

The TRY Database System

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Quantifying and scaling global plant trait diversity

TRY is a network of vegetation scientists headed by [Future Earth](#) and the Max Planck Institute for Biogeochemistry, providing a global archive of curated plant traits. The TRY database is a research platform of iDiv.

Database Version 4 online (2017-07-20)
Updated to 4.1 on 2018-02-04

6.9 million trait records
148,000 plant taxa
largely open access

[Data Portal](#)

News

Activity Report (2018-07-02)

In June 2018, TRY received 129 requests and released 16.8 million trait data for 125 requests; 1 new publication was reported. This brings the totals to 4781 received requests, 449 million trait records released for 3897 requests, and 178 recorded publications ([link](#))

Paper published (2018-05-22)

Zeeman et al.: Non-native plant cover and functional trait composition of urban temperate grasslands in relation to local- and landscape-scale road density. *Biological Invasions*. ([link](#))

Paper published (2018-02-26)

Schneider et al.: Mapping functional diversity from remotely sensed morphological and physiological forest traits. *Nature Communications*. ([link](#))

Paper published (2018-02-26)

<https://www.try-db.org>

We collect Plant Trait Datasets from Custodians, curate the data, and hand them out to request PIs

Statistics

Mid July 2018

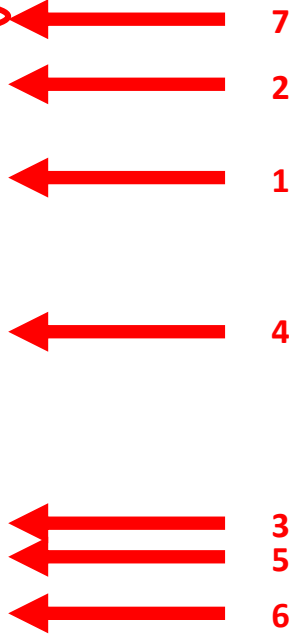
Users Origin

Mid June to Mid July 2018

Database Members Workshops Requests Public

Basic Statistics

Number of publications	178
-	
Number of accepted species	148333
-	
Number of traits	2918
Number of trait measurements	6904553
Number of georeferenced trait measurements	2725578
Number of observations	2567404
Number of georeferenced observations	536805
-	
Number of trait measurements provided to request PIs	460305550
-	
Number of datasets	391
Number of custodians	282
Number of contributors	430
-	
Number of requests	4863
Number of data releases for requests	3972
Number of published requests	152
Number of request PIs	2592
Number of requesters	4129
-	
Number of TRY members	4369
Number of registered users	5244



<https://www.try-db.org/TryWeb/StatBasics1.php>

Statistics by Time

Internal Pages



Home

Database Members

Data Releases by Date

year	month	CountOfProjectID
2018	7	75
2018	6	125
2018	5	111
2018	4	119
2018	3	100
2018	2	121
2018	1	107
2017	12	67
2017	11	118
2017	10	139
2017	9	106
2017	8	79
2017	7	90
2017	6	83



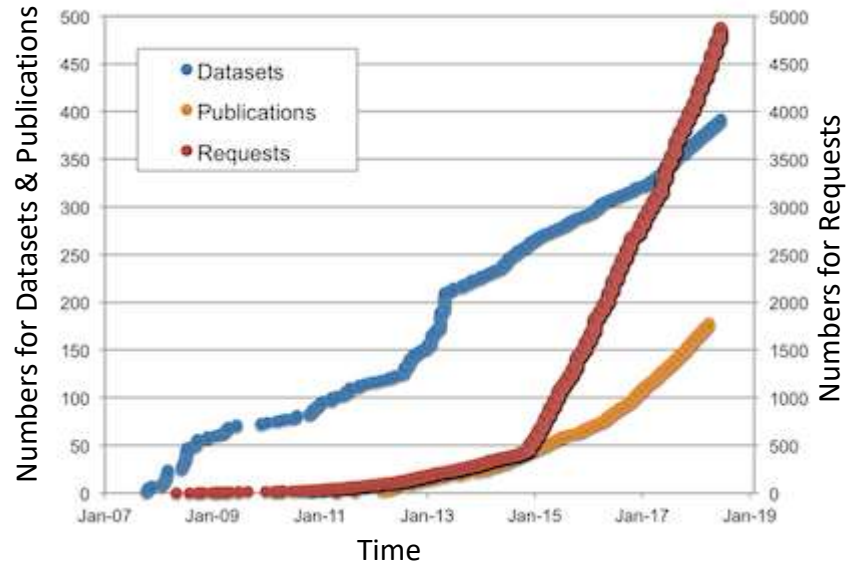
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Database Members W

Trait Records Released

year	month	SumOfTraitNum
2018	7	11034658
2018	6	16875230
2018	5	13671281
2018	4	17937940
2018	3	10848264
2018	2	18803597
2018	1	25107473
2017	12	16680274
2017	11	9709283
2017	10	16851077
2017	9	5124305
2017	8	5549510
2017	7	5913318
2017	6	10755688

Mid July 2018







Pillar 1 - Trust

Steering Committee

All activities of the TRY initiative are headed by the Steering Committee, which comprises leading scientists from around the globe, including the principle investigators of the former IGBP Fast Track Initiative on Refining Plant Functional Classifications and the hosting institute of the TRY database.

