada do ponto da sede municipal adotada pelo IBGE.

Registros "suspeitos" são aqueles cuja coordenada geográfica associada aos dados de país, estado e/ou município não é consistente com as informações da base do IBGE. São dados cujo ponto de ocorrência, p.ex. não cai no espaço geográfico registrado pela coleção. O sistema não analisa se a espécie é terrestre ou aquática. Se um registro tem como país "Brasil" e o ponto cair dentro do mar territorial brasileiro ele não será um registro suspeito independentemente da espécie, pois em termos geográficos, não há inconsistência. Ao mesmo tempo, dados históricos com dados municipais não atualizados podem ser classificados como "suspeitos" apesar da coordenada geográfica eventualmente estar correta.

Busca avançada Indicadores dataCleaning

Coordenação

Coordenação: Leonor Costa Maia/UFPE
Vice-Coordenadora: Maria Regina Barbosa/UFPB
Email: inct@florabrasil.net

Apoio



Informações:

BHCB

NYBG_BR

SP

The New York
Botanical Garden

NYBG_BR - The New York Botanical Garden - Brazilian records
The New York Botanical Garden, NYBG

[Como citar](#) | [Condições de uso](#)

[1/1]

spLink	nome científico	tipo	família	número de catálogo	ano da coleta	mês da coleta	dia da coleta	cole
	<i>Tachigali alba</i> Ducke	type	Caesalpinaceae	22911	1933	6	3	B. A
	<i>Tachigali argyrophylla</i> Ducke	type	Caesalpinaceae	22942	1941	6	20	W. A
	<i>Tachigali aurea</i> Tul.	type	Caesalpinaceae	1187809	-	-	-	J. S.
	<i>Tachigali aurea</i> Tul.	type	Caesalpinaceae	22925	1841	-	-	Martí
	<i>Tachigali aurea</i> Tul. fm. alpha	type	Caesalpinaceae	22921	-	-	-	P. Cle
	<i>Tachigali carinata</i> Gleason	holotype	Caesalpinaceae	22910	1931	11	-	B. A
	<i>Tachigali eriocalyx</i> Tul.	probable syntype	Caesalpinaceae	4909	1828	9	-	L. Ri
	<i>Tachigali paniculata</i> Aubl. var. <i>cavipes</i> Spruce ex Benth.	-	Caesalpinaceae	8546	1852	10	-	R. St
	<i>Tachigali paniculata</i> Aubl. var. <i>cavipes</i> Spruce ex Benth.	isotype	Caesalpinaceae	8545	1852	10	-	R. St
	<i>Tachigali plumbea</i> Ducke	syntype	Caesalpinaceae	1185427	1941	3	6	W. A
	<i>Tachigali plumbea</i> Ducke	syntype	Caesalpinaceae	22917	1940	6	18	W. A
	<i>Tachigali plumbea</i> Ducke	syntype	Caesalpinaceae	22918	1841	3	6	W. A
	<i>Tachigali ptychophysca</i> Spruce ex Benth.	type	Caesalpinaceae	8547	1852	10	-	R. St
	<i>Tachigali ptychophysca</i> Spruce ex Benth.	type	Caesalpinaceae	8548	1852	10	-	R. St
	<i>Tachigali sericea</i> Tul.	syntype	Caesalpinaceae	22927	1882	-	-	E. F.
	<i>Tachigali venusta</i> Dwyer	type	Caesalpinaceae	22915	1946	9	11	W. A

Coordenação

Coordenação: Leonor Costa Maia/UFPE
Vice-Coordenadora: Maria Regina Barbosa/UFPB
Email: inct@florabrasil.net

Apoio



INCT
Instituto Nacional de
Ciência e Tecnologia



60 ANOS



CAPES



Ministério da
Ciência e Tecnologia



NY0002291



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Brazilian records, NY00022910

NY00022910



The New York Botanical Garden - Brazilian records (NY)

núm. catálogo
NY 22910

identificação

Caesalpinaceae

***Tachigalla carinata* Gleason Holotype**

coleta

B. A. Krukoff, 1479, Near Tabajara, upper Machado River region. [-8.93, -62.09], Rondônia, Brazil, 11-1931.

em outros sistemas

in Lista do Brasil

Nome não encontrado.

in Flora brasiliensis

Nome não encontrado.

lista de espécies
flora do brasil



créditos

responsável pela informação

Barbara Thiers

como citar

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do Flor e dos Fungos

english | ajuda



Universidade
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FURB



UnB



UFPA



Universidade Federal do Rio de Janeiro



UFPA



UNICAMP

Busca simples 1 | Coleções 2 | Filtros 3 | Resultados

Os registros são apresentados por coleção. Escolha o tipo de conteúdo, formato e saída desejada textual, mapas e Google maps

Coleção	Georeferenciados				
	Registros Original	Automático	Conteúdo	Formato	Saída
BHCB	7	0	7 Resumido	HTML	ver
MYBG_BR	16	2	1 Resumido	HTML	ver
SP	1	0	1 Resumido	HTML	ver
Total	24	2	9 Resumido	HTML	ver

O georeferenciamento automático é realizado nos registros do Brasil que não têm coordenadas geográficas, mas têm o nome do município. Registros que tiveram os valores das coordenadas geográficas bloqueados não são georeferenciados pela ferramenta, respeitando a decisão do curador de classificá-los como dados sensíveis. O sistema utiliza a coordenada do ponto da sede municipal adotada pelo IBGE.

Registros "suspeitos" são aqueles cuja coordenada geográfica associada aos dados de país, estado e/ou município não é consistente com as informações da base do IBGE. São dados cujo ponto de ocorrência, p.ex. não cai no espaço geográfico registrado pela coleção. O sistema não analisa se a espécie é terrestre ou aquática. Se um registro tem como país "Brasil" e o ponto cair dentro do mar territorial brasileiro ele não será um registro suspeito independentemente da espécie, pois em termos geográficos, não há inconsistência. Ao mesmo tempo, dados históricos com dados municipais não atualizados podem ser classificados como "suspeitos" apesar da coordenada geográfica eventualmente estar correta.

Busca avançada Indicadores dataCleaning

Coordenação

Coordenação: Leonor Costa Maia/UFPE
Vice-Coordenadora: Maria Regina Barbosa/UFPB
Email: inct@florabrasil.net

Apoio



[slides] [mais detalhes]



[mais detalhes]

FSI Viewer



P00000732

PLANTAS DO BRASIL CENTRAL, GLAZIOW N° 18847.

Senoua crassiflora, Mart.
St. Bras. XIII, 1, p. 7 - St. P. Tringuesii, B. H. - Augustia
amaroleitensis, H. B. Mill. in Herb. Suis. Diacho Das
Venas 4 de Março de 1892. Her. fl. am. Herbario-Sua.



R000007321 - Annonaceae | *Annona crassiflora*
© Museu Nacional do Rio de Janeiro



© Museu Nacional do Rio de Janeiro.
R000007321

R000007321



Museu Nacional do Rio de Janeiro (R)

núm. catálogo
R 7321

identificação

Annonaceae

***Annona crassiflora* Mart.**

coleta

Glaziou, A.E.M., 18844, Brasil, 04-05-1892.

em outros sistemas

in Lista do Brasil

***Annona crassiflora* Mart., Nome aceito, Nome correto**

in Flora brasiliensis

***Annona crassiflora* Mart.**



lista de espécies
flora do brasil



créditos

responsável pela informação

Luci de Senna Valle

como citar

Herbário do Museu Nacional - Centro de referência da biodiversidade brasileira

restrições de uso

A comercialização é vedada e é necessário citar nas dissertações, teses e artigos a fonte.

***Annona crassiflora* Mart.**

Accepted name, Correct name

taxonomy hierarchy

Annonaceae » ***Annona* L.** » ***Annona crassiflora* Mart.**

voucher

Irwin, H.S. 14674 MO, NY, S, SP, TEX

origin

native

endemism

not endemic to Brazil

phytogeographic domains

Cerrado, Pantanal

geographic distribution in Brazil

Norte (Pará, Tocantins), **Ilordeste** (Maranhão, Bahia), **Centro-Oeste** (Mato Grosso, Goiás, Distrito Federal, Mato Grosso do Sul), **Sudeste** (Minas Gerais, São Paulo), **Sul** (Paraná)

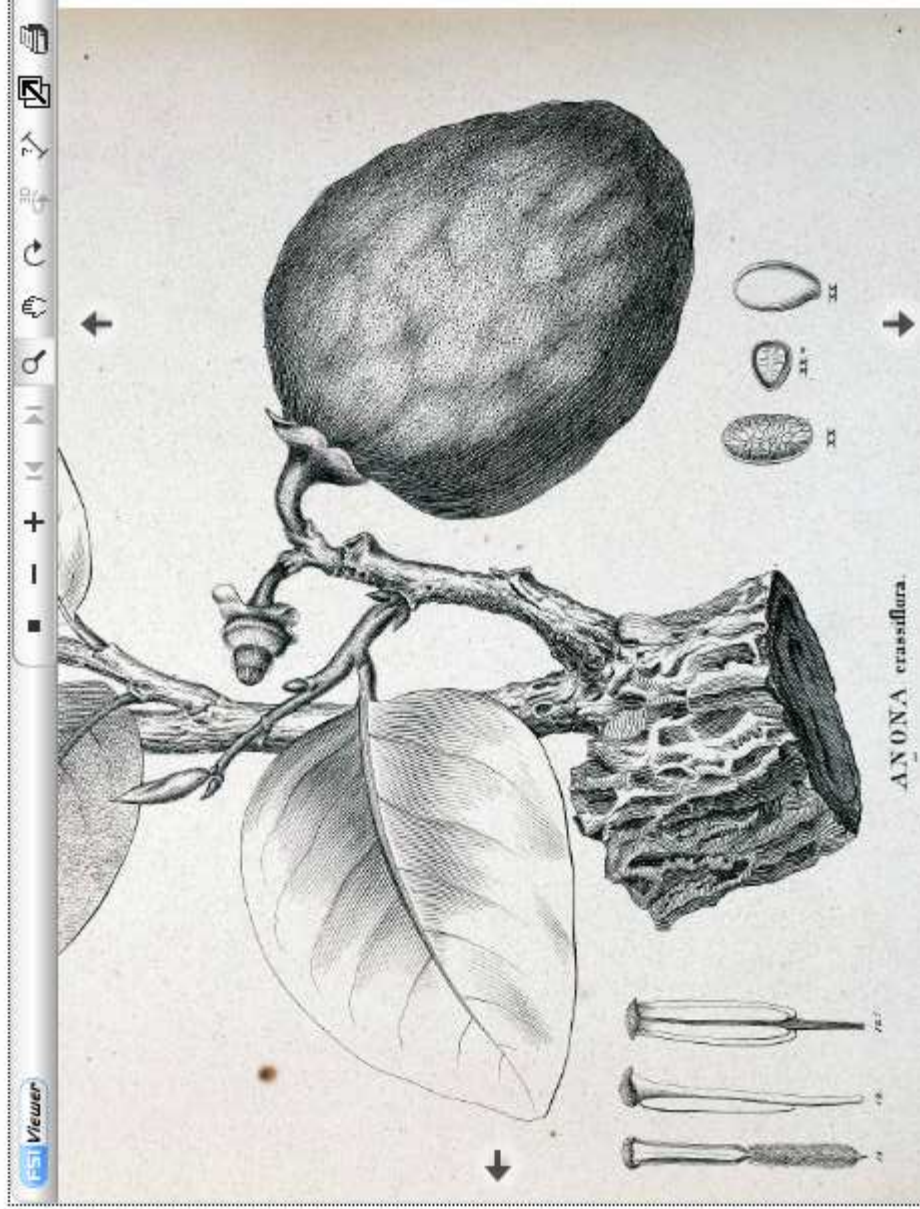
vernacular names

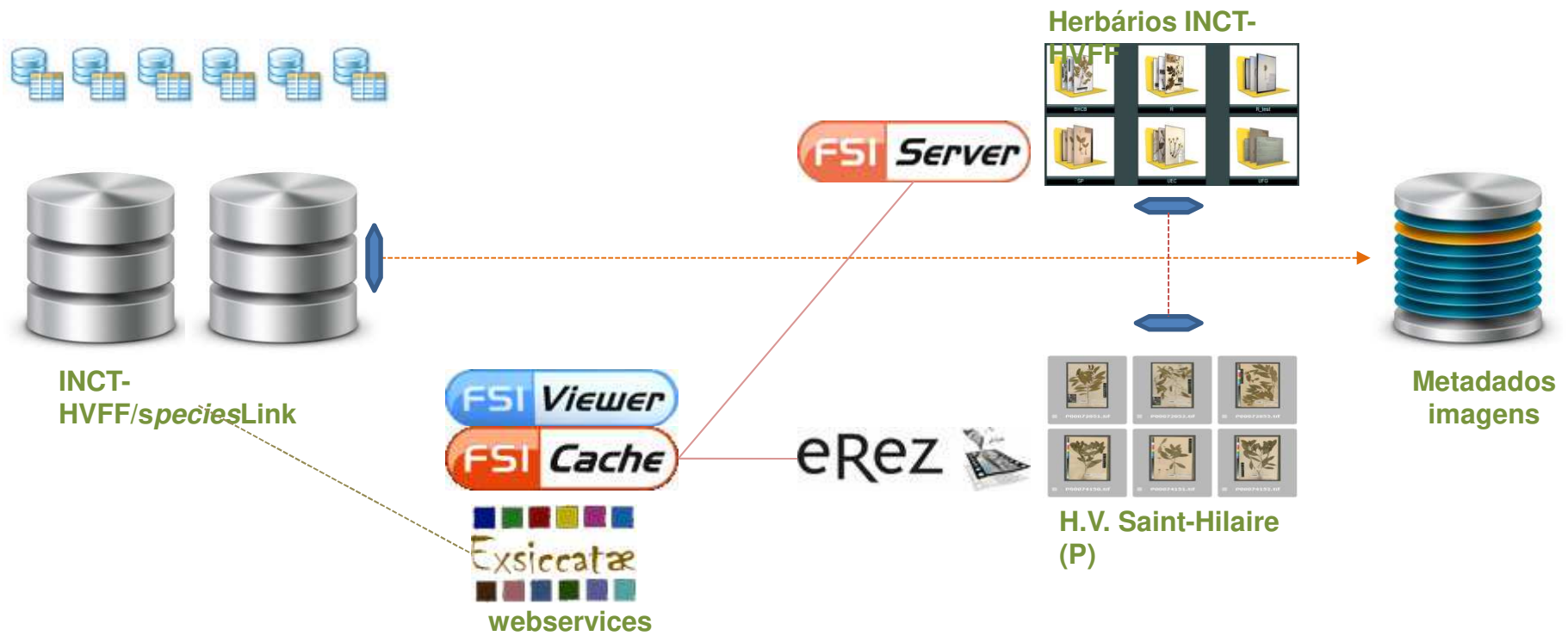
Acanga, Sudeste, Kaxinawá
Araticum, Norte, Portuguese
Araticum do Mata, Sudeste, Portuguese
Tapanahuacanga, Norte, Kaxinawá

how to cite

Maas, P., Rainer, H., Lobão, A. 2010. Annonaceae in **Lista de Espécies da Flora do Brasil**. Jardim Botânico do Rio de Janeiro. (<http://floradobrasil.jbrj.gov.br/2010/FB117092>).







2010 lista de espécies
flora do brasil

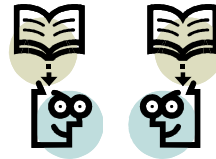
A collection of logos for botanical institutions and museums, including:

- THE NEW YORK BOTANICAL GARDEN
- MUSEU NACIONAL UFRJ
- MUSEUM NATIONAL D'HISTOIRE NATURELLE
- Instituto de Botânica
- Herbário UEC
- UFMG
- UFG



Development (CRIA)

- Import of existing lists
- Maintenance, correcting bugs
- New implementations
- Support to coordination



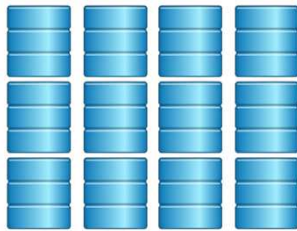
Coordination (JBRJ)

- User control
- Global corrections
- logs and controls
- Support to specialists

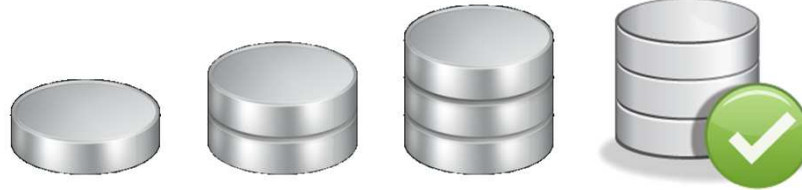


Specialists social network

- data cleaning interface
- Statistics interface
- Editing interface
- External resources



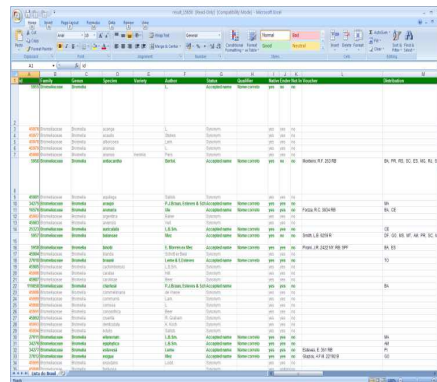
backups, backups, backups, backups ...



Web interface



xls spreadsheet output



rtf output for printing



Distribution maps



- Achatocarpaceae
- Acoraceae
- Adoxaceae E.Mey.
- Agavaceae
- Aizoaceae
- Alismataceae Vent.
- Alliaceae Borkh.
- Alstroemeriaceae Dumort.
- Amaranthaceae A.Juss.
- Amaryllidaceae
- Anacardiaceae
- Anisophylaceae Pidd.
- Annonaceae
- Aberemoa*
- Anaxagorea* A.St.-Hil.
- Annaa*
- Annona* L.
- Bocagea* A.St.-Hil.
- Bocageopsis* R.E.Fr.
- Cananga*
- Cardiopetalum* Schtdl.
- Cre mastosperma* R.E.Fr.
- Gymbopetalum* Benth.
- Diclinanona* R.E.Fr.
- Duckeanthus* R.E.Fr.
- Duguetia* A.St.-Hil.
- Ephedranthus* S.Moore
- Ephedranthus amazonicus* R.E.Fr.
- Ephedranthus bovivivensis* Chatrou &
- Ephedranthus fragrans* R.E.Fr.
- Ephedranthus parviflorus* S.Moore
- Ephedranthus pisocarpus* R.E.Fr.
- Froestodendron* R.E.Fr.
- Fusaea* (Baill.) Saif.
- Geanthemum*
- Guatteria* Ruiz & Pav.
- Guatterifolia*
- Guatteriopsis*
- Heteropetalum*
- Hexalobus*

nome do táxon
***Ephedranthus pisocarpus* R.E.Fr.**

FB110367

hierarquia taxonômica
Angiospermas → Annonaceae → *Ephedranthus* S.Moore → *Ephedranthus pisocarpus* R.E.Fr.

qualificações do nome
status *qualificador*
Nome aceito Nome correto


sinônimos relevantes
tem como sinônimo
é sinônimo

voucher
Schatz, G.E. 732 MG, NY

referência

forma de vida e substrato

distribuição
nativa, endêmica do Brasil
domínios fitogeográficos
Amazônia
tipos de vegetação
distribuição geográfica
Nordeste (Maranhão, Piauí, Ceará)



nomes vernáculos

Nomes buscados: <i>Ephedranthus pisocarpus</i>						
num. cat.	taxon	coletor	determinador	estado	cód. barras	
EAC 19230	<i>Ephedranthus pisocarpus</i>	Araújo, F. S. 104	Lima-Verde, L. W., 08-08-2000	Ceará		
EAC 19261	<i>Ephedranthus pisocarpus</i>	Araújo, F. S. 135	Araújo, F. S. -04-1997	Ceará		
EAC 19319	<i>Ephedranthus pisocarpus</i>	Araújo, F. S. 193	Lima-Verde, L. W., 08-08-2000	Ceará		
EAC 34944	<i>Ephedranthus pisocarpus</i>	Costa, R. C. 23	Costa, R. C. -06-2004	Ceará		
EAC 34949	<i>Ephedranthus pisocarpus</i>	Costa, R. C. 220	Costa, R. C. -06-2004	Ceará		
EAC 35293	<i>Ephedranthus pisocarpus</i>	Lima-Verde, L. W.; et al. 1099		Ceará		
EAC 35688	<i>Ephedranthus pisocarpus</i>	Lima, J. R. 16	Lima-Verde, L. W.; Lima, J. .R. 07-06-2005	Ceará		
INPA-Herbario 116536	<i>Ephedranthus pisocarpus</i>	Daly, D.C.; Campbell, D.G.; Silva, A.S. da; Bahia, R.P.; Santos, M.R. dos & Bastos, N.C. 500	Oliveira, J. de 01-01-1997	Maranhão		
INPA-Herbario 116580	<i>Ephedranthus pisocarpus</i>	Daly, D.C.; Campbell, D.G.; Silva, A.S. da; Bahia, R.P. & Santos, M.R. dos 557	Oliveira, J. de	Maranhão		
INPA-Herbario 136454	<i>Ephedranthus pisocarpus</i>	Silva, M.F.F. da; Taylor, E.; Rosa, N.A.; Silva, J.B.F. da; Oliveira, J.G. de; Rosário, C. da S.; 1034	Oliveira, J. de 01-01-1995	Maranhão		
MOBOT_BR 3410389	<i>Ephedranthus pisocarpus</i>	G.E. Schatz, et al. 732		Maranhão		
NYBG_BR 622080	<i>Ephedranthus pisocarpus</i>	R. de Lemos Fróes 11592		Maranhão	NY00622080	
NYBG_BR 836518	<i>Ephedranthus pisocarpus</i>	J. Oliveira 144	J. Oliveira -1995	Maranhão	NY00836518	
NYBG_BR 836519	<i>Ephedranthus pisocarpus</i>	G. E. Schatz 732	J. Oliveira -5-1995	Maranhão	NY00836519	
NYBG_BR 836543	<i>Ephedranthus pisocarpus</i>	G. E. Schatz 776	J. Oliveira -10-1995	Maranhão	NY00836543	
SP 99767	<i>Ephedranthus pisocarpus</i>	Krukoff, B.A. 11592	Fries, R.E. 01-01-1944	Maranhão	SP000292	
MOBOT_BR 3405912	<i>Ephedranthus pisocarpus</i>	C.A. Cid Ferreira, et al. 6433	D.M. Johnson,	Mato Grosso do Sul		
TEPB 16940	<i>Ephedranthus pisocarpus</i>	C.G. Lopes - A. Carvalho 52	A. Fernandes 13-01-1995	PI		
HST 9037	<i>Ephedranthus pisocarpus</i>	J.R.Lemos 64	J.R.lemos -02-1999	Piauí		
UB	<i>Ephedranthus pisocarpus</i>	Fagg, C.W. 1651	Proença, C.	Piauí		
UB	<i>Ephedranthus pisocarpus</i>	Haidar, R.F.; Matos, M.Q.; Fagg, C.W.; Felfili, J.M.; Mendonça, R.C.; Proença, C.; Farias-Sing 80	Haidar, R.F.	Piauí		
UB	<i>Ephedranthus pisocarpus</i>	Proença, C.; Fagg, J.M.F.; Fagg, C.W.; Haidar, R.F.; Mendonça, R.C. & Fernandes, J.H. 3273	Proença, C.; Borges, D.N.	Piauí		
UEC 125963	<i>Ephedranthus pisocarpus</i>	Albino, R.S. 8	Alencar, M.E. -03-2002	Piauí	UEC125963	
UB	<i>Ephedranthus pisocarpus</i>	Haidar, R.F.; Matos, M.Q. 248	Haidar, R.F.	Tocantins		



NY00622080

R. FROES, UNDER THE DIRECTION OF B. A. KRUKOFF

11592

Ephedranthus pisocarpus n. sp.

des. Fries

"Enóira de Cocho"

Shrub 15 ft. high, 3 inches in dia.
Estrada de Ferro, Terra firma, high land,
rocky soil, old clearing.

BRAZIL: State of Maranhão: Island of São Luiz.
Feb.-Mar., 1939.

Specimens distributed through the New York Botanical Garden

NY00622080 - Annonaceae | *Ephedranthus pisocarpus*
© The New York Botanical Garden - Brazilian record

[List of Species of the Brazilian Flora 2011 - Mozilla Firefox](#)
<http://checklist.florabrasil.net/admin/main>

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Ephedranthus piscocarpus R.E.Fr.

Angiospermas → **Annonaceae** → **Ephedranthus** → **Ephedranthus piscocarpus** →

TAXON NAME
 Species: *Ephedranthus piscocarpus* subsp.

NAME QUALIFIER
 status:

SOURCE

collector	number	herb/catal.	barcode	state	typos
Krukoff, B.A.	11592				<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

references
 should be used only when voucher is not available
 author publication vol/page year

INCT-HVFF Reflora - Exsiccatae Voucher Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Exsiccatae Administrative Interface INCT Exsiccatae Viewer INCT-HVFF Reflora - Exsiccatae Voucher ... x

http://reflora.cria.org.br/admin/voucher/collectornumber/11592



salário mínimo

INCT-Herbário Virtual da Flora e dos Fungos Banco de Imagens de Exsiccatas

species link

INCT-Herbário Virtual da Flora e dos Fungos

Baseado no número do coletor, as seguintes imagens estão disponíveis no servidor de imagens do Herbário Virtual da Flora e dos Fungos do Instituto Nacional de Ciência e Tecnologia.

	SP000292 Annonaceae <i>Ephedranthus piscocarpus</i> Krukoff, B.A. 11592
	HY00622080 Annonaceae <i>Ephedranthus piscocarpus</i> R. E. Fr. R. de Lemos Fróes 11592



© Herbário de Botânica, São Paulo,
SP000292

SP000292



Herbário de Botânica, São Paulo (SP)

núm. catálogo
SP 99767

identificação

Annonaceae

Ephedranthus pisocarpus* R.E.Fr. *Isotype

ident.: Fries, R.E., 01-01-1944.

notas: Shrub 15 ft. high, 3 inches in diam.

coleta

Krukoff, B.A., 11592, Estrada de Ferro. Terra firma, high land, rocky soil, old clearing, São Luís [-2.52972, -44.3028 erro: 33693m], Maranhão, Brasil, 03-1939.

em outros sistemas

in Lista do Brasil

***Ephedranthus pisocarpus* R.E.Fr.**, Nome aceito, Nome correto

in Flora brasiliensis

Nome não encontrado.

lista de espécies
flora do brasil



créditos

responsável pela informação

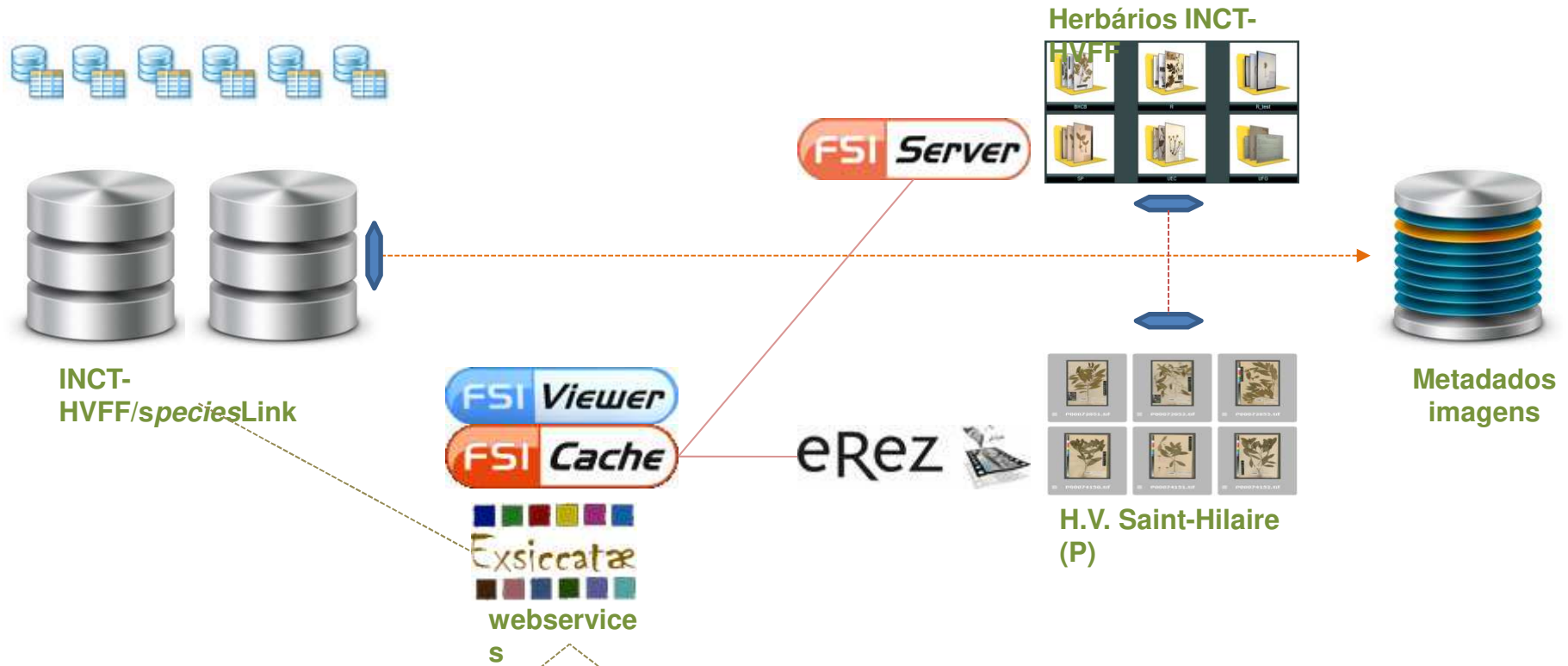
Maria Candida Henrique Mamede

como citar

(c) Herbário de Botânica, São Paulo

restrições de uso

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**2010 lista de espécies
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A collection of logos for partner institutions and museums, including:

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- Instituto de Botânica
- Herbário UEC (Universidade Estadual de Campinas)
- UFG (Universidade Federal de Goiás)

coleção



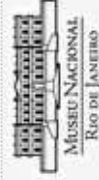
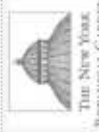
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Para visualizar as imagens é necessário selecionar pelo menos uma família (a opção de *família em branco* também está disponível). Um gênero específico também pode ser selecionado. A opção de escolher um código de barras específico também está disponível.

Após fazer a seleção inicial, clique em **buscar**. Os *thumbnails* das imagens que correspondem ao critério de busca serão exibidos. Clique sobre uma das imagens para ver os detalhes sobre ela. Clique na imagem maior para vê-la no visualizador.

No final da área de detalhes sobre a imagem, são apresentados os endereços necessários para a utilização da imagem no website do herbário.

	BHCB	CLF	NY	P	R	SP	UEC	UFG	US	total
imagens armazenadas	47	636	8805	4534	638	1015	282	30	10	16007
códigos de barra	47	611	8531	4376	619	1001	291	15	10	15501
tipus			8413	1159	310	995	57		10	10944
registros textuais associados	44		8484	3413	431	1000	83	15	10	13490





coleção

- BHCB
- CLF
- FB_PLATES
- NY
- P
- R
- SP
- UEC
- UFG
- US

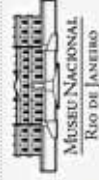
Esse é o serviço **Exsiccatae** de Fungos. herbários parceiros no projeto Reflora coordenado pelo INCT Instituto Virtual da Flora e dos

Para visualizar as imagens é necessário clicar pelo menos uma família (a opção de *família em branco* também está disponível). Um gênero ou de escolher um código de barras específico também está disponível.

Após fazer a seleção inicial, clique uma das imagens para ver os detalhes. As *thumbnails* das imagens que correspondem ao critério de busca serão exibidas. Clique sobre a imagem maior para vê-la no visualizador.

No final da área de detalhes são apresentados os endereços necessários para a utilização da imagem no website do herbário.

	BHCB	CLF	NY	P	R	SP	UEC	UFG	US	total
imagens armazenadas	47	636	8805	4634	638	1015	292	30	10	16007
códigos de barra	47	611	8531	4376	619	1001	291	15	10	15501
tipus			8413	1159	310	995	57		10	10944
registros textuais associados	44		8494	3413	431	1000	83	15	10	13490



BHCB000936



coleção **BHCB** família **Fabaceae, 44** gênero **todos**

buscar

speciesLink | sobre a imagem | uso da imagem | estatísticas

núm. catálogo
BHCB 27866

cód. barras
BHCB000936

Fabaceae

Apuleia leiocarpa (Vogel) J.F. Macbr.

identification: Mello Silva, R.

notes: Nome vulgar: "Garapa"&nf;Mata ciliar. Arbóreo

RED LIST

Fabaceae

Apuleia leiocarpa (Vogel) J.F. Macbr.

RED LIST

coleta

Mello Silva, R., 984, Rio Santo Antônio, UHE Porto Estrela, Braúnas [-19.0558, -42.7166 erro 19086m], Minas Gerais, Brasil



BHCB000936 BHCB000941 BHCB000942 BHCB000943 BHCB000944 BHCB000945 BHCB000999 BHCB001000 BHCB001001 BHCB001043 BHCB001050 BHCB001051 BHCB001052 BHCB001078 BHCB001079

BHCB001078



coleção **BHCB** família **Fabaceae, 43** gênero **todos**

buscar

speciesLink | sobre a imagem | uso da imagem | estatísticas

Imagem

Para inserir uma imagem dessa exsicata em seu website, use o código abaixo:

```
<img src='http://reflora.cria.org.br/inct/exsicatae/image/size/TAMP.MHO/format/jpeg/imagecode/BHCB001078' />
```

substituindo **TAMAIHO** por: **icon**, **tiny**, **thumb**, **small**, **medium**, **large** para obter diferentes tamanhos da imagem. Para conferir o resultado, clique em um dos tamanhos listados.

Visualização em alta resolução

Para criar um *link* para uma página para que o usuário possa explorar a imagem dessa exsicata em alta resolução, use o código abaixo:

```
<a href='http://reflora.cria.org.br/inct/exsicatae/viewer/format/slide/style/BHCB/imagecode/BHCB001078' />link</a>
```









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111

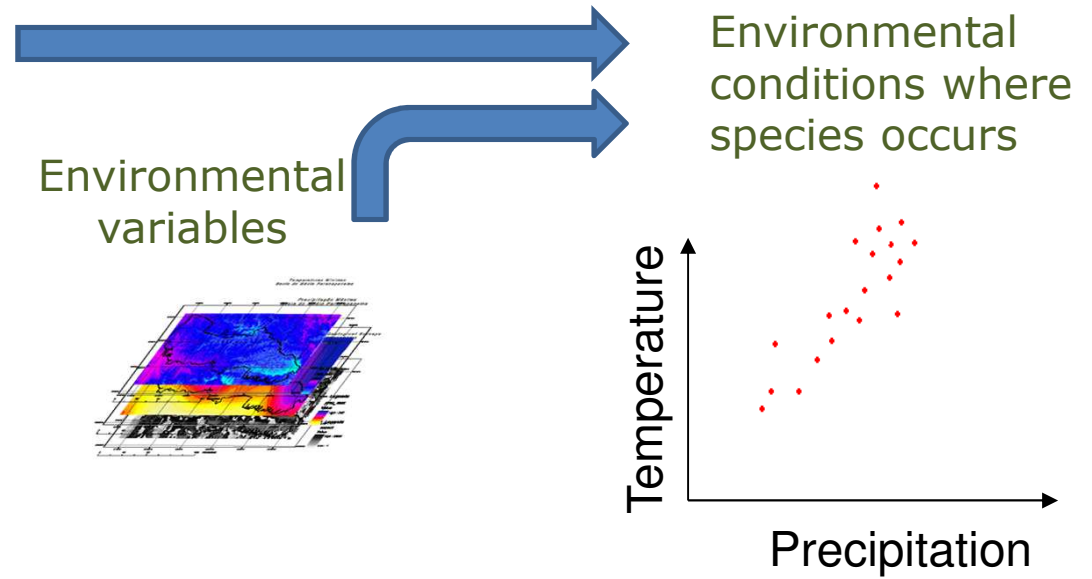
Exsicatae

Content

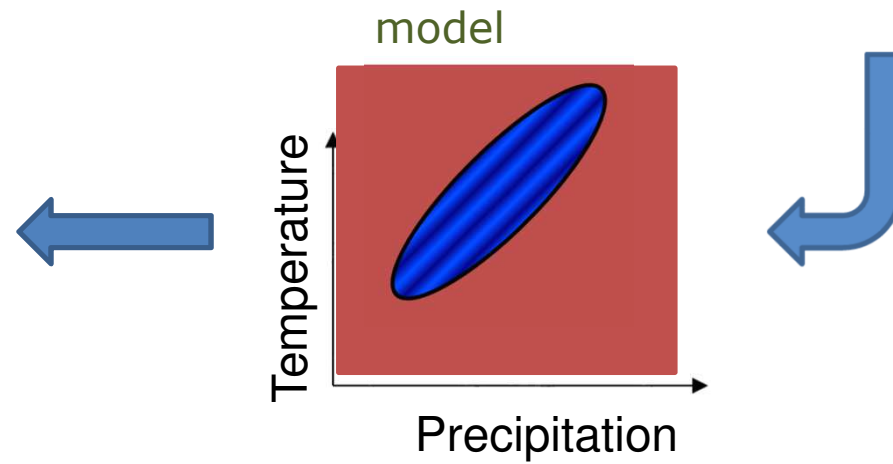
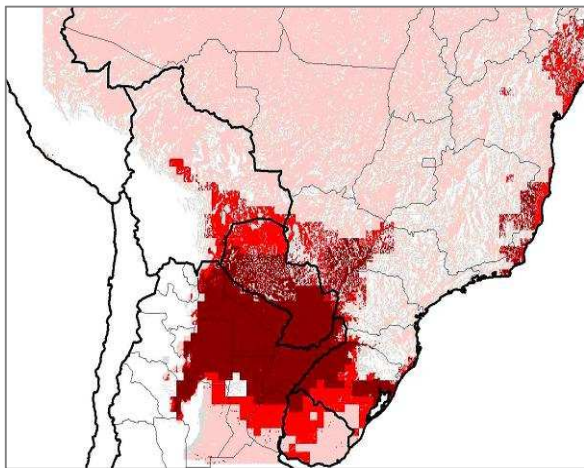
- Network Architecture 
- Tools
 - Data cleaning 
 - Manager 
 - Collection profile 
 - Indicators 
 - Search & retrieval 
 - Image server 
 - Ecological niche modeling

Distribution models (ecological niche)

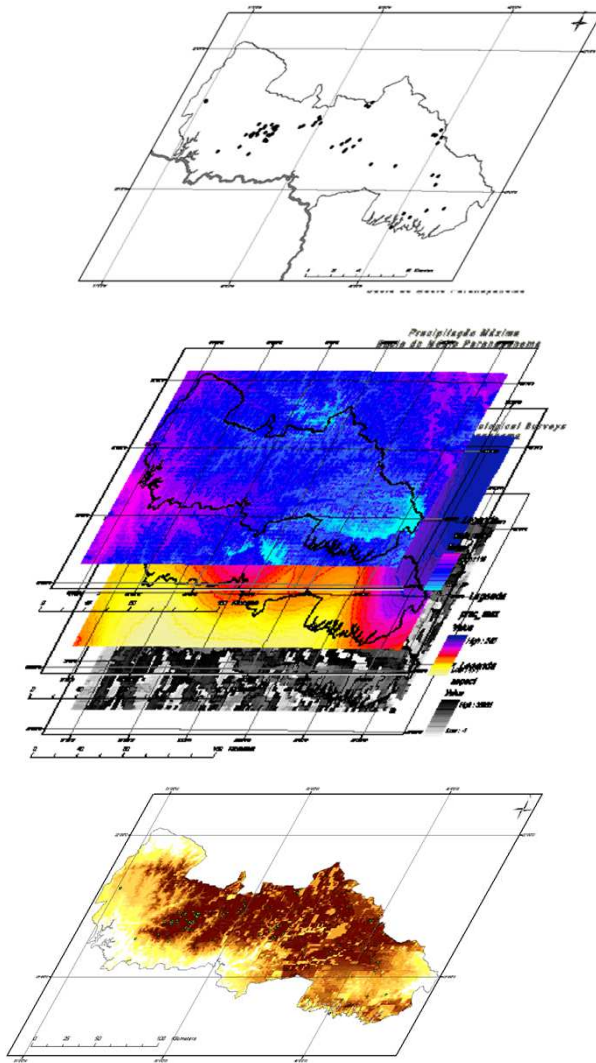
Species occurrence points



Potential distribution



Usage

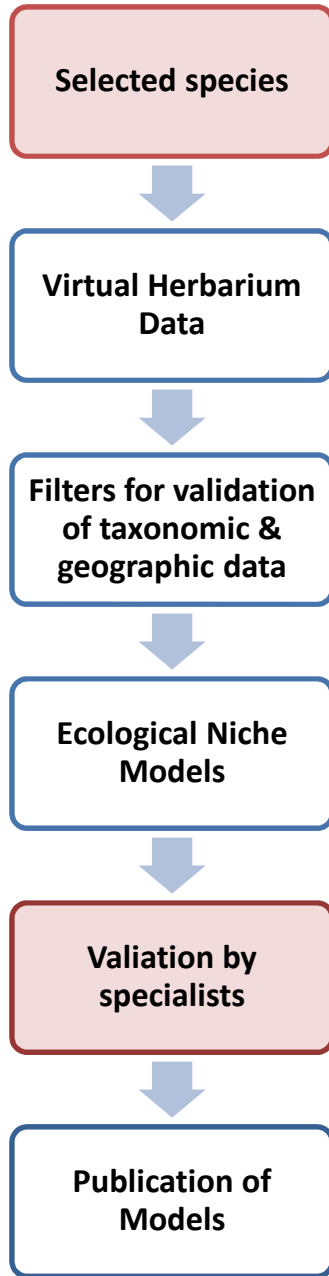


Georeferenced data:

- Study species distribution
- Plan new field trips
- Bioprospecting
- Recuperate degraded areas
- Predict invasive species
- Evaluate risks: diseases, pests
- ...
- Can be associated with other types of data (economic, social, ...)

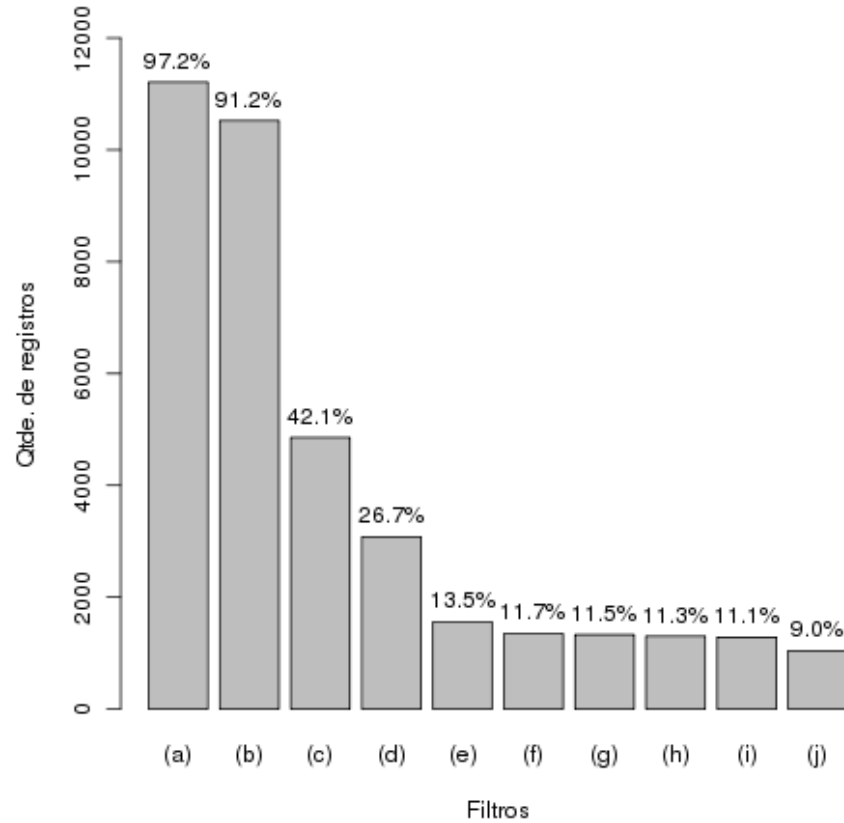
Ecological Niche Models

SisBiota



Passifloraceae

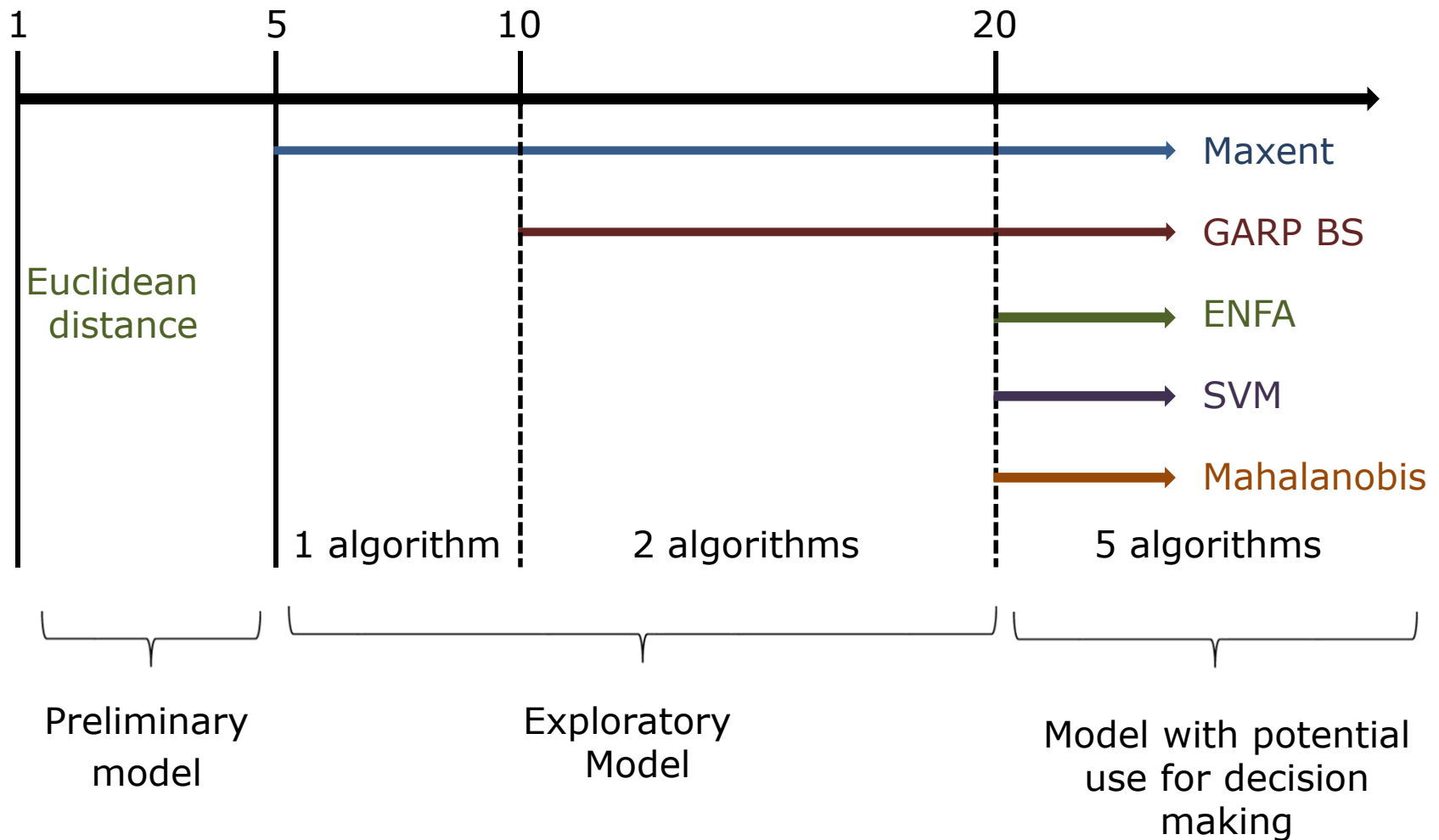
11.531 data records (more then 30 institutions), 5.487 (48%) with coordinates



Renato De Giovanni <renato@cria.org.br>

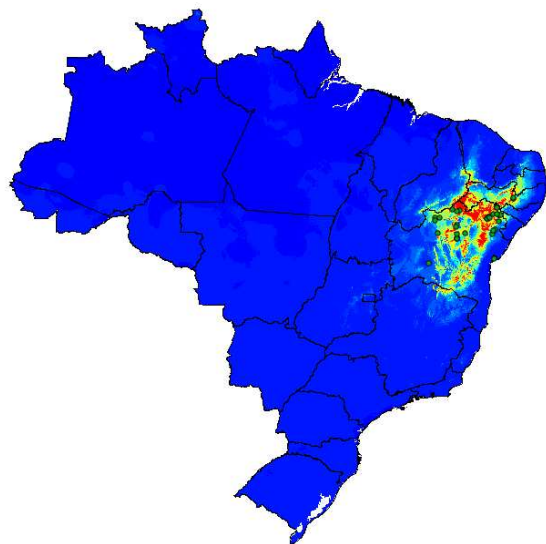
Modelling procedure (openModeler)

No. of occurrence points

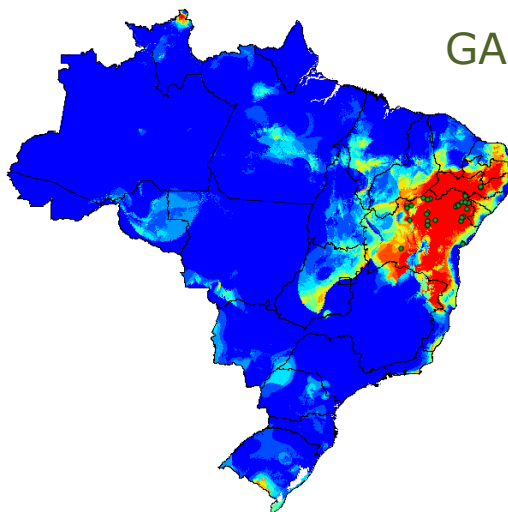


Generating individual models

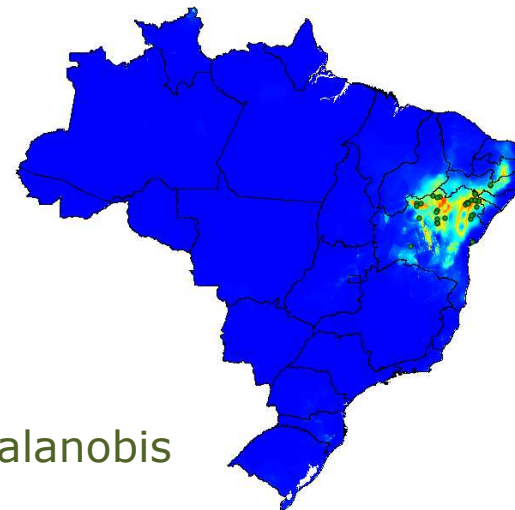
ENFA



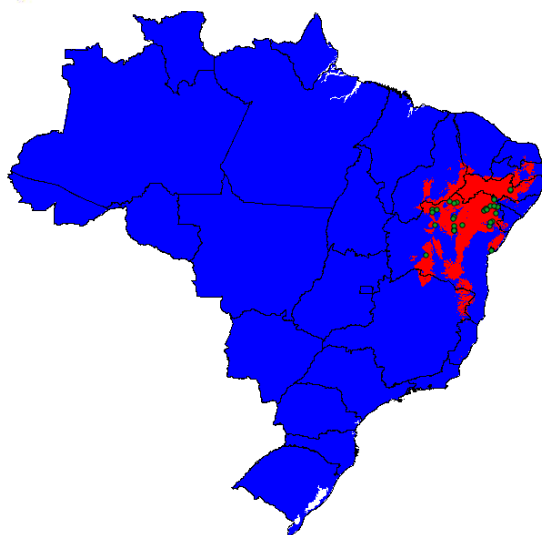
GARP BS



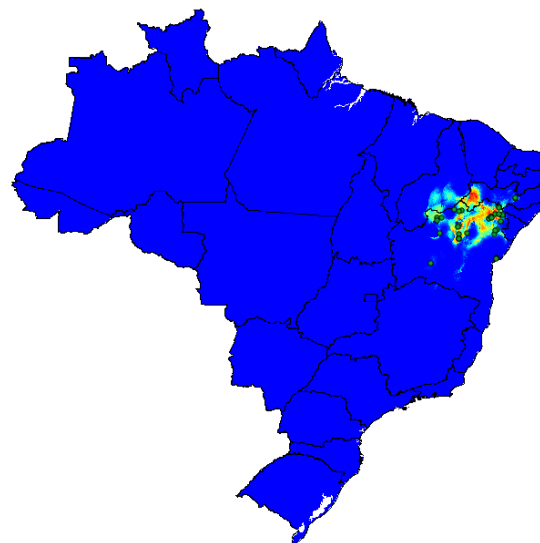
Maxent



SVM



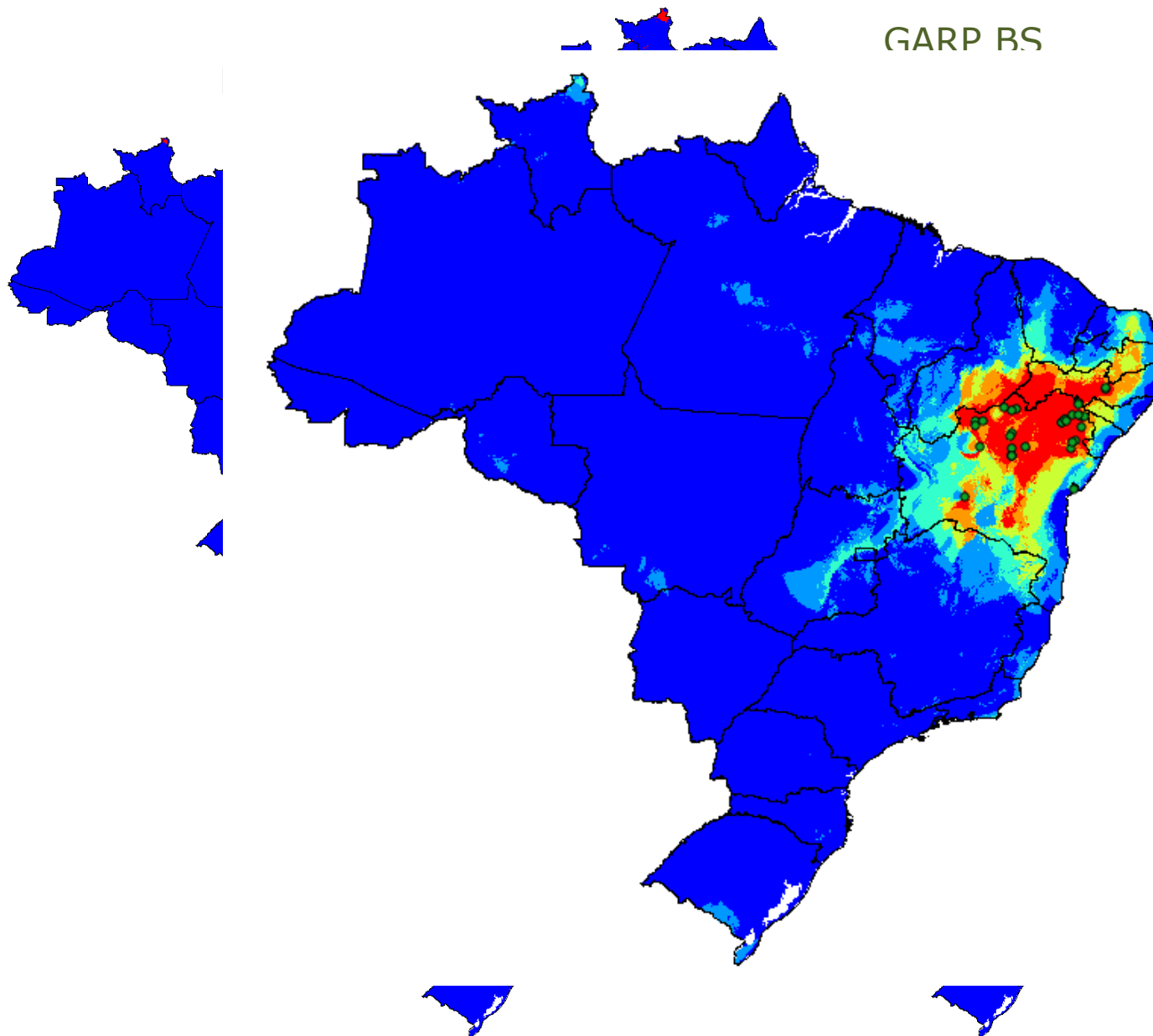
Mahalanobis



*Passiflora
luetzelburgii*

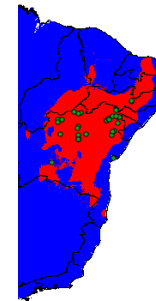


Renato De Giovanni <renato@cria.org.br>



GARP BS

Maxent



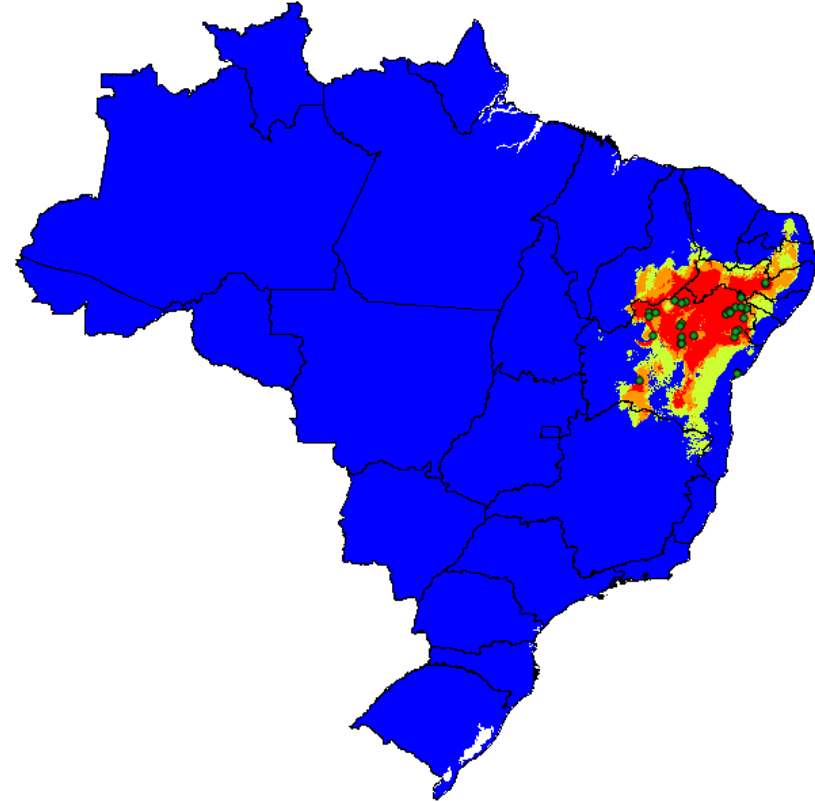
*Passiflora
luetzelburgii*



Renato De Giovanni <renato@cria.org.br>

Possible uses

- Guide field work
- Provide information for new research
- Improve data quality
- Prioritize data entry and georeferencing
- Prioritize species for conservation
- Value biological collections



Note: Data quality is fundamental to produce good models

Strategy



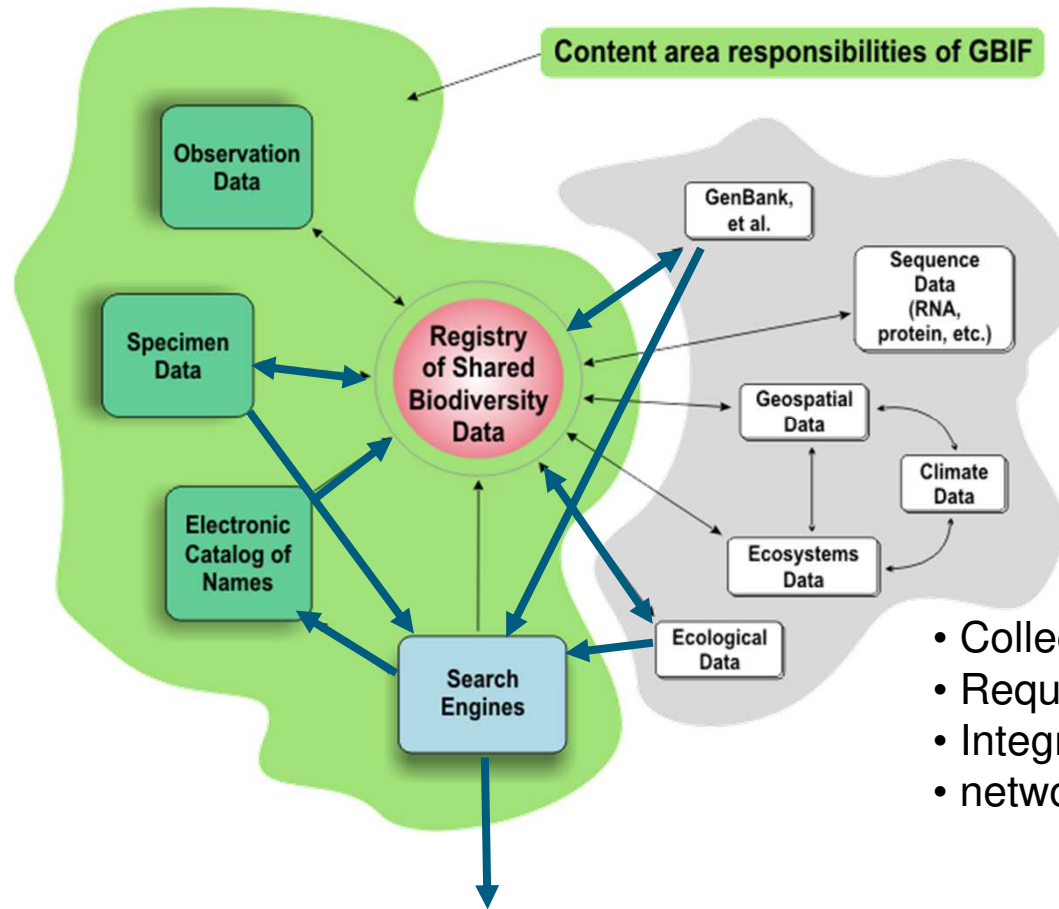
Guidelines and strategies for the modernization of brazilian biological collections and consolidation of integrated biodiversity information systems.

Presented to the Ministry of Science and Technology

By:
Brazilian Societies of Zoology, Botany, and Microbiology;
RNP – Rede Nacional de Ensino e Pesquisa; and
CRIA

<http://www.cria.org.br/cgee/col>

Data and tools for knowledge management



Building the biodiversity knowledge base

- Collective, multi and interdisciplinary effort
- Requires a global cooperation environment
- Integration of local and global efforts
- networking

Compiled data and information on species, specimens and ecosystems

Qualifying GBIF's data

- 2010 GBIF Annual Report when total no. of records was 267 million (today ~300 million records)
 - Observation records: 71.6%
 - Specimen Data: 27.5%
 - Animal related: 70.3%
 - Plant related: 26.3%
 - 89% served by North America & Europe
 - 75% data about species observed or collected in the Northern Hemisphere

How Many Species Are There on Earth and in the Ocean?

Mora C, Tittensor DP, Adl S, Simpson AGB, Worm B (2011) PLoS Biol 9(8): e1001127.
doi:10.1371/journal.pbio.1001127

- Estimated number of animals, plants & fungi (eukaryotes): ~8.7 million \pm 1.3 million
 - 7.7 million animal species, 298 thousand plant species
 - Measuring human activity or biodiversity?
- Opinion of taxonomic experts: 3 – 100 million
- 250 years of taxonomic classification: CoL (2011), 100 databases, 1,368,009 species

What have we achieved?

- Number of species: ~8 million
 - Validated species names in databases at CoL (developing CoL since 1996): ~1,4 million
- Number of specimens in natural history collections: ~1,2 – 2,1 billion (Ariño, 2010)
 - GBIF holds (2010 report) 58 million specimen records (10 yrs of GBIF) – less than 3%

What we need

- More data: digitization, new data ...
- More tools: field work, identification, data integration, interoperability, analysis, ...
- New strategies
 - DNA barcode
 - Target species to measure trends
 - Modeling for decision & policy making
 - Citizen science & social networks
 -
 - Networking

Decisions have to be made: aiming at informed decisions

Quality data (real time), freely and openly available to all, in a useful, useable, and comprehensive format



Obrigada.

Dora Ann Lange Canhos

dora@cria.org.br

speciesLink website: <http://splink.cria.org.br>

How to participate: [http://splink.cria.org.br/how to participate](http://splink.cria.org.br/how_to_participate)