



BIOLOG

Optimising work procedures in data capture and collection management

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- **IT techniques**
- **working procedures**
 - digitization and information usage
 - information domains and selective access
- **"virtual collections"**



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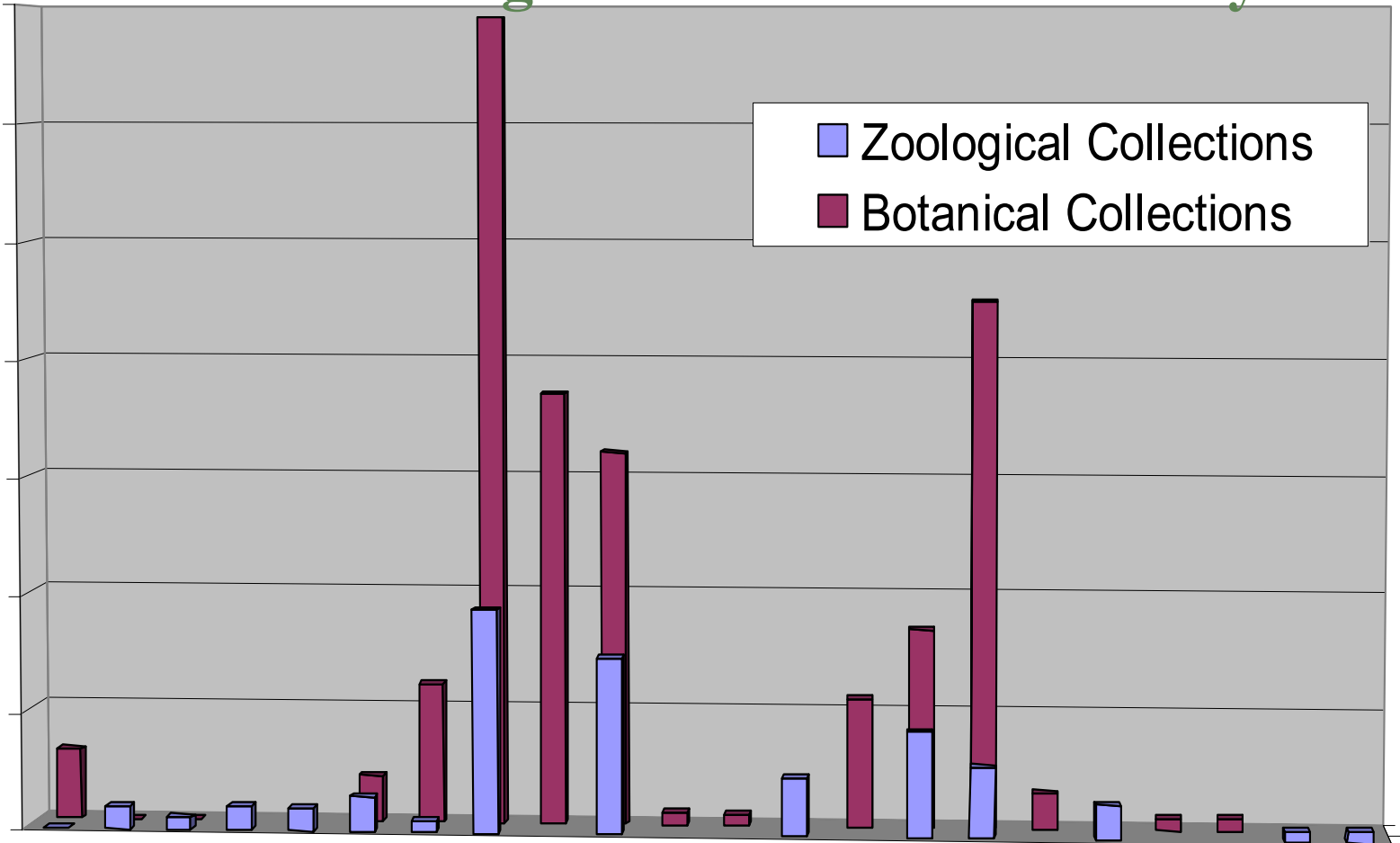
Collection Management Software Diversity

number of collections

50

■ Zoological Collections
■ Botanical Collections

database software:



Client-Server

Relational

+/-

Relational

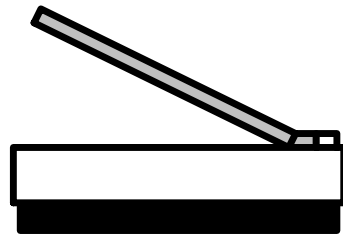
Flatfile

Unknown

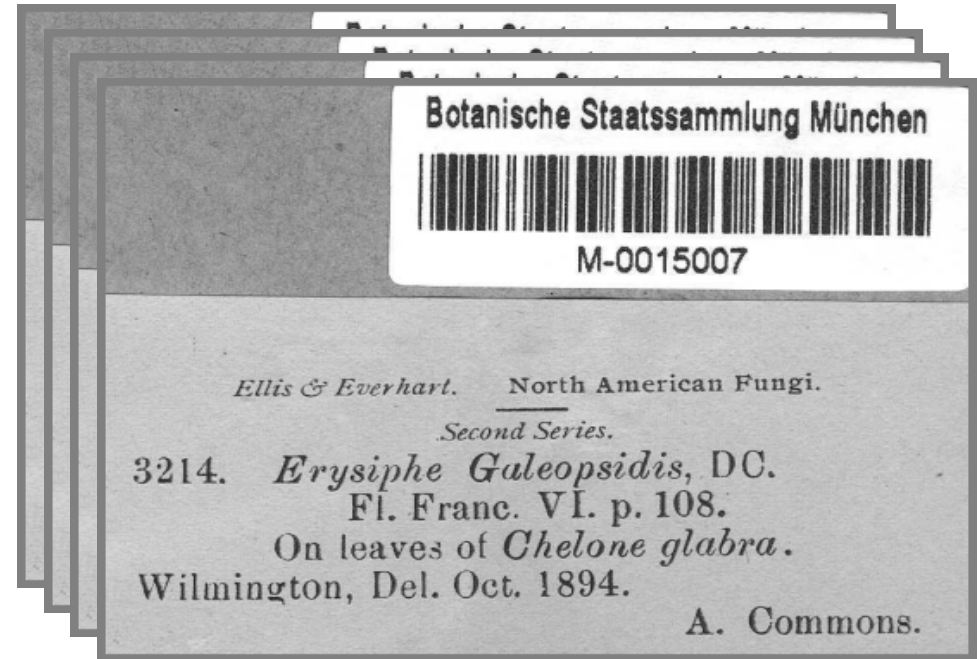
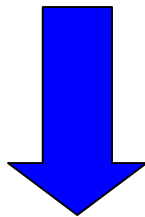
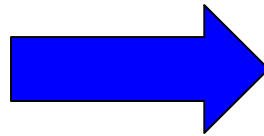


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LabelScan



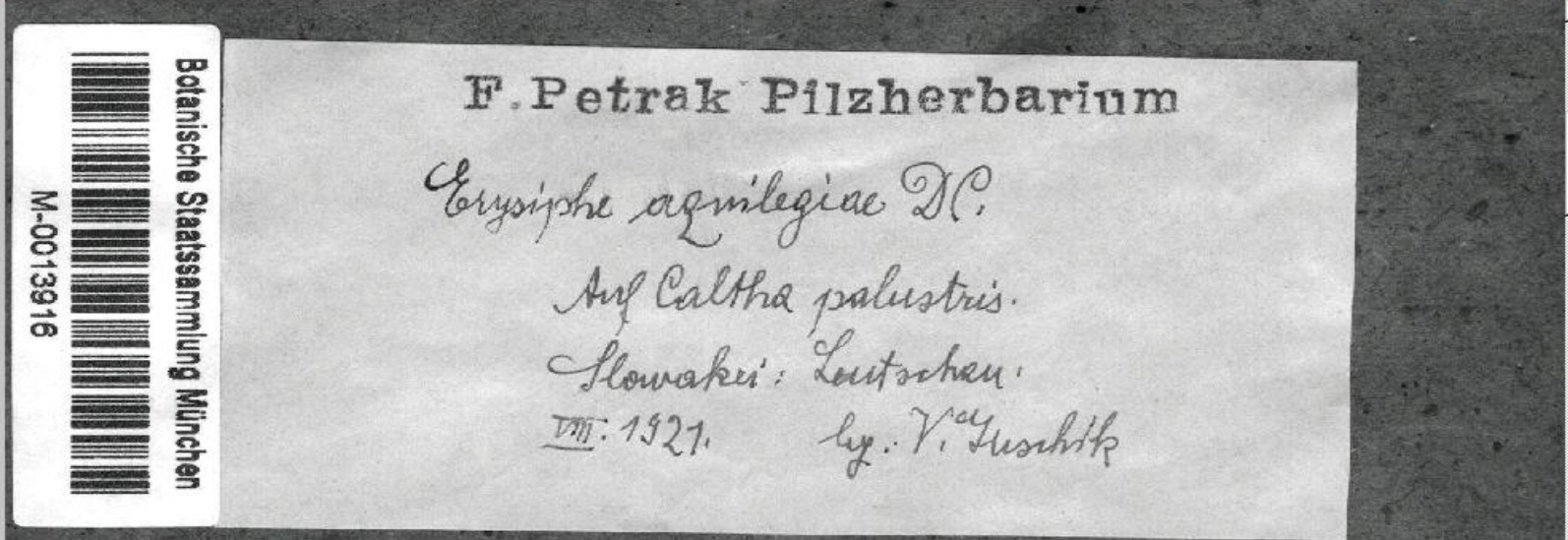
Scanner



M-0015007	D:\M-0015\M-0015007.jpg	Erysiphe galeopsidis
M-0013584	D:\M-0013\M-0013584.jpg	Brasiliomyces trina
M-0013593	D:\M-0013\M-0013593.jpg	Cystotheca lanestris
M-0013598	D:\M-0013\M-0013598.jpg	Cystotheca wrightii
M-0013599	D:\M-0013\M-0013599.jpg	Perisporina spec.
.....

DiversityCollection: Data Digitization

Botanische Staatssammlung München M-0013916 - *Erysiphe aquilegiae* var. *aquilegiae* Show Images Zoom: 150%



Botanische Staatssammlung München
M-0013916

F. Petrak Pilzherbarium

Erysiphe aquilegiae DC.

Auf *Caltha palustris*.

Slowakei: Leutschau.

VII. 1921. by V. Juschik

collector, time and location geographic data identification storage and loan notes and problems

Label title: _____ Date: 8 1921 (day|month|year|suppl.)

Collecting persons or groups / coll. number Locality/habitat: Slowakei: Leutschau

▶ Juschik, V. * unknown

print label

Original notes: _____

Exsiccate:

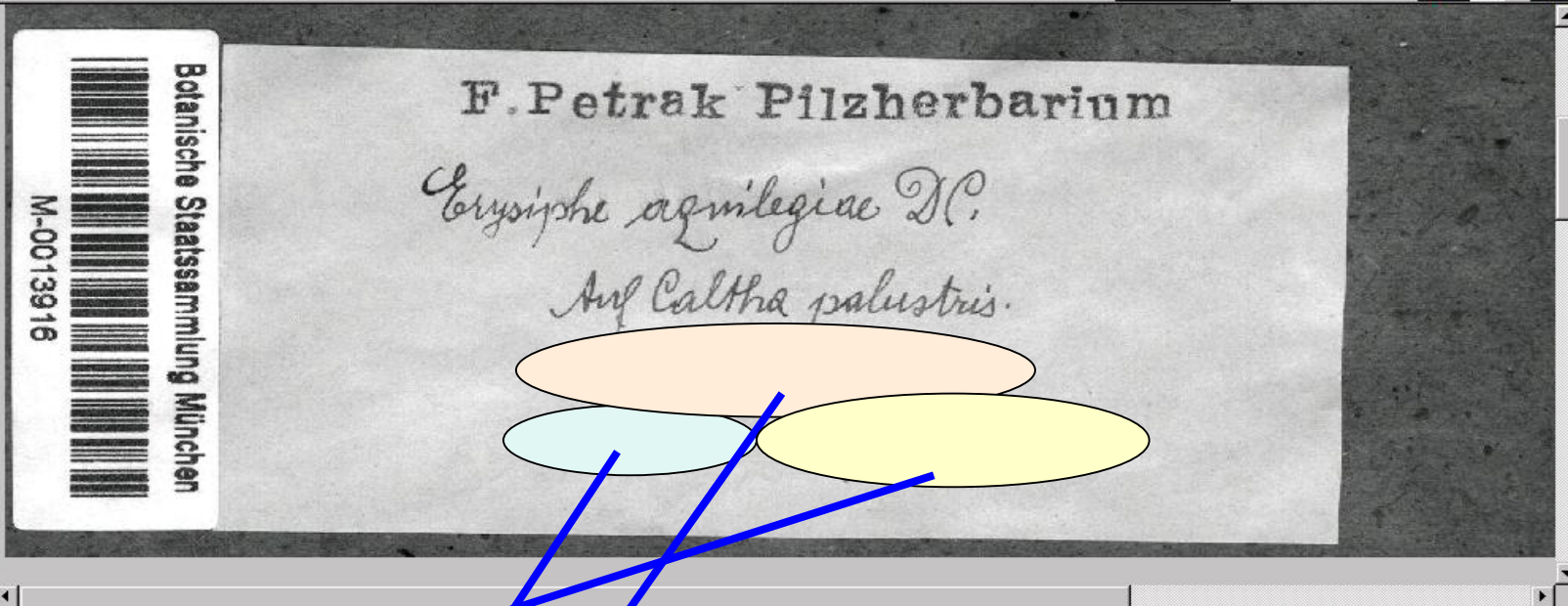
Label type:

Transcription:

Label notes: _____

DiversityCollection: Collection Event Data

Botanische Staatssammlung München M-0013916 - *Erysiphe aquilegiae* var. *aquilegiae* Show Images Zoom: 150%



F. Petrak Pilzherbarium
Erysiphe aquilegiae DC.
 Auf *Caltha palustris*.

M-0013916
 Botanische Staatssammlung München

collector, time and location | geographic data | identification | storage and loan | notes and problems

Label title: _____ Date: 8 1921 (day|month|year|suppl.)

Collecting persons: groups / coll. number
 Iuschik, V.
 * unknown

Locality/habitat: Slowakei: Leutschau

Original notes: _____

print label

Exsiccate:

Label type: handwritten

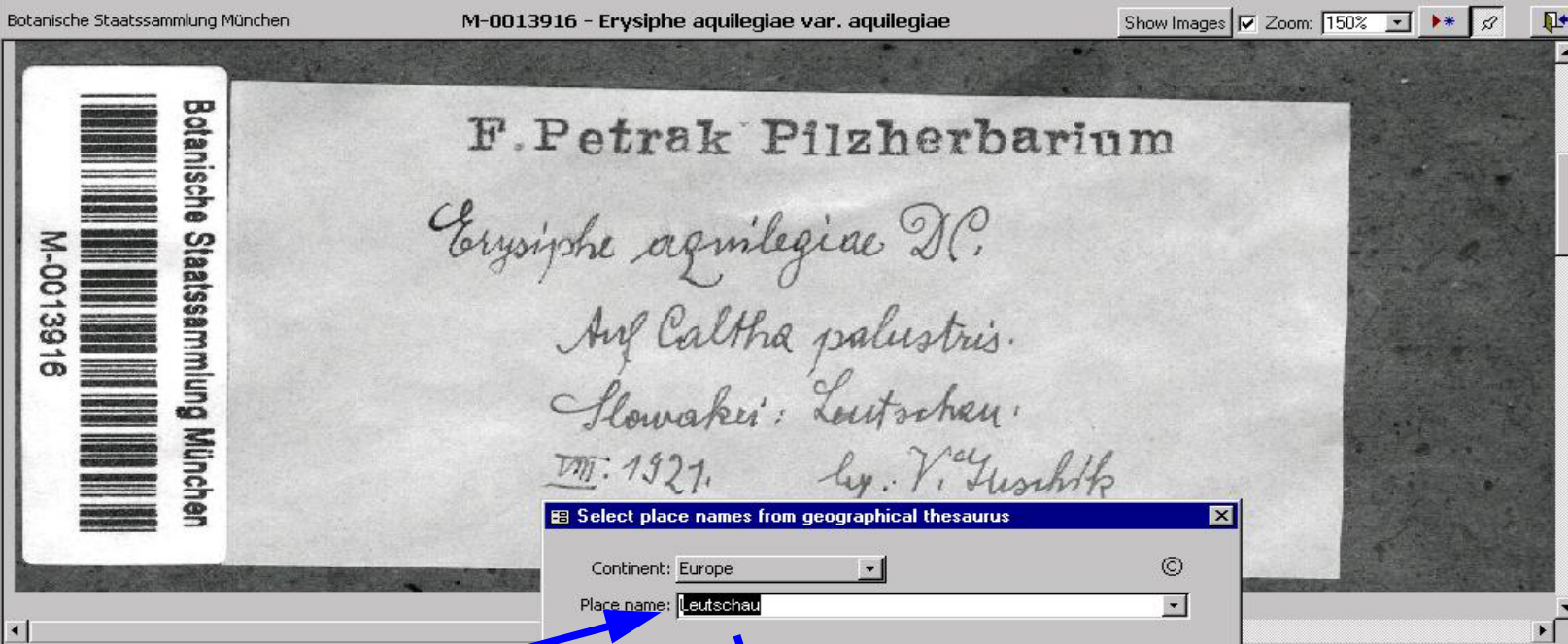
Transcription: _____

reviewed by: _____

Label notes: _____

DiversityCollection: Geography

Botanische Staatssammlung München M-0013916 - *Erysiphe aquilegiae* var. *aquilegiae* Show Images Zoom: 150%



F. Petrak Pilzherbarium
Erysiphe aquilegiae DC.
 Auf *Caltha palustris*.
 Slowakei: Leutschau.
 VII. 1921. by V. Luschnik

Botanische Staatssammlung München
 M-0013916

Select place names from geographical thesaurus

Continent: Europe
 Place name: Leutschau

OK Close

collector, time and location geographic data identification storage

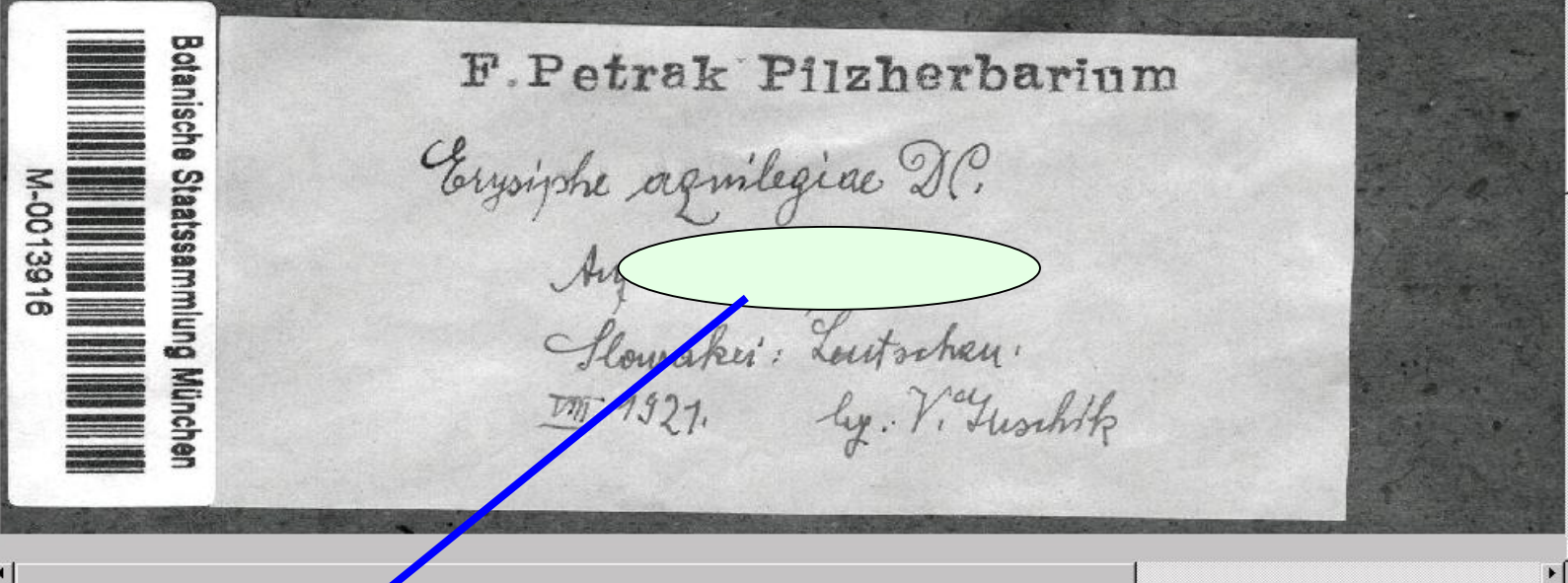
Locality/habitat: Slowakei: Leutschau

Named area (Thesaur Leutschau, Východosk LocalisationSystem Location Leutschau, Východoslovenský, Slovens Respons. Triebel, Dagr Problems:
 Named area (Thesaur Thesaurus code 157548 Date 28.03.01

Datensatz: 1 von 1

DiversityCollection: Host Plant

Botanische Staatssammlung München M-0013916 - *Erysiphe aquilegiae* var. *aquilegiae* Show Images Zoom: 150%



collector, time and location geographic data identification storage and loan notes and problems

Exsiccata title and number: []

plant
 fungus
 lichen
 animal
 procaryotic
 virus
 other

Typified taxon and state: []

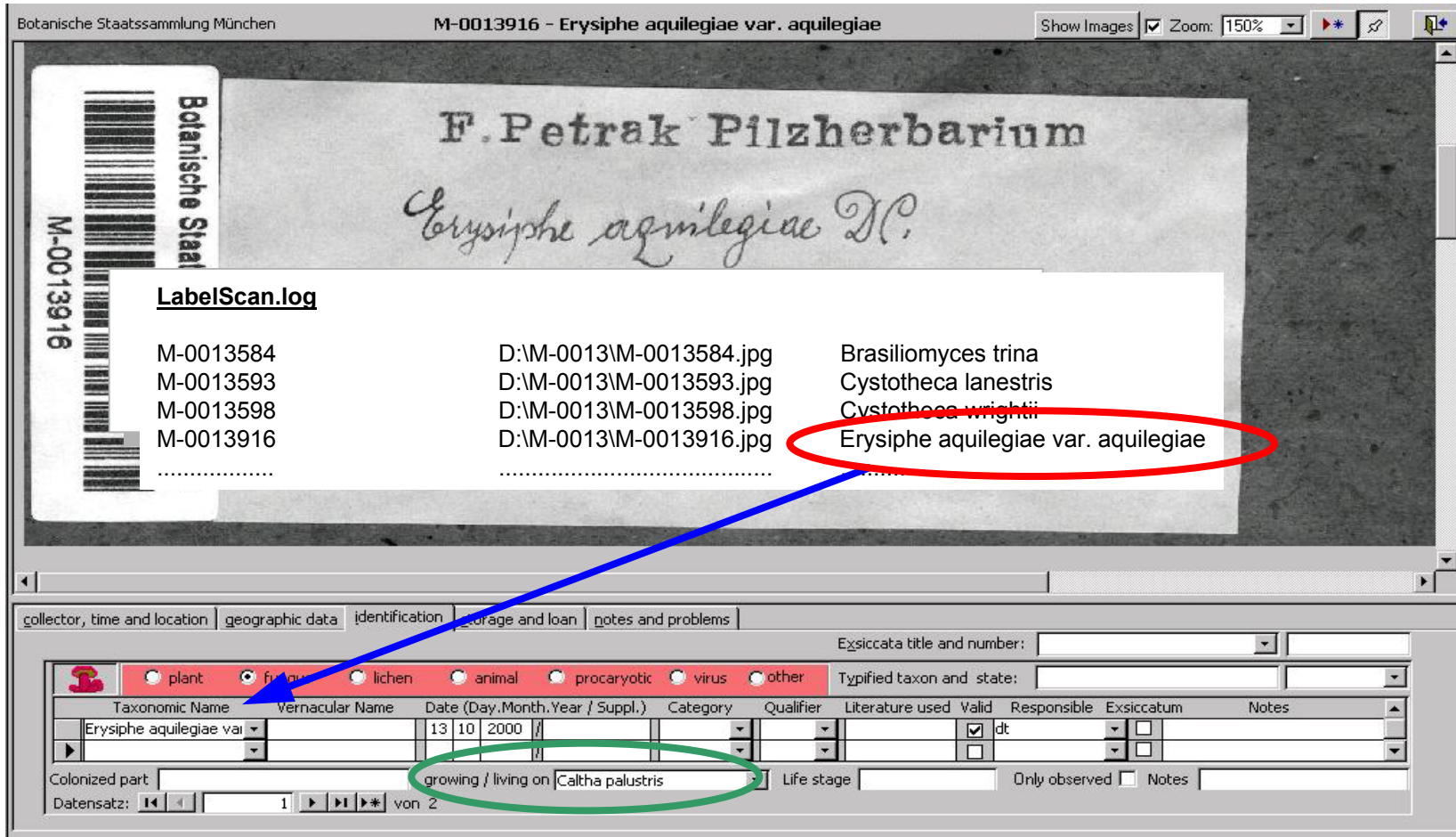
Taxonomic Name	Vernacular Name	Date (Day.Month.Year / Suppl.)	Category	Qualifier	Literature used	Valid	Responsible	Exsiccatum	Notes
▶ Caltha palustris						<input checked="" type="checkbox"/>	dt	<input type="checkbox"/>	
* []						<input type="checkbox"/>		<input type="checkbox"/>	

Colonized part: [] growing / living on: [] Life stage: [] Only observed Notes: []

Datensatz: [] 2 von 2

DiversityCollection: Fungus (Collection Object)

Botanische Staatssammlung München M-0013916 - *Erysiphe aquilegiae* var. *aquilegiae* Show Images Zoom: 150%



LabelScan.log

M-0013584	D:\M-0013\M-0013584.jpg	Brasiliomyces trina
M-0013593	D:\M-0013\M-0013593.jpg	Cystotheca lanestrus
M-0013598	D:\M-0013\M-0013598.jpg	Cystotheca wrightii
M-0013916	D:\M-0013\M-0013916.jpg	Erysiphe aquilegiae var. aquilegiae

collector, time and location geographic data identification storage and loan notes and problems

Exsiccata title and number:

plant **fungus** lichen animal procaryotic virus other

Typified taxon and state:

Taxonomic Name	Vernacular Name	Date (Day.Month.Year / Suppl.)	Category	Qualifier	Literature used	Valid	Responsible	Exsiccatum	Notes
Erysiphe aquilegiae var.		13 10 2000 /				<input checked="" type="checkbox"/>	dt	<input type="checkbox"/>	

Colonized part growing / living on Life stage Only observed Notes

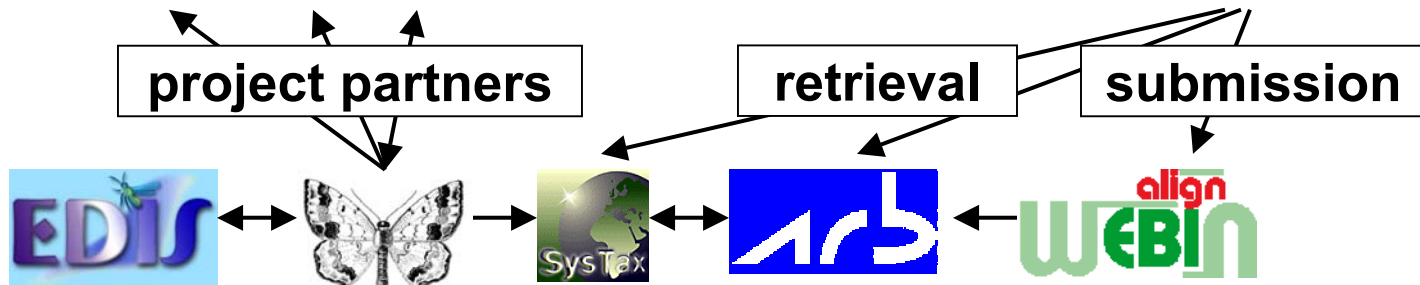
Datensatz: 1 von 2

Collection Management: DNA and Vouchers

Lepidoptera
Diptera
Collembola
Hymenoptera
Coleoptera



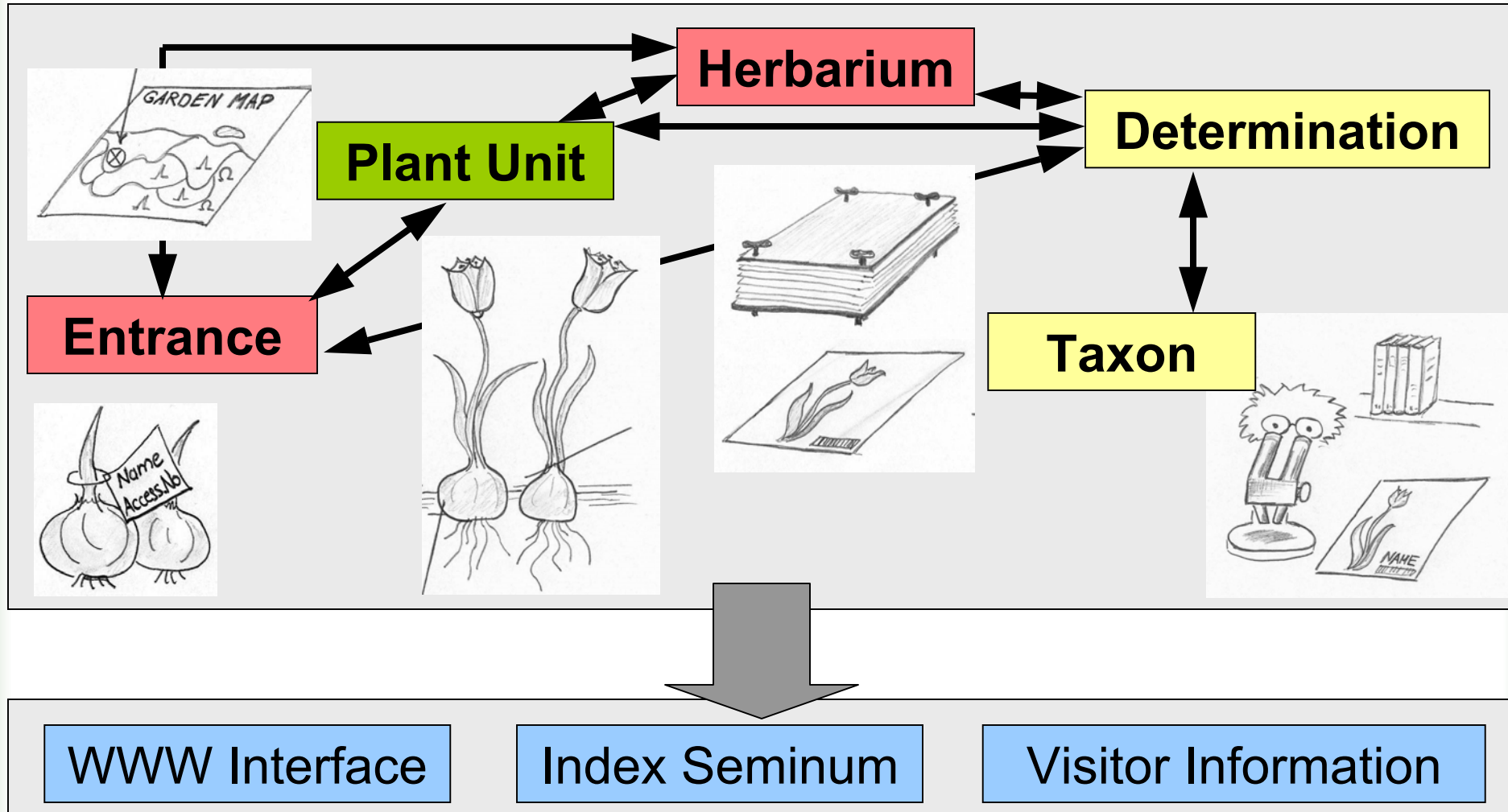
Masterlist DNA-TAX Project									
<u>Sample- No.</u>	<u>Genus</u>	<u>Species</u>	<u>Project</u>	<u>Extraction</u>	<u>Extr. Dat.</u>	<u>Conc. (ng/ul)</u>	<u>Storage DNA</u>	<u>Storage Voucher</u>	<u>EMBL/ GenBank</u>
00286	Chloroclystis	v-ata	GeoLN	Qiagen TK	19.02.2001	51,7	F2/1-D004F1	K1/1-V004F1	AJ_225364
00287	Epirrhoe	alternata	GeoLN	Qiagen TK	19.02.2001	155,7	F2/1-D004F2	K1/1-V004F2	AJ_336254
00288	Glossotrophia	alba	GeoLN	Qiagen TK	19.02.2001	86,3	F2/1-D004F3	K1/1-V004F3	AJ_452280





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Botanical Garden Information Domain – Administration Areas





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Virtual Collections

- substitute collection objects
- observation data
- "virtual objects"



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Virtual Collection - Ehrenberg



Virtual Collection - Ehrenberg