The Steering Committee provides guidance for the development of the TRY initiative and has facilitated third party funding from DIVERSITAS, IGBP, QUEST and the Max Planck Institute for Biogeochemistry - the basis for a long-term perspective of TRY.

	<p>Sandra Díaz</p> <ul style="list-style-type: none">• Future Earth Scientific Committee• USA National Academy of Sciences• CONICET and National University of Cordoba, Argentina		<p>Colin Prentice</p> <ul style="list-style-type: none">• IGBP Scientific Committee (up to 2010)• IPCC lead author in 3rd report• Macquarie University, Sydney, Australia• Imperial College, London, UK
	<p>Sandra Lavorel</p> <ul style="list-style-type: none">• CNRS, Grenoble, France• Joseph Fourier University, Grenoble, France		<p>Christian Wirth</p> <ul style="list-style-type: none">• Director of the German Center of Integrative Biodiversity Research (iDiv)• University of Leipzig, Germany• TRY database management
	<p>Paul Leadly</p> <ul style="list-style-type: none">• Past Chair of Future Earth bioDISCOVERY• IPCC lead author in 5th report• University Paris-Sud, Orsay, France		<p>Jens Kattge</p> <ul style="list-style-type: none">• TRY project coordination• TRY database management• Max Planck Institute for Biogeochemistry, Jena, Germany
	<p>Gerhard Boenisch</p> <ul style="list-style-type: none">• TRY database design and management• TRY IT infrastructure and workflow development• TRY website development and administration• Max Planck Institute for Biogeochemistry, Jena, Germany		

Pillar 2 – Database Structure

That does not limit traits and covariates

File 111				
Species	Trait1	Trait2	Covar1	Covar2
S1	T11	T21	C11	C21
S2	T12	T22	C12	C22
S3	T13	T23	C13	C23
Tables				
Observation		(line)		
ObsID	FileID	SpeciesID		
1	111	S1		
2	111	S2		
3	111	S3		
ObsData		(cell)		
ODID	ObsID	DataID	Value	& fields
1	1	Trait1	T11	
2	1	Trait2	T21	
3	1	Covar1	C11	
4	1	Covar2	C21	
5	2	Trait1	T12	
6	2	Trait2	T22	
7	2	Covar1	C12	
8	2	Covar2	C22	
9	3	Trait1	T13	
10	3	Trait2	T23	
11	3	Covar1	C13	
12	3	Covar2	C23	

& Tables for:

- Data
- Species
- Files
- Original File Column Headings
- Etc.

Pillar 3 – No Effort For Contributors

Species	Comment	Soil	LocationCoord	LocationName	SLA	SW/DW	SSLA	leaf size	lat	lon
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	24.72807343	3.029	0.168003124	6195	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	16.61945941	2.629963280	6.320645161	6342	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	15.0088234	3.523111111	5.949765721	4676	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	20.8087234	2.817666674	7.429139923	5738	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	22.76294431	2.769162642	6.221156912	3691	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	19.145125	2.505375	7.643104126	2974	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	14.04904378	2.5820625	6.616628668	4535	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	18.54616766	2.795145701	6.680241228	3807	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	14.59932263	2.429237288	6.011076923	10556	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	17.63133221	2.843271601	6.272031079	10266	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	18.15386861	2.668175182	6.805254892	5128	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	20.58192982	2.015436996	7.311809847	6534	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	25.58033854	3.914886833	6.637686675	10285	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	16.49674797	2.537860976	6.502287582	5910	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	14.01447917	2.411822727	6.01386836	15217	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	15.82519722	2.862412993	5.945084444	6622	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	13.80480687	2.495709013	5.62130137	9948	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	15.52791225	2.564659607	6.865746889	9965	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	16.39060229	2.595162491	6.390469361	4951	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	17.62997024	2.619821429	6.842954481	5849	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	15.77008761	2.557321652	6.167913669	12990	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	17.3665994	2.806	6.183489323	10049	53.4	-1.5
Acer platanoides		MAGNESIUM LIMESTONE	34899	Roche Abbey	16.26177928	2.538288289	7.196038886	8359	53.4	-1.5
Acer platanoides		MILLSTONE GRIT (acidic sandstone)	34912	Hathersage	17.30972992	2.695768331	6.423653188	9688	53.4	-1.5

No Template to fill out

StartRow	EndRow	NameCol	CtrlContrib	Wk	Sheet	Col	Name1	Name2	Comment	Species	DataID	UncertCol	UncertRow	UncertSp	UncertUnit	UnitCol	UnitRow
1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	268	2	1	1	1	2	2	2	2	2	236	2	2	2	2	2	2
4		3	1	1	1	3	3	3	3	3	236	3	3	3	3	3	3
5		4	1	1	1	4	4	4	4	4	112	4	4	4	4	4	4
6		5	1	1	1	5	5	5	5	5	113	5	5	5	5	5	5
7		6	1	1	1	6	6	6	6	6	12	6	6	6	6	6	6
8		7	1	1	1	7	7	7	7	7	54	7	7	7	7	7	7
9		8	1	1	1	8	8	8	8	8	96	8	8	8	8	8	8
10		9	1	1	1	9	9	9	9	9	1	9	9	9	9	9	9
11		10	1	1	1	10	10	10	10	10	59	10	10	10	10	10	10
12		11	1	1	1	11	11	11	11	11	60	11	11	11	11	11	11

Data Portal



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(File Owners only)



Max Planck Institute
for Biogeochemistry



Data Request to The TRY Database

https://www.try-db.org/TryWeb/Prop0.php



TRY Select Traits

Please use the Show Traits button to **check the up-to-date trait list** (status: 2017-07-21)

Show Traits

You can also use the [Advanced Trait Search](#) (This will open a new window).

First you have to tell for which traits you want data. You can use the Show Traits button to check which traits are available in a new window.

Please enter a list of comma separated TraitIDs as shown in the example. Anything else will be ignored.

Example: 1, 12, 15

Continue

https://www.try-db.org/TryWeb/Prop023.php



TRY Data Explorer

Download table

Trait List

Table fields:

ObsNum: Number of [Observations](#)

ObsGRNum: Number of geo-referenced [Observations](#)

PubNum: Number of public [Observations](#)

AccSpecNum: Number of Accepted Species

TraitID	Trait
3124	Aboveground woody biomass per ground area
2137	Absorptive fine root 12 phenol content per absorptive fine root C content
2120	Absorptive fine root acid hydrolyzable extractives per absorptive fine root dry mass
2054	Absorptive fine root arsenic (As) content per absorptive fine root dry mass
2123	Absorptive fine root bound phenol content per absorptive fine root C content
2098	Absorptive fine root branching intensity by length: number of root tips divided by total absorptive
2097	Absorptive fine root branching intensity: number of absorptive fine roots per higher order absorptiv
2055	Absorptive fine root cadmium (Cd) content per absorptive fine root dry mass
2056	Absorptive fine root calcium (Ca) content per absorptive fine root dry mass
2134	Absorptive fine root carbon (C) content not hydrolyzable in acid extractives per absorptive fine roo
2039	Absorptive fine root carbon (C) content per absorptive fine root dry mass
2273	Absorptive fine root carbon content per ground area
2272	Absorptive fine root carbon content per soil dry mass
2057	Absorptive fine root carbon/nitrogen (C/N) ratio

Data Output

TRY 4 Data Output Vs 4 27.2.2018

TRY DB Version

Local Cache

Project

Checks

Includes original and standard data

MS Access Tool

1. Connects to web database (MySQL) for request data
2. Connects to main database (MySQL) for trait data
3. Selects output records
4. Writes output records in output format to text file
5. Zips output text file
6. Adds Data Release Notes (pdf) to zip file
7. Adds IPG (pdf) to zip file



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User: boenisch@bgc-jena.mpg.de

Request PI Center (Gerhard Boenisch)

Requests On Hold - Edit and Submit

Request by traits and optionally species:

Request by dataset:

Requests - Review Custodian Responses And Start Data Release

Request:

Requests - Download Data

Request:

Requests - Summary

(General Information - Reference List - Notify Dataset Custodians - Report Publication - etc.)

Only requests are shown, whose data release are at least requested (not On Hold or Permission Requested).





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[Dataset Custodian Center](#)
(Dataset Custodians only)

User: boenisch@bgc-jena.mpg.de

Dataset Custodian Center (Gerhard Boenisch)

Pending Requests

You can change the permission status of your data for these Requests.

Request:

Manage Your Datasets

Change availability (public or restricted), coauthorship request, republication setting, or get general information about the datasets.

All Requests For Your Data

Your Notification Setting

Email notifications for request for **public** datasets.

Notification:

